ORDOVICIAN NEWS

SUBCOMMISSION ON ORDOVICIAN STRATIGRAPHY

INTERNATIONAL COMMISSION ON STRATIGRAPHY

volume 43 (for 2025)

Ordovician Subcommission website : http://ordovician.stratigraphy.org

Cover photo: Sandstones of the Kermeur Formation (Katian), Veryac'h section, Camaret-sur-Mer, Crozon Peninsula (Brittany, France); © Valentin Jamart.

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CONTENTS


International Union of Geological Sciences (IUGS) statement on the Russian Federation's invasion of Ukraine.
The IUGS works with many Russian and Ukrainian geoscientists and has made some fundamental contributions to establishing global geological standards with Russia.
The IUGS executive is appalled by the invasion of Ukraine by the Russian Federation and, alongside the initiative of other government and scientific organisations, IUGS will freeze all activity with the Russian Federation until future notice.

CHAIRMAN'S MESSAGE

Thank you for reading *Ordovician News* issue 43.

In this issue, we summarize the Ordovician activities of last year, 2025, and we present, as usual, the activities for the next year, 2026, and the following years, with some announcements and news. Thanks to all of you who contributed with your news and current research. Issue 43 is again a nice volume with lots of Ordovician News!

Last year, we reported the meeting organized in June 2024 in Oslo, to celebrate the career of Robin Cocks (1938–2023). Richard Fortey (1946–2025), Robin's closest collaborator and friend, passed away when we compiled Ordovician News 42 in March 2025. You will find Richard's obituary in this issue, and, unfortunately a few others. We indeed lost during 2025 a number of other giants of Ordovician stratigraphy.

Barry Webby (1934–2025) is well known to all of us. We all have the "Webby book" in our library. Barry was Chair of the Subcommission until 1996, when he started the first of a long series of IGCP (International Geological Correlation Programme, becoming later International Geoscience Programme) projects focused on the Ordovician: IGCP 410 (1997–2001). The GOBE ('Great Ordovician Biodiversification Event') was defined by Barry Webby in 2004, in the introductive chapter of the Webby (Webby, Droser, Paris, Percival) book!

Time is moving on, and now we start losing some of the most prominent figures of Ordovician stratigraphy from the 20th century, with the first scientists of the generation of the 'baby boomers' (born 1946–1964) disappearing as well. You will find the obituaries of eight Ordovician workers in this issue. May they all rest in peace, and let us remember them.

But let us focus on more pleasant news. You can see from this issue of *Ordovician News* that many activities focused the Ordovician are going on. Many studies from various fields are listed, in your research reports, and in your list of publications.

However, not all of these studies are related to stratigraphy, although we are compiling the news of the SOS, the Subcommission on Ordovician Stratigraphy. The SOS is one of the subcommissions of the International Commission on Stratigraphy (ICS). From the webpage of the ICS you can read the following:

The International Commission on Stratigraphy (ICS) is the largest and oldest constituent scientific body in the International Union of Geological Sciences (IUGS). Its primary objective is to precisely define global units (systems, series and stages) of the International Chronostratigraphic Chart that are the basis for the units (periods, epochs and age) of the International Geological Time Scale, thus establishing the fundamental scale for expressing the history of the Earth. The work of the Commission is divided between seventeen subcommissions, each responsible for a specific period of geological time.

Now, some administrators, and even some scientists, of the International Union of Geological Sciences (IUGS), and of other bodies, question (more and more) the relevance of the ICS, and the utility of stratigraphy in general. I am sure that you all have colleagues who wonder why we still work in the field of stratigraphy. What is the use of this 'old' discipline?

Yes, with (nearly) all GSSPs (Global boundary Stratotype Section and Point) defined (actually, there are still some GSSPs to be ratified for a number of geological time intervals) why do we still need the ICS? Why do we need to look for other sections and other fossils? Should not we stop and do more exciting things, more relevant to modern societal questions?

All Ordovician GSSPs have been ratified about 20 to 30 years ago, precisely between 1997 (base of the Darriwilian, the first Ordovician GSSP ratified) and 2007 (base of the Dapingian, the last GSSP ratified). But we are still not able to correlate these boundaries with the sections from all other continents. There is still a lot of work to be done. In many countries the Ordovician stratigraphy is not yet well established.

What about subdividing the global Ordovician stages? Other subcommissions of the ICS work on the substages of particular intervals. Should the Subcommission on Ordovician Stratigraphy also start this work? Actually, for this, we need a lot of working power. And times are difficult to get financial support to just do basic stratigraphy... Because it is rather clear that it becomes increasingly difficult to get grants for basic, solid research, including field work, in a period where it is easier to work on databases and computer models…. in a world where populistic and simplistic viewpoints are invading also scientific fields.

Nevertheless, we, as Ordovician stratigraphers, have the expertise to propose not only international correlations, but also a more precise subdivision of our Ordovician chart. Therefore, let us concentrate again on the basis of our discipline, and get back to stratigraphy, with all modern and innovative approaches that are now at our disposal. Let us not only look to fossils, but also to all other possible stratigraphical markers. Today, we must return to our GSSPs (and SABS) and restudy them, 30 years after their ratification, i.e., in most cases 40 to 50 years after they have been studied in detail. This is what the ICS wishes us to do, this is the reason of the existence of the SOS!

In this context, we propose to work on a special publication, following the publication of the two volumes of the *Geological Society of London, Special Publications* concerning 'A Global Synthesis of the Ordovician System') in 2023. This third issue, also to be presented to the Geological Society of London, should focus on Ordovician stratigraphy, and we will focus on our GSSPs, and on the stratigraphical correlation of the most important fossil groups. A first online meeting of the voting (titular) members of the SOS took place in late 2025, and it has been agreed that the Subcommission will focus on this special publication during the next two years.

As you know, we work together with IGCP 735 (Rocks and the Rise of Ordovician Life – Rocks n'ROL) hand in hand. A few voting (titular) members of the SOS are also co-leaders of IGCP 735. This project is in its last year, running from 2021 to 2026. We have no information right now if there will be future IGCP projects, but we will keep you informed.

Please, continue to send your news and articles to our Newsletter Editor, Bertrand Lefebvre. We thank Bertrand for editing another outstanding issue, but also Ian Percival (former secretary and newsletter editor), who continues to check and correct the newsletter before it goes out.

With best regards,

Thomas Servais

International Commission on Stratigraphy

ANNUAL REPORT OF THE ORDOVICIAN SUBCOMMISSION FOR 2025

BACKGROUND INFORMATION

Name of the ICS Constituent Group: Subcommission on Ordovician Stratigraphy (SOS)

Nature of the Constituent Group: Subcommission

Website/social media links: https://ordovician.stratigraphy.org/subcommission

Year of reporting: 2025

Submitted by:

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- Role in the ICS Constituent Group: Chair
- Year of appointment to the position in the ICS Constituent Group: 2020
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ORIGINAL WORKPLANS FOR 2025

Provide a short summary (in bullet points of maximum 100 words) of what was planned for 2025 as stated in your Annual Report for 2024.

1. THIRD GSL SPECIAL PUBLICATION

The Ordovician Subcommission (SOS) planned a **third Geological Society Special Publication (GSL)** volume (2024–2028), following volumes 532 and 533. This new edition will focus on **revising Ordovician stratigraphy**, including proxies and boundary validity, involving leading specialists worldwide. The trilogy aims to provide a comprehensive *continuum* of Ordovician knowledge.

2. INTERNATIONAL MEETINGS & PROJECTS

In 2025, IGCP 735 hosted **key events** under the theme “Rocks and the Rise of Ordovician Life.” Two regional meetings and field excursions took place in July in Wales, UK, devoted to Lagerstätten and Ordovician palaeontology of Avalonia, and in September in Brittany, France, focusing on the classical Ordovician succession of the Crozon Peninsula (high-

latitude Gondwana). October featured the 5th annual meeting in Changsha, China, with field trips to Hunan Province, under SOS auspices. Discussions were also planned to lay the foundation for a new IGCP proposal with SOS members during 2025.

3. SOS MEETINGS, NEWSLETTER & WEB-PAGE

Regular **online and business meetings** were planned for Titular Members and Executive officers. In June 2025, a business meeting in Lille was scheduled to review progress toward the Subcommission's main goals. Data from all SOS Members were acquired to support the release of *Ordovician News* 42 (2024 edition) in March 2025 on the SOS website (http://ordovician.stratigraphy.org/). A **major website reorganization** was planned to showcase current activities, encourage member participation, and enhance public outreach, especially for younger audiences. This included appointing a new Internet Officer to manage updates and engagement. These initiatives aim to strengthen communication and visibility within and beyond the Ordovician community.

ACHIEVEMENTS IN 2025

1. PUBLICATIONS

List publications in 2025 that include research sponsored by IUGS Funds and where IUGS is acknowledged (insert rows if needed).

- **Annalisa Ferretti, Marco Balini, David A.T. Harper, Thomas Servais, 2025. From rock to time: Evolutionary lineages and the calibration of the Chronostratigraphic Scale. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 19 papers.**

  This Virtual Special Issue (VSI) highlights **key findings from STRATI2023**, held in Lille, France (July 11–13, 2023). It brings together the most significant contributions presented at the meeting, complemented by selected research articles to ensure comprehensive coverage of stratigraphy. The aim is to showcase advances across all major fields, reflecting the diversity and depth of current stratigraphic research. By integrating conference insights with targeted studies, this VSI provides an updated reference for specialists and promotes broader understanding of stratigraphic developments discussed during STRATI2023.

  https://www.sciencedirect.com/special-issue/10R1230QP4K

- **Annalisa Ferretti, Marco Balini, David A.T. Harper, Thomas Servais, 2025. Cutting time in slices. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 113433.**

  https://www.sciencedirect.com/science/article/pii/S0031018225007187/pdfft?md5=9402bf462e5b70b4bb43f063cc159d0a&pid=1-s2.0-S0031018225007187-main.pdf

- **Annalisa Ferretti, Marco Balini, David A.T. Harper, Thomas Servais, 2025. Editorial preface to special issue: From rock to time: evolutionary lineages and the calibration of the Chronostratigraphic Scale. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 113456.**

  https://www.sciencedirect.com/science/article/pii/S0031018225007412/pdfft?md5=87e15621f9242ca57190d8832bfff018&pid=1-s2.0-S0031018225007412-main.pdf

2. CONFERENCES/CONGRESSES/WORKSHOPS

Provide information on all early-career researchers and postgraduate students who attended scientific conferences/ congresses/workshops and meetings related to the constituent group activities/fieldworks, using IUGS funds allocated for the year 2025 (insert more columns if more than one participant attended the same event, and insert more tables if more than one event was participated in).

Funds requested in 2024 for the year 2025 were planned for meetings of members of the Executive of the Subcommission on Ordovician Stratigraphy (SOS) only. They were spent accordingly, and thus not prepared for early-career researchers. Nevertheless, we organized three meetings with field excursions together with IGCP 735, in Wales (UK, July 2025), Brittany (France, September 2025), and Changsha (China, October 2025) attended by numerous young researchers. Reduced registration costs allowed them to participate.

No IUGS funds through the ICS and SOS were therefore used in 2025 for sponsoring early-career researchers and students, but only through IGCP 735, which is strongly related to the SOS.

3. OTHER RESULTS

List any relevant activity that was supported by funds allocated by IUGS.

Following the requests made in 2024, there were no direct IUGS funds used for other relevant activities.

INTERACTIONS

1. INTERACTION WITH OTHER IUGS CONSTITUENT GROUP(S)

N/A

2. INTERACTION WITH OTHER INTERNATIONAL ORGANIZATIONS AND/OR PROJECTS OUTSIDE IUGS

Name of the International Organizations and/or Projects: IGCP project 735 ‘Rocks and the Rise of Ordovician Life’ (Rocks n’ROL)

Type of interaction and which are the results (e.g., joint workshop/publication/session at international conferences, etc..):

- Joint regional meeting and field excursion at **Llandrindod Wells**, **UK** (4–11 July 2025)
- Joint regional meeting and field excursion at **Camaret-sur-Mer**, **France** (21–23 September 2025)
- Joint international conference (5th annual meeting of IGCP 735) and field excursion at **Changsha**, **China** (17–21 October 2025)

INCOME IN 2025

From IUGS: 4,000 USD

From other sources (specify the source and amount, insert rows if needed): > 10,000 USD

TOTAL: > 14,000 USD

The various activities of the Subcommission (in particular the three conferences and workshops) were realized with the financial help of numerous and various other resources, in particular the research grants of all executive, titular and voting members, but also corresponding members. For 2025, the amount of all financial resources was not calculated, but clearly exceeds several tens of thousands of USD.

EXPENDITURES IN 2025

Provide a summary of the activities that were supported financially by the funds allocated by IUGS in 2025.

Conferences/congresses/workshops attended by members of the constituent group: 1600 USD

Conferences/congresses/workshops attended by early-career researchers and postgraduate students: none

Costs related to committee meetings/fieldworks of the constituent group: 2400 USD

Costs related to committee/fieldworks of the Constituent Group attended by early-career researchers and postgraduate students: none

Publications fees: none

Dissemination/outreach/website: none

Other costs (specify the type of costs): none

TOTAL EXPENDITURES: 4000 USD

Following the request in 2024 (9000 USD), the Subcommission (SOS) received **4000 USD** for 2025. The support was spent as planned, but only partly, due to the limited amount of support.

A meeting of the Chair and Newsletter Editor took place in Lyon in January 2025 (**800 USD** for travel and living expenses of the Chair); the Chair, Secretary and Newsletter editor (past Secretary) met in September 2025 in Lille for the preparation of a third volume of the Geol. Soc. Sp. Publ. related to the Ordovician, organized by the Subcommission (**1600 USD** for travel and living expenses of the Secretary and the Newsletter Editor); the Chair participated in the main annual event of the SOS, the official annual meeting at Changsha, China, organized with IGCP 735 (**1600 USD**).

OBJECTIVES AND WORKPLANS FOR THE YEAR 2026

1. OBJECTIVES

The Subcommission will continue in 2026 to convene Ordovician stratigraphers from across the globe, primarily through participation in several international congresses. **The most significant occasion will be the STRATI meeting, scheduled for June–July 2026 in China.**

2. ACHIEVABLE WORKPLAN

- Organisation of a Subcommission session at STRATI related to "**Ordovician stratigraphy**" (conveners: LIANG Yan, Bertrand LEFEBVRE, Wenhui WANG - all titular members);

- organisation of of a Subcommission session at STRATI related to "**Ordovician ecosystem and the habitability evolution**" (conveners: Renbin ZHAN, Lars HOLMER - all titular members);

- organisation of a general session at STRATI, entitled "**The Palaeozoic world: Events that shaped Life**" (conveners: Thomas SERVAIS, Lucia ANGIOLINI, Junxuan FAN, Annalisa FERRETTI - including the Chair and Secretary of the Subcommission);

- attendance at the Penrose meeting, including "**GTS2030 – Defining the Future of Timescale Calibration**";

- co-organisation of **all other meetings** with the programme IGCP 735, including a session at the International Palaeontological Congress (South Africa).

3. PLANNED CONFERENCES

STRATI (China), IPC (South Africa)

4. PLANNED PUBLICATIONS ON RESEARCH TO BE SUPPORTED BY IUGS FUNDS

An ***Episodes*** article focused on three decades of work on the Ordovician biodiversification ('GOBE'), will be submitted in 2026, by titular members of the SOS (including all executive members) that have been active during the last 30 years as co-leaders of IGCP projects related to the Ordovician (IGCP 410, 503, 591, 653, 735).

5. OTHER ACTIVITIES IN BULLET POINTS

- The main objective of the Subcommission in the 2024–2028 term is the publication of a **Third Issue (following volumes 532 and 533) of *Geol. Soc. Sp. Publ.***, dedicated to Ordovician stratigraphy. The volume is currently prepared, chapter manuscripts will be submitted during 2026, publication is scheduled in late 2027 – early 2028;

- A **VSI in *Palaeogeography, Palaeoclimatology, Palaeoecology*** will be launched as an outcome of the STRATI general session "**The Palaeozoic world: Events that shaped Life**". The Subcommission continues the effort to give great visibility to STRATI results.

The VSI **"From rock to time: evolutionary lineages and the calibration of the Chronostratigraphic Scale"** (19 contributions resulting from STRATI 4 in France) has been recently published in *Palaeogeography, Palaeoclimatology, Palaeoecology* (see above).

BUDGETARY PROPOSALS FOR 2026

The budget proposal for activities supported by IUGS/ICS in 2026 must align with the work plans for that year.

Conferences/congresses/workshops to be attended by members of the constituent group: 8000 USD

Conferences/congresses/workshops to be attended by early-career researchers and postgraduate students: 1000 USD

Costs related to committee meetings/fieldworks of the constituent group: 2000 USD

Costs related to committee meetings//fieldworks of the constituent group to be attended by early-career researchers and postgraduate students: none

Publications fees: open access

Dissemination/outreach/ website: no costs

Other costs (specify the type of costs): none

TOTAL REQUESTED BUDGET: 11000 USD

For the year 2026, we request 11000 USD (see details below).

1. STRATI 2026 : 7500 USD

The main amount of the sum will be used to attend the **STRATI International Conference** in China (June-July 2026). **The meeting will be attended by most executive members of the Subcommission:**

- The Chair (Thomas SERVAIS) and Secretary (Annalisa FERRETTI) co-organize with other colleagues a general session on "*The Palaeozoic world: Events that shaped Life*." The Subcommission requests the sums of **1500 USD for travel of the Chair** (registration and accommodation covered by the STRATI organizers) and the sum of **2500 USD for travel, attendance, and accommodation of the Secretary** of the SOS.

- The first Vice-Chair (ZHAN Renbin) organises with a titular member (Lars HOLMER) a subcommission session on "*Ordovician ecosystem and the habitability evolution*," but no funds are requested.

- The Newsletter Editor and past-Secretary (Bertrand LEFEBVRE) and the Webmaster (WANG Wenhui) co-organize with a titular member (LIANG Yan) a session on

"*Ordovician Stratigraphy*," for which the Subcommission requests the sum of **2500 USD for travel, attendance, and accommodation of the Newsletter Editor** of the SOS.

- The Subcommission plans to provide two prizes of 500 USD each for the best student talks in the two subcommission sessions at STRATI, i.e. a sum of **1000 USD**.

2. PENROSE 2026: 1500 USD

We also request the sum of **1500 USD to allow the second Vice-Chair** (Alycia Stigall) to attend the **Penrose Meeting**, and the sessions organized by the Subcommission on Time Scale Calibration (Iowa, USA, June 2026).

3. LYON 2026: 2000 USD

In addition to the support requested for Conferences, we also request support of **2000 USD** for the Executive to meet at Lyon University, in order to progress with the preparation and editing of the special issue in *Geol. Soc. Spec. Publ*., dedicated to Ordovician stratigraphy.

ANNEX

1. DESCRIPTION

Name of the Constituent Subcommission: Subcommission on Ordovician Stratigraphy (SOS)

Aims and Objectives: SOS promotes **international cooperation** on all aspects of Ordovician geology, specifically stratigraphy. The goal of the Subcommission is to provide a **high-resolution geological time scale** that will be a sound base for interdisciplinary research on the global Earth system during the Ordovician Period.

The work is broadly based and must include specialists in palaeontology, all subdisciplines of stratigraphy (bio-, litho-, chemo-, and magneto- stratigraphy), sedimentology, geochemistry, and tectonics. With a large network including active participants from more than 25 countries, the Subcommission thus involves much of the global geological community. Its global network involves a large set of Members (about 600) from Academia, government institutions and industry.

Specific objectives of the Subcommission are:

a. To delimit and subdivide the Ordovician System (and Period) as a part of the overall ICS mission to **establish and publish a standard global stratigraphic scale**. This work aims to establish/verify boundaries (GSSPs and ASSPs), correlation of major subdivisions (Stages and Series) globally and regionally, and to periodically review the effectiveness and utility of these decisions.

b. To promote **regular international meetings** on all aspects of Ordovician stratigraphy, especially those devoted to clarifying stratigraphic procedures, nomenclature and methods for use in establishing a unified global time scale and to prepare correlation charts with explanatory notes.

c. To **encourage, promote, and support interdisciplinary research on all aspects of Ordovician stratigraphy**, also through the proposal of **joint international research projects**, addressing topics that require high-resolution, global correlation and promoting new stratigraphic methods and their integration into a multidisciplinary stratigraphic approach.

d. To promote **education in stratigraphic methods**, and the dissemination of stratigraphic knowledge, by the publication of Thematic Issues strictly focused on diverse aspects of Ordovician stratigraphy, through the release of an annual newsletter (*Ordovician News*) and by a web page for promoting discussions and reporting results of this research.

Indicate, if possible, how your activities align with the goals of the United Nations Sustainable Development, see https://sdgs.un.org/goals: The activities of the Subcommission on Ordovician Stratigraphy (SOS) strongly support the United Nations Sustainable Development Goals (SDGs) by fostering global scientific collaboration and advancing geoscience knowledge. Through its mission to establish a high-resolution geological time scale, SOS contributes to **SDG 9** (Industry, Innovation, and Infrastructure) as a high-resolution geological time scale supports innovation in geoscience and related industries. Its emphasis on interdisciplinary research and climate reconstructions aligns with **SDG 13** (Climate Action), offering insights into past Earth systems to inform future climate strategies. Educational initiatives, including thematic publications, newsletters, and online resources, promote **SDG 4** (Quality Education), while its extensive international network of over 600 members from academia, government, and industry exemplifies **SDG 17** (Partnerships for the Goals), ensuring inclusive and cooperative progress in global geoscience.

2. DIRECTORY OF OFFICERS 2025–2028

Please provide a summary of information on all officers and voting members of your Subcommission.

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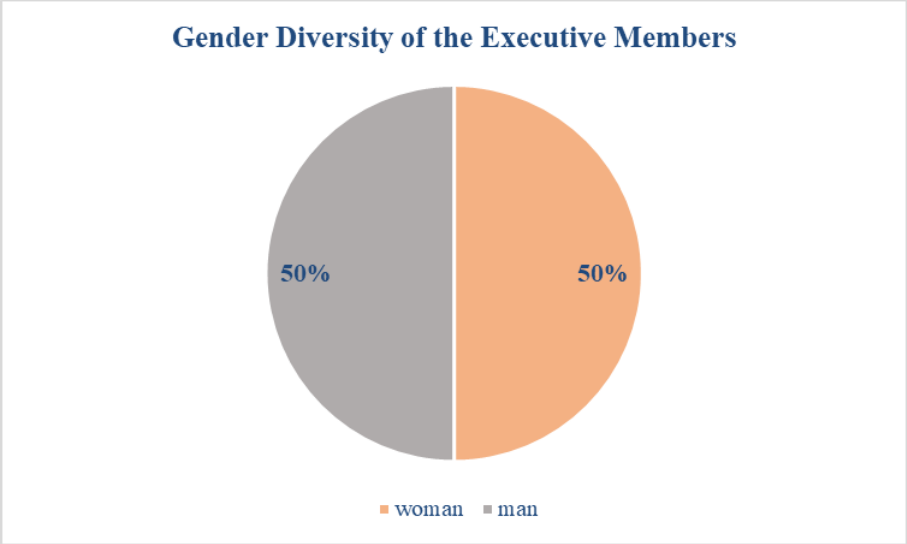

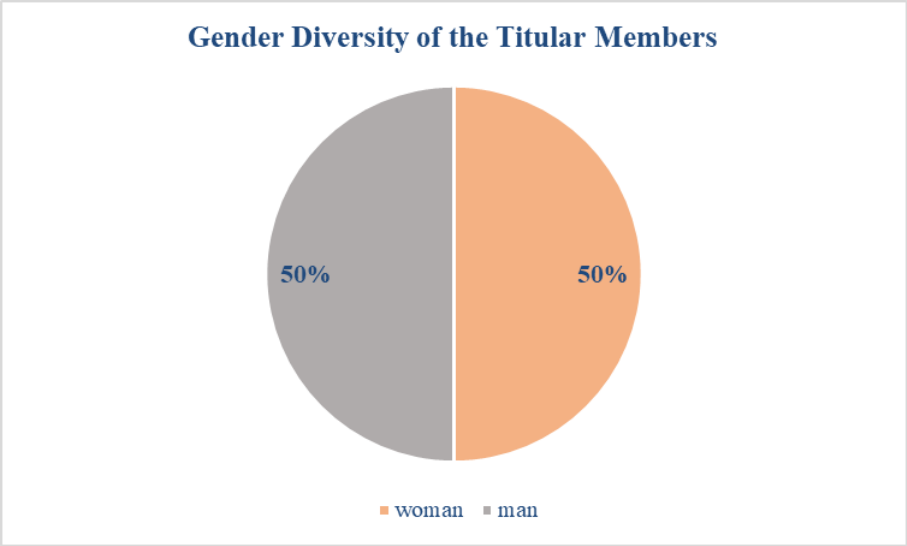

Geographic provenance of the Titular Members

NEWS AND VIEWS

Upcoming position - FRQ research chair in Ordovician Mass Extinction and Palaeoenvironments (Anticosti Island, Canada)

The University of Laval in Quebec City, Canada, will shortly begin accepting applications for a tenure-track Research Chair in the End-Ordovician Mass Extinction and Palaeoenvironments associated with the Fonds de Recherche du Québec (FRQ). This research program will be based on the exceptional geological and fossil history of Anticosti Island, a UNESCO World Heritage Site. It aims to create interdisciplinary collaboration in the fields of stratigraphy, sedimentology, paleontology, and geochemistry, as well as related fields.

The University of Laval is about to release an official call for applications. This communication is only to inform you that at this time, details about the job description, application process, and other requirements are not yet available. The University of Laval will release further details via its official channels in the near future. If you are part of the Ordovician-Silurian community and are interested in this position, please contact :

André Desrochers, Scientific Director, Société du patrimoine mondial Anticosti (adesrochers@patrimoinemondial-anticosti.ca) — for information on the scientific context, research opportunities and site infrastructure.

Further information will be shared in due course.

André Desrochers

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The mysterious presence of a trilete spore assemblage in the Late Ordovician from Saudi Arabia

Currently, I have not conducted any new observations on miospores from the Ordovician. However, I am contributing to a comprehensive review of cryptospores and trilete spores from the Ordovician to the Lower Devonian. This presents an opportune moment to re-evaluate the occurrence of trilete spores in the Upper Ordovician strata of Saudi Arabia. This discovery remains highly contentious among the scientific community, with some deeming these observations erroneous (while internationally well-known other authors probably disregard them).

The identification of trilete spores from the Late Ordovician in Saudi Arabia represents a pivotal advancement in our understanding of early plant evolution. Historically, *Ambitisporites* was recognized as the earliest known trilete spore, described from the Late Ordovician, Turkey (Steemans *et al*., 1996). This discovery was contested for several years but now seems to be accepted. Subsequent investigations from a borehole in Saudi Arabia (Steemans *et al*., 2009; Wellman *et al*., 2015) uncovered an assemblage of several trilete spores alongside *Ambitisporites*, including seven additional species. This could suggest an earlier and more diverse presence of vascular plant ancestors than previously acknowledged.

Critics initially questioned this finding, citing concerns regarding potential contamination. However, these objections are less compelling, considering that the samples were derived from core material, which minimizes contamination risks, and were processed independently in two different laboratories. Furthermore, the identified species are absent from younger strata (except for *A. avitus*), further supporting the absence of contamination. Another contention is that these trilete spores may have originated from bryophytes rather than trachaeophytes, as some modern bryophytes can sometimes produce trilete spores. Nevertheless, this reasoning is weak, as based on comparisons of modern plant with very old one about which we know nothing. In addition, the presence of spores from bryophytes in younger sediments (i.e. during the Palaeozoic) is poorly documented.

The existence of spores produced by tracheophytes during the Late Ordovician has also been questioned by Edwards *et al.* (2014). According to those authors, the structure resembling a trilete mark may result from the dissociation of a tetrad, creating four pseudo-trilete alete monads. Unfortunately, no evidence supports this hypothesis (where are the factual arguments?). The Ordovician specimens distinctly exhibit well preserved trilete marks characterized by two separate labra, as clearly illustrated in the plates published by Wellman *et al*. (2015). Strangely the trilete mark of *Ambitisporites* in the Ordovician is accepted.

So, why not the other Ordovician miospores? Concerning the presence of a true trilete mark or a pseudo-trilete mark we may use the case of *Gneudnaspora*, a genus established by Balme (1988) in the Middle Devonian (firstly described as *Archaeozonotriletes* by Chibrikova). *Gneudnaspora* is described as an alete miospore sometimes characterized by tears mimicking a trilete mark. Balme created the species *G. divellomedia*. Well-preserved specimens of *G. divellomedia* var. *divellomedia* from the Lower and Middle Devonian of Saudi Arabia have been documented by Breuer *et al*. (2007), who classify *Gneudnaspora* as a cryptospore. Except in extremely rare cases, the pseudo-trilete marks observed on *divellomedia* display three branches that do not reach the curvaturae. Only one case shows a pseudo-trilete structure reaching the curvaturae. The axes of these pseudo-trilete marks are not perfectly straight but instead exhibit numerous small angular irregularities (tears). There is no encroachment at the junction between the pseudo-trilete mark and the curvaturae, a

morphological characteristic typically observed in the true trilete spores. We may add also that the proximal tears observed on *divellomedia* are very irregular. These observations facilitate the differentiation between pseudo-trilete marks and genuine ones. The figure below shows three *Gneudnaspora* with pseudo-trilete mark, three true trilete spores from the Late Ordovician (after Wellman *et al*., 2015), and three spores internationally accepted as true trilete spores since many years. These observations strongly support the existence of a diverse assemblage of true trilete spores during the Late Ordovician from Saudi Arabia

Eophytes (Edwards *et al*., 2014) are plants which have delivered cryptospores. Those authors have excluded the possibility that cryptospores may be produced by bryophytes. However usually macro-remains of plants are fossils rarely observed (by comparison with many other groups of fossils (Late Silurian and Lochkovian layers from UK are an exception in the world), even under sedimentological conditions favourable for their preservation. On the reverse dispersed miospores are always much more numerous than their parent plants. Therefore, they will bring earlier information that the macroplants cannot reveal. Statistically it seems evident that biological evolutions among the plants will appear first among the dispersed miospores, this means in older layers than the remains of macroplants. Considering that most sediments below the late Wenlock are of marine or rarely nearshore origin, it is highly unlikely to find macro remains of terrestrial plants. Therefore, to find the oldest fossils of tracheophytes is challenging. Up to now only the findings of true trilete spores may help us.

A new element is provided by the latest phylogenetic study using molecular data calibrated with fossils (Harris *et al*., 2022) which suggests that trachaeophytes to have originated in the late Ordovician.

Philippe Steemans

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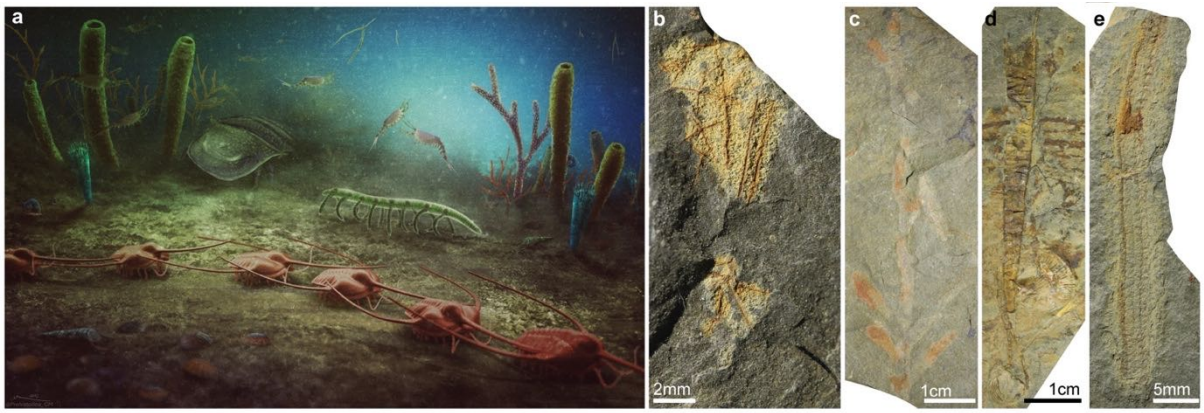
WELLMAN, C.H., STEEMANS, P. & MILLER, M.A. 2015. Spore assemblages from Upper Ordovician and lowermost Silurian sediments recovered from the Qusaiba-1 shallow core hole, Qasim region, central Saudi Arabia. *Review of Palaeobotany and Palynology*, **212**, 111–126.

Comparison of miospores with true trilete marks (7–9) and pseudo-trilete marks (1–3), with Late Ordovician trilete spores from Saudi Arabia (4–6). **1–3**: Unpublished pictures from P. Breuer, Lower to Middle Devonian, Saudi Arabia: *Gneudnaspora divellomedia* var. *divellomedia* (Chibrikova) Breuer *et al*., 2007 showing pseudo-trilete marks. **4–6**: Pictures from Wellman *et al*. (2015): they are the Late Ordovician trilete spores from Saudi Arabia, which are considered as doubtful by some authors. **4**: *Ambitisporites avitus* Hoffmeister, 1959 *sensu* Steemans *et al*. (1996) with a true trilete mark. **5**: *Chelinospora prisca* Wellman *et al*., 2015 with a true trilete mark, encroachment of the curvaturae is well visible. **6**: *Aneurospora* sp. A in Wellman *et al*. (2015) with a thin, straight, regular, trilete mark reaching the curvaturae. **7–9**: Copy examples of published true trilete spores from the Silurian up to Lochkovian. **7**: *Ambitisporites avitus* Hoffmeister, 1959 (extracted from Hoffmeister, 1959: pl. 1, fig. 10). **8**: *Chelinospora retorrida* Turnau, 1996 (extracted from Filipiak *et al*., 2012: fig. 4F). **9**: *Aneurospora extensa* (Naumova) Turnau, 1996 (extracted from Turnau & Markiewicz, 2010: pl. 1, fig. 3).

Unveilling a 470-million-year-old polar ecosystem in France – upcoming special volume in *Lethaia*

Fossil sites featuring soft-tissue preservation provide an unparalleled window into ancient ecosystems. Unlike typical deposits that only capture easily fossilized biomineralized organisms (such as brachiopods), these rare sites also preserve non-biomineralized life, like algae and jellyfish, offering a much more holistic picture of deep-time biodiversity. Such exceptional preservation is notoriously scarce in the geological record. While Paleozoic discoveries of this kind are relatively common in Cambrian strata, they become exceedingly rare in subsequent periods. However, this paradigm is shifting thanks to several recent discoveries of Ordovician soft-tissue sites. One of the most recent breakthrough is the Cabrières Biota in France, which preserves a remarkably diverse Early Ordovician ecosystem that once thrived near the South Pole (Figure below).



Artistic reconstruction and fossils from the Cabrières Biota. (a) Tens of genera are preserved in detail in this Lagerstätte. Fossils of sponge spicules (b), an algal specimen (c), a brachiopod attached to *Sphenothallus* (d), and a vermiform organism (e).

Initially, the identification of several fossils from the site, including suspected algae, cnidarians, sponges, and worm-like (vermiform) organisms, faced skepticism, with some researchers arguing they were merely trace fossils rather than body remains. A recently published/in press special issue of the journal *Lethaia* comprehensively addresses these doubts. Backed by extensive fieldwork, the collection of thousands of new specimens, and the collaborative effort of roughly 50 researchers, students, and amateur paleontologists, the original interpretations have been validated. The issue features 15 papers detailing the biota's remarkable diversity, environmental context, and taphonomic processes.

While the host rock (the Landeyran Formation) does contain plentiful trace fossils, the new research demonstrates they are entirely distinct from the body fossils. Updated taxonomic descriptions confirm the presence of hexactinellid sponges, various vermiform creatures, two distinct cnidarian genera, and abundant vendotaenid-like macroalgae, effectively putting previous claims of misidentification to rest. Furthermore, close examinations of the arthropod fauna have unveiled a newly discovered taxon alongside numerous freshly molted trilobite exoskeletons, underscoring the extraordinary preservation quality of the assemblage.

The site's hard-shelled organisms are equally pristine. Echinoderms feature fully articulated skeletons, while brachiopods, mollusks, and trilobites help refine the known faunal profile. Biostratigraphic dating using graptolites and acritarchs pinpoints the Cabrières Biota to the early late Floian stage (Fl3). Additionally, sedimentological and ichnological data

suggest this community lived in a wave-influenced deltaic setting. The fossils were primarily preserved in distal, environmentally stressed areas where conditions favored carbonaceous preservation, pyritization, and silicification. We are only just beginning to unlock the secrets of this unique polar ecosystem, and future research promises to reveal much more.

Farid Saleh, Pierre Gueriau & Bertrand Lefebvre

List of included articles:

CAILLAUD, V., BIROLINI, E., LEFEBVRE, B., MANZANI, E.G., MICHEL, S., REGNIER, S., VAUCHER, R. & SERVAIS, T. 2026. Acritarchs from the Floian (Early Ordovician) of the Montagne Noire, France: Biostratigraphical and palaeobiogeographical implications. *Lethaia*, **59**(2).

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GOUGEON, R., VAUCHER, R., VIDAL, M., BIROLINI, E., DUPICHAUD, C. & SALEH, F. 2026. Ichnology of the Lower Ordovician Landeyran Formation (Montagne Noire, France) and criteria for distinguishing simple trace fossils from body fossils. *Lethaia*, **59**(2).

GUTIÉRREZ-MARCO, J.C., MALETZ, J., VIZCAÏNO, D., LEFEBVRE, B. & SALEH, F. 2026. Lower Ordovician graptolites from the Cabrières region, Montagne Noire, France. *Lethaia*, **59**(2).

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VAN ITEN, H., BIROLINI, E., DUPICHAUD, C. & LEFEBVRE, B. 2026. Cnidarians of the Cabrières Lagerstätte (Lower Ordovician, France): Diversity, taphonomy, paleoecology, and paleobiogeography. *Lethaia*, **59**(2).

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Upcoming IGCP 735 special volume in *Bulletin of Geosciences*

We are pleased to announce a forthcoming special volume of the *Bulletin of Geosciences*, dedicated to the 3rd Virtual IGCP 735 Meeting in Prague. This volume presents the latest discoveries from the Ordovician period and features a comprehensive collection of 11 diverse manuscripts. The contributions cover a broad range of disciplines, including systematics, stratigraphy, palaeoecology, ichnology, and taphonomy. Edited by Martina Nohejlová, Lukáš Laibl, Yves Candela, and Bertrand Lefebvre, the issue is scheduled for official publication as the first volume of 2026.

Martina Nohejlová, Lukáš Laibl, Yves Candela & Bertrand Lefebvre

List of included articles:

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VIDAL-MARTY, C., LEFEBVRE, B., GENDRY, D., GUTIÉRREZ-MARCO, J.C., NOHEJLOVÁ, M. & RENAUD, S. 2026. Morphological variability within the mitrate *Mitrocystella incipiens* (Echinodermata, Stylophora) from the Darriwilian (Middle Ordovician) of high-latitude peri-Gondwanan regions. *Bulletin of Geosciences*.

VOLDMAN, G.G., ZEBALLO, F.J., VACCARI, N.E., CARRERA, M.G., KNAUST, D. & HUNT, A.P. 2026. Phosphatized coprolites and cololites from the lower Paleozoic of NW Argentina. *Bulletin of Geosciences*.

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REPORTS OF RECENT CONFERENCES

IGCP 735 regional meeting and field excursion
Llandrindod Wells (UK), July 4–11, 2025

At the beginning of July 2025, a joint conference, field trips and workshops took place in the heart of Wales, in the picturesque town of Llandrindod Wells on the border of the world-renowned Builth Inlier (Ordovician, Welsh Basin). The symposium was organised by Lucy Muir, Joseph Botting, Michelle Thomas and Berwyn Powell with the help of volunteers. The scientific content was supervised by the scientific committee members, namely Lucy Muir, Joseph Botting, Stephen Pates, Mansoureh Ghobadi-Pour, Caroline Buttler and Lucy McCobb.

This symposium hosted researchers from all around the world, from China to Europe and North America, 38 scientists in total. The research results were presented in 13 poster presentations, 19 oral presentations, and 6 keynote talks, addressing diverse early Palaeozoic fossil groups and palaeogeography. All contributions fell under the overarching theme of the conference: the phenomenon of Konservat-Lagerstätten and exceptional preservation.

The poster and scientific sessions were held in the comfort of the Powys Suite at the Metropole Hotel, Llandrindod Wells.

Stephen Pates delivering a lecture, as part of the conference workshop on bivalved arthropods.

The conference participants at Meeting House Quarry, near Llandrindod, with Ordovician volcanic rocks in the background.

The remarkable keynotes were given on these topics:

1. “The Herefordshire Lagerstätte: virtual fossils flesh out Silurian marine life” by David J. Siveter
2. “Filling Gaps in the Record: Late Ordovician Konservat-Lagerstätten in Manitoba, Canada” by Graham A. Young
3. “The Builth Inlier: volcanoes and exceptional preservation” by Joseph P. Botting
4. “Evolutionary patterns in Ordovician trilobites of the Builth-Llandrindod inlier: small changes with big implications” by Peter R. Sheldon
5. “Recent fossil insights into deuterostome origins: tentaculate worms, outstanding problematica, and the search for the first fish” by Karma Nanglu
6. “Early Paleozoic Seaweeds: An Overview” by Steven T. LoDuca

The meeting ended with two very interesting and practical workshops:

1. Identification and interpretation of early Palaeozoic sponges led by Joseph P. Botting
2. Identification of bivalved arthropods led by Stephen Pates.

Both workshops were supplied with amazing samples of both fossil and extant representatives of the presented animal groups.

One of the greatest things about this regional meeting was the unusual format—the presentation sessions alternated with the field trips. Thanks to this, the discussions on various topics could naturally start at the field sites and go on for hours and hours.

However, the visited sites represented one of the programme’s most transformative highlights. The Welsh Basin is not only foundational to the history of palaeontological research, but the organisers have also identified several localities near Llandrindod Wells with exceptional soft-bodied preservation—discoveries that are already reshaping, and will continue to shape, our understanding of the Ordovician Period.

Among these, two sites stand out in particular: Castle Bank, renowned for its exquisitely preserved soft-bodied fauna; and Llanfawr Quarry, which yields both exceptionally preserved sponges and microfossils.

The programme also included observations of specimens from the iconic Bailey Einon Ordovician rocks, alongside visits to other key sites such as the Holothurian Bed at Bach-y-Graig. For the Silurian System, participants explored the Pales locality, where fossil collecting was possible, and observed the spectacular Elan Valley outcrop.

The trip's success was evident as many left with overweight luggage—a humorous reminder of the rich fossil yields from the collectible sites.

Any conference would not be complete without social events in the evenings. The participants were able to get acquainted at the informal Icebreaker reception, where already the first of the many discussions started. The next evening, the Builth Male Voice Choir introduced the conference attendees to a part of the rich Welsh music tradition. The exploration of Welsh music continued on Monday evening in a historical 16th century pub, the Llanerch Inn, with a traditional folk music session. And last, but not least, the gala dinner took place on Wednesday evening. The delicious three-course dinner was served at the Metropole Hotel.

The whole meeting was characterized by a very high and exceptional scientific standard while maintaining a friendly and relaxed atmosphere. This was possible thanks to the wonderful organizers and volunteers, the supreme members of the scientific committee and the helpful staff at the Metropole Hotel.

On behalf of the participants, we would like to express our gratitude for organizing this excellent regional meeting and for inviting us to the extraordinary Welsh Basin.

Klára Jůzlová & Jakub Vodička

Conference participants enjoy Welsh sunshine as they examine outcrops of the Caban Conglomerate Formation (lower Llandovery) in the Elan Valley.

IGCP 735 regional meeting and field excursion
Camaret-sur-Mer (France), September 21–23, 2025

This IGCP 735 regional meeting and field excursion took place in Crozon peninsula, at the western point of France, along the sea front, organised by Muriel Vidal, Romain Gougeon, Damien Gendry, Yves Candela, Bertrand Lefebvre, Mathilde Levacher, Nathalie Babonneau, Germain Bayon and Alfredo Loi, with the help of Sophie Coat for the protected Geoheritage of Crozon peninsula. Thirty four researchers and students attended to the conference coming from different countries of North America (Canada, USA virtually), Asia (China), Africa (Chad) and Europe (Czech Republic, England, France, Germany, Switzerland, Spain). In total, 24 talks and 6 posters devoted to the Ordovician period have been presented with varied topics ranging from paleontology, sedimentology, stratigraphy, climate change, biodiversity, polar ecosystem, exceptional preservation, trace fossils or geochemistry.

The first day (Sunday 21) was dedicated to the arrival of the delegates in Crozon, registration and meeting opening. Some of the delegates were able to visit some sites in the late morning and afternoon according to their arrival, with the *Plage de Postolonnec* (Darriwilian sedimentary section and fauna), the *Pointe de Lostmarc'h* (Katian volcanism – pillow lavas) and the *Pointe de Pen-Hir* (Armorican Sandstone). At 6 p.m., Muriel welcomed everyone at the sea view congress center above the Veryac'h Ordovician section and paid tribute to Claude Babin (1934–2022) who organised the first international congress dedicated to the Ordovician (and Silurian) in 1971 in Brest. Claude Babin is well known for his work on Palaeozoic bivalves and cephalopods in the international scientific community and for books on geology (educational), on the history of palaeontology and on geologists and palaeontologists in France. Then, the welcomed speech of Mickaël Kernéis, the president of the municipalities of Crozon-Aulne maritime, was followed by two presentations, on the Subcommission on Ordovician Stratigraphy by its president, Thomas Servais from Lille and on the IGCP 735 Rocks 'n' ROL (for Rocks and the Rise of Ordovician Life), by Bertrand Lefebvre and Yves Candela, before an icebreaker *apéritif* and dinner.

The scientific sessions started the following morning (Monday 22), with a keynote talk by Grégory Beaugrand on the application of the METAL theory to reconstruct changes in biodiversity through time. Farid Saleh presented an update on the research carried out at the newly discovered Lagerstätte, the Cabrières Biota (Lower Ordovician), in southern France. Nora Corthésy and co-authors presented their research on decay experiments. Eiver Gelan Manzano and co-authors presented a review of phytoplankton palaeobiogeography in the Ordovician. Ismail Khardali and co-authors presented their preliminary results on the recently discovered Nkob Biota (Middle Ordovician) in Morocco. The last talk of this session presented by Paulina Nätscher and co-authors stressed the influence of climate and palaeogeographical changes on the evolution and distribution of brachiopods in the Ordovician.

A mid conference field excursion was organised to the *Plage du Veryac'h*, where the famous Veryac'h–Lamm Saoz section shows an almost complete (Llandovery missing) succession from the Darriwilian (Postolonnec Fm) to the Wenlock (La Tavelle Fm). As this visit was tide dependent, the delegates headed back to the Centre for the afternoon sessions.

The participants of the Crozon meeting at the Veryac'h beach, Camaret-sur-Mer (Brittany)

The second keynote talk of the day was presented by Bertrand Lefebvre and co-authors on the Cambro-Ordovician diversification of echinoderms. The next four talks focussed on faunal aspects of the Fezouata Biota in Morocco. Martina Nohejlová and co-authors presented their research on eocrinoids; Allison Daley presented for Lorenzo Lustri and co-authors their study on horseshoe crabs; Gaëtan Potin and co-authors presented their research on radiodonts; Harriet DRAGE and co-authors presented research on a new marrellid.

Following a break and poster session, the third keynote talk of the afternoon was presented by Marika Polechová on Claude Babin's impact on bivalve knowledges and ongoing research. The following talk by Juan Carlos Gutiérrez-Marco presented Ordovician graptolites from the Iberian Peninsula, also as a tribute to Claude Babin. Titouan Camus was presenting live from the USA his talk on the phylogeny and systematics of the Ordovician reedocalymenid trilobites. Damien Gendry presented the last talk of the day on the palaeontological collections at the University of Rennes and their access via databases.

The last day (Tuesday 23), the last keynote talk of the meeting by Gabriela Mángano and Luis Buatois presented a review of trace fossil records in the Ordovician. Yan Liang and co-authors presented a talk on the classification of chitinozoans. Thomas Servais reviewed the acritarch *Veryhachium*, first described from the *Plage du Veryac'h*. Hendrik Nowak and co-authors ended this session with a talk on the Ordovician plankton revolution. After the last poster session (and last coffee break) of the meeting, Jean-François Ghienne presented a talk on the end Ordovician life and ice sheets. Mathilde Levacher and co-authors presented their research on geochemical markers and the Late Ordovician climate change. Shen Jun presented a talk on mercury record and the need for caution in applying the Hg proxy for volcanic inputs. Valentin Jamart and co-authors presented on the Nkob Biota from the sedimentological and stratigraphical points of view. Lastly, Romain Gougeon and co-authors closed the scientific sessions of this meeting with a talk on trace fossils and the macro-evolution of burrowing animals in the Ordovician.

Keynote talk of Bertrand Lefebvre (above), Muriel Vidal and Mickaël Kernéis (on the left) and discussion during a poster session (on the right).

During these two days, posters could also be displayed for viewing during coffee breaks and for discussions with the authors, including Ordovician linguliformean brachiopod assemblage from Belgium by Yves Candela and co-authors, Cambro-Ordovician trace fossiles from northern Chad by Barnabé Djatibeye and co-authors, *Bifungites* from the Ordovician of Crozon peninsula: environmental tolerance and evolutionary trajectory by Romain Gougeon and co-authors, a Nd-Hf isotope investigation of Upper Ordovician from Anticosti Island (Canada) by Corentine Ribbe and co-authors, chitinozoans from the Early Devonian of South China by Shouhan Wu and co-authors, and finally the geological heritage of Crozon Peninsula by Sophie Coat.

The last afternoon was dedicated to excursions with trace fossils and sedimentary structures at the Corréjou beach near Camaret-sur-Mer, and at the Aber beach along the south coast of the Crozon peninsula to visit the volcanoclastic Rosan Formation. Along these days, the programmation of talk sessions interrupted by fieldwork visits have successfully contribute to foster the scientific discussions.

The organizing committee wishes to thank the sponsors: the Palaeontological Association, ISblue ("*The Interdisciplinary graduate school for the blue planet*", ANR-17-EURE-0015), the UNESCO and IGCP 735 Rocks ‘n’ ROL and the Réserve Naturelle régionale de Crozon -

Aulne maritime. Some sampling have been collected after the express authorization of the DREAL, Region Bretagne and the Réserve naturelle des sites d'intérêt géologique de la presqu'île de Crozon – Aulne maritime.

The book of abstracts is available for download as a special volume of the Journal of the APF for *Association Paléontologique Française*.

Muriel Vidal, Nathalie Babonneau, Germain Bayon, Yves Candela, Sophie Coat, Damien Gendry, Romain Gougeon, Bertrand Lefebvre, Mathilde Levacher & Alfredo Loi

Participants on the field, at le Correjou on the upper member of the Armorican sandstones (on the left, above), at Lostmarc'h point with pillow lava in the Rosan Formation (on the right above) and at le Veryac'h section in front of the Kermeur Formation (below).

5th annual meeting of IGCP 735
Changsha (China), October 17–21, 2025

From 17 to 21 October 2025, the 'International Geological Sciences Programme (IGCP) Project 735 Annual Conference 2025' was successfully convened in Changsha, Hunan Province. The event was hosted by the Central South University, and co-organized by the Nanjing Institute of Geology and Palaeontology of the Chinese Academy of Sciences and the Chinese Academy of Geological Sciences.

The meeting, organized by members of the Executive board of the Ordovician Subcommission, focused on the main objectives of IGCP 735, i.e., attempting to fill knowledge gaps to understanding of early Palaeozoic radiation, that includes the Cambrian 'Explosion' and the Ordovician Biodiversificatian 'Event'. The indoor meeting spanned four days, featuring six keynote presentations, twenty-nine oral presentations, and twenty-one poster presentations

Group photograph of participants at the 2025 Annual Academic Meeting of IGCP 735 Project.

Professor Zhan Renbin and Professor Zhang Yuandong from the Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, along with their team, Professor David A.T. Harper, Member of the Royal Danish Academy of Sciences and Letters, Professor Thomas Servais from the University of Lille, Professor Yves Candela from the National Museum of Scotland, Dr Elena Raevskaya from the Geological Survey of Russia, and Professor Birger Schmitz from Lund University in Sweden, among other internationally renowned experts, attended the conference. Nearly 70 experts, scholars, and students from 15 countries including the United Kingdom, France, Belgium, Russia, Argentina, South Korea, Nigeria, Estonia, Thailand, and Malaysia, alongside numerous domestic research institutions, participated in this academic conference.

Photographs of selected presenters at the 2025 Academic Annual Meeting of IGCP Project 735

The programme encompassed multiple components, including a workshop on the Liexi Fauna and a mid-conference field excursion held on 20 October Delegates travelled to Weishan Township, Ningxiang City, Changsha, Hunan Province, for the field trip. They conducted an on-site visit to a well-exposed Ordovician section. Later on that day, a workshop on the Liexi Fauna, a recenly discovered new Fossillagerstätte documenting the early stage of the Great Ordovician Biodiversification Event was organized back at the Central South University. The conference concluded successfully on 21 October, with an award ceremony for three Best Student Oral Presentation and one Best Student Poster Presentation.

Conference delegates conducting fossil observation (Liexi Fauna) and discussion within the Central South University laboratory.

The post-conference excursion allowed the participants to visit other fossil localities, in particular in the late Cambrian, i.e. in the crucial interval between the Cambrian and Ordovician radiation pulses (the late Cambrian, Furongian Gap).

This conference, themed “Rocks and the Rise of Ordovician Life”, provided a high-calibre academic exchange platform for scholars from across the globe. The conference highlighted recent research advances in relatively understudied periods, regions, biological phyla, and chemostratigraphic approaches within Ordovician studies, thereby fostering international collaboration and scholarly exchange. Its convening not only deepened understanding of Ordovician biological evolution but also enhanced research precision across related disciplines including palaeontology, palaeoceanography, palaeoclimatology, chemostratigraphy, and palaeoecology. This holds significant importance for comprehending the formation processes of the habitable Earth.

Wenhui Wang

Delegates engaged in lively academic discussions in the poster area.

Delegates conducting field work on Ordovician strata at Mount Weishan, Ningxiang.

Delegates in the post-conference excursion

Programme and list of oral presentations

Oct. 18, Morning

9:00–10:00: Opening Ceremony

10:00–10:30: Tea & coffee break & group photo

10:30–11:00: **Thomas SERVAIS** – 30 years of expeditions to the GOBE: five IGCPs projects to decipher the Ordovician radiations

11:00–11:20: **Yuandong ZHANG** – Boundaries of the South China Block during the Ordovician: A stratigraphic and palaeobiogeographic perspective

11:20–11:40: **Mongkol UDCHACHON**, Haylay Tsegab GEBRETSADIK, Hathaithip THASSANAPAK, Xiang FANG, Zhongyang CHEN & Clive BURRETT – Early Palaeozoic Stratigraphic Records from Southern Thailand and North–Western Malaysia (Sibumasu Terrane)

Oct. 18, Afternoon

14:30–15:00: **Mu LIU** – Diversification to extinction: oceanic and climatic context of the Ordovician

15:00–15:20: **Blanca A. TORO**, Nexxys C. HERRERA SÁNCHEZ & Claudia V. RUBINSTEIN – New graptolite and acritarch records from the Piscuno section, eastern Puna, Argentina: biostratigraphic and paleobiogeographic implications

15:20–15:40: **Dan TU**, Yilong LIU, Carlos MARTÍNEZ-PÉREZ, Philip C. J. DONOGHUE, Ruiwen ZONG & Yiming GONG – The early Katian (Late Ordovician) conodonts natural assemblages from Fuping Fauna

15:40–16:00: **Thibaud LIEFFROY**, Peep MÄNNIK, Alicja WUDARSKA, Frederic COUFFIGNAL, Michael WIEDENBECK & Olle HINTS – Conodont $\delta^{18}O$-based reconstruction of Lower and Middle Ordovician paleotemperatures in Baltica: new data from the deep-shelf Aizpute-41 drill core, Latvia

16:00–16:30: Tea & coffee break

16:30–16:50: **Birger SCHMITZ**, Shiyong LIAO, Tao Anna ZHANG & Philipp R. HECK – Mid-Ordovician fossil meteorites and the formation of a gigantic asteroid family 466 Ma

16:50–17:10: **Shiyong LIAO**, Tao Anna ZHANG & Birger SCHMITZ – Tracing volcanic activity through heavy minerals in marine sediment: insights from the middle Ordovician limestones in the Yangtze Block

17:10–17:30: **Kui YAN**, Jun LI, Longlong SHAN, Thomas SERVAIS & Yuandong ZHANG – Miaolingian (Cambrian)–Early Ordovician palynomorphs of the Baishan area, Jilin Province, China

17:30–17:50: **Elena RAEVSKAYA** – Late Ordovician-Silurian acritarchs from the Arctic of Russia

Oct. 19, Morning

8:30–9:00: **Lijing LIU** – Ordovician marine Charophyceae and insights into land plant derivations

9:00–9:20: **David A.T. HARPER**, Claire BROWNING & Cameron R. PENN-CLARKE – Late Hirnantian brachiopod fauna from the Cederberg Formation, South Africa: Opportunists on the edge of a waning ice sheet

9:20–9:40: **Hanxiao SHEN**, Qi XU, Wenwei YUAN & Junxuan FAN – Systematics and Quantitative Morphometrics of Ordovician Trilobites from the Qilian Mountains, North China: New Species and Palaeobiogeographic

9:40–10:00: **Yves CANDELA**, David, A.T. HARPER, Thomas SERVAIS & Bernard MOTTEQUIN – Synoptic review of Ordovician Avalonian brachiopods: A Belgian Story

10:00–10:30: Tea & coffee break

10:30–10:50: Paulina NÄTSCHER, Claude MONNET, Alexis BALEMBOIS, Grégory BEAUGRAND, David HARPER, Bertrand LEFEBVRE, Alexandre POHL & **Thomas SERVAIS** – The latitudinal biodiversity gradient in Ordovician brachiopods: Influences of climate, tectonic, ecological and methodological parameters

10:50–11:00: **Jörg MALETZ** – Graptolite diversity - How much do we know?

11:00–11:20: **Zhongyang CHEN**, Hathaithip THASSANAPAK, Wenjie LI, Xuejin WU, Chao LI, Mongkol UDCHACHO, Xiang FANG, Yuandong – Ordovician and Silurian conodonts from western Thailand

11:20–11:40: **Muhammad Aqqid SAPARIN** & Yuandong ZHANG – Graptolite faunas and biostratigraphy of the Ordovician-Silurian transition in Sibumasu: questions and approaches

Oct. 19, Afternoon

14:30–15:00: **Peter VAN ROY** – 25 years of discovery of the Fezouata Biota: Past, present and future

15:00–15:20: **Yilong LIU**, Dan TU, Ruoying FAN, Qingyang XU, Xin HU, Ruiwen ZONG & Yiming GONG – Fuping Fauna: a deep-water fauna in the prime of the Great Ordovician Biodiversification Event

15:20–15:50: Tea & coffee break

15:50–17:30: Workshop + Poster presentation (3 minutes for each presenter)

Oct. 20: Mid-conference excursion

Oct. 21, Morning

8:30–9:00: **Juwan JEON**, Qijian LI & Jeong-Hyun LEE – Sea-level fluctuation distorts Ordovician reef evolution

9:00–9:20: **Jiaqi SONG** & Xiang FANG – Oceanic current-influenced cephalopod province in the Katian: Evidence from the Eastern Anti-Atlas and Northern Qilian Mountains

9:20–9:40: **Zihan ZHOU**, Zongyuan SUN, Congyu YU, Qing CHEN, Shi TANG & Junxuan FAN – Quantitative analysis of graptolite morphological evolution across the Ordovician–Silurian transition

9:40–10:00: **Marhaba KHATTAK**, Zakir ALI, Emad Ullah KHAN, Qijian LI & Maryam SALEEM – Evolutionary and diagenetic history of Nowshera reef complex, Peshawar Basin, Pakistan

10:00–10:30: Tea & coffee break

10:30–10:50: **Guangxu WANG** & Yunong CUI – Systematics and evolution of key Late Ordovician coral groups

10:50–11:00: **Peng TANG**, Yuchen ZHANG, Yi WANG, Zhibin HUANG, Zhilin YANG, Xiaole ZHANG, Guangxu WANG, Kun LIANG, Fangyi GONG, Junjun SONG, Yuanyuan ZHANG & Renbin ZHAN – Late Ordovician Stratigraphic Framework and Depositional History in northwestern Tarim Basin, China

11:00–11:20: **Siying AN**, Zongyuan SUN, Xin JIN, Qing CHEN, Xiaoyue ZHANG, Feng LIANG & Junxuan FAN – No direct link between eruptive volcanic activity intensity and organic matter enrichment in the lower Silurian Longmaxi Formation shales, South China

11:20–11:40: Nexxys C. HERRERA SÁNCHEZ, **Blanca A. TORO**, Ana MESTRE, Juan L. BENEDETTO & Guadalupe REMONDA – High resolution graptolite-conodont biostratigraphy from the Ordovician-Silurian transition at Cerro La Chilca section, Argentine Precordillera

Oct. 21, Afternoon

14:30–15:00: **Xiaocong LUAN**, Colin D. SPROAT, Jisuo JIN, Peir K. PUFAHL, Rongchang WU & Renbin ZHAN – Ordovician ferruginous ooids and microbialites: distribution, origins and environmental significances

15:00–15:20: **Jinqi XU**, Ruining HU, Wenhui WANG & Jingqiang TAN – Nitrogen isotopic constraints on marine primary productivity across the Ordovician–Silurian transition

15:20–15:40: **Yuchen ZHANG**, Peng TANG, Qing CHEN, Xin WEI, Yuanyuan ZHANG, Yi WANG, Renbin ZHAN & Jiayu RONG – The Ordovician-Silurian boundary

deposits in northwestern Tarim, Xinjiang: The Xikeer Bed (new unit) and its implications

15:40–16:00: **Ogechukwu Ann MOGHALU**, Björn KRÖGER, Luis BUATOIS, Gabriela MÁNGANO, Petra TONAROVÁ, Olle HINTS & Ursula TOOM – Palaeoenvironment implications of a multi-proxy assessment of the Hirnantian-earliest Rhuddanian carbonates of Estonia (Baltica)

16:00–16:20: **Meimei XU** & Yiying DENG – Study on the Biodiversity of the Great Ordovician Biodiversification in the Baltic

16:20–16:50: Tea & coffee break

16:50-17:20: Closing Ceremony and Awarding

List of poster presentations

Wenjie LI, Jiaqi SONG, Xin WEI, Yuchen ZHANG, Rongchang WU, Yong WANG, Yatao ZHANG, Peng TANG, Yi WANG, Renbin ZHAN & Yuandong ZHANG – New bellerophontoids (Gastropoda) from the Katian of Qilian, China: implications for Ordovician carbonate platform ecosystems

Xiangri CHI, Guanzhou YAN, Fangyi GONG & **Rongchang WU** – Integrated conodont biostratigraphy and stable isotope chemostratigraphy from the Tremadocian and Floian (Lower Ordovician) of the eastern North China Platform

Xiaocong LUAN, Mikael CALNER, Fangyi GONG, Oliver LEHNERT, Guanzhou YAN, Yuchen ZHANG, Zhutong ZHANG & **Rongchang WU** – High resolution Ordovician (Floian-Sandbian) carbon isotope stratigraphy from the Jiangnan slope, South China: The first complete record of the MDICE in δ^{13}Corg and its global significance

Lixia LI, Guanzhou YAN, Xin WEI, Fangyi GONG & Rongchang WU – Late Ordovician sponge spicule assemblage from the Yangtze Platform, South China and its paleobiogeographical significance

Nikolay V. SENNIKOV & Ilya.G. ZAKIRYANOV – Small domed buildups (calyptrae) in the Upper Ordovician of Gorny Altai (South of West Siberia)

Petra TONAROVÁ & Olle HINTS – Emergence of jawed polychaete diversity in the Ordovician

Zhutong ZHANG, Chuan YANG, Diana SAHY, Ren bin ZHAN, Rongchang WU, Yang LI, Yiying DENG, Bing HUANG, Daniel J. CONDON, Jiayu RONG & Xianhua LI – Tempo of the Late Ordovician mass extinction controlled by the rate of climate change

Xiuchun JING, Yang SHEN & Ru FAN – Refining Middle-Upper Ordovician conodont biostratigraphy in the Hatuke Creek section, western North China Craton: Evidence from bedding plane assemblages

Xinping HANG, Joseph P. BOTTING, Wenhui WANG, Yuandong ZHANG & Junye MA – Diversity of sponges from Ganggangshan, South China following the end-Ordovician mass extinction

Yan LIANG, Olle HINTS, Jaak NÕLVAK & Peng TANG – Characterizing inner structures of chitinozoans using novel techniques: Insights into their classification system

Ming LI, Baoyu LIN & Mengbi LI – Temporal and spatial distribution of Ordovician marine red beds in western Yunnan

Linna ZHANG & Qing CHEN – Biogeographic dynamics of graptolites during the Late Ordovician Mass Extinction in South China

Xin WEI, Renbin ZHAN, Guanzhou YAN, Xiaole ZHANG & Guangxu WANG – The earliest known recovery trilobite faunas following the Late Ordovician mass extinction (LOME) in South China and their ecological distribution

Lan JIANG, Jiaqi SONG, Zhongyang CHEN, Tingen CHEN & Xiang FANG – The middle to late Silurian cephalopod fauna in the Baoshan area, Western Yunnan

Xuejin WU, Hui LUO, Junpeng ZHANG, Qing CHEN, Xiang FANG, Wenhui WANG, Wenjie LI, Zhensheng SHI & Yuandong ZHANG – Volcanism-driven marine eutrophication in the end-Ordovician: evidence from radiolarians and trace elements of black shale in South China

Shijia GAO, Jingqiang TAN, Wenhui WANG – Palaeoecological study of some characteristic graptolites by using CFD simulations

Guanzhou YAN, Jianbo LIU, Oliver LEHNERT, Xiaocong LUAN, Mikael CALNER & Rongchang WU – Tremadocian (Lower Ordovician) conodont biostratigraphy, bioevents, and their integration with stable isotope chemostratigraphy on the Yangtze Platform, South China

Juwan JEON, Yuchen ZHANG, Stephen KERSHAW & Renbin ZHAN – Katian (Late Ordovician) stromatoporoids from the North Qilian Mountains, NW China

Peter VAN ROY, Andries WEUG, Laurenz SCHRÖER & Veerle CNUDDE – Survival of Tamisiocarididae in the Tremadocian Fezouata Biota of Morocco

Peter VAN ROY, Mohamed OUMOUHOU, Ondřej ZICHA, Robert R. GAINES, Jana BRUTHANSOVÁ & Petr KRAFT – Hurdiid radiodonts from a new exceptionally preserved early Sandbian biota from Morocco

Peter VAN ROY, Jared, C. RICHARDS & Javier ORTEGA-HERNÁNDEZ – Tremadocian sea scorpions from Morocco suggest Cambrian origins and major early diversification of Eurypterida

Han WANG, Simon BRADDY, Zhikun Gai, Zhixin SUN, Bo WANG & Haichun ZHANG – Silurian and Early Devonian Eurypterid Assemblages from South China

Tao Anna ZHANG, Shiyong LIAO & Birger SCHMITZ – Elevated micrometeorite flux prevailed for at least 20 Myr after the L-chondrite parent body breakup

CONFERENCE ANNOUNCEMENTS

5th International Congress on Stratigraphy (STRATI 2026)
Suzhou (China), June 28–July 3, 2026

Foreword

The STRATI congress is the official meeting of the International Commission on Stratigraphy held between meetings of the International Geological Congress. STRATI meetings serve as a cornerstone of international stratigraphic research, fostering dialogue and innovation across continents with a legacy rooted in Europe. As Earth science challenges and opportunities become increasingly interconnected, STRATI 2026 represents a pivotal opportunity to enhance global cooperation. Hosting this edition in Suzhou reflects the International Commission on Stratigraphy's (ICS) dedication to promoting inclusive worldwide scientific exchange and addressing shared priorities in stratigraphic research.

This congress comes at a critical time for the Earth sciences. The rising demand for data integration, harmonized chronostratigraphic frameworks, and collaborative solutions to planetary-scale challenges, including climate archives and resource sustainability and calls for renewed global synergy. STRATI 2026 will act as a catalyst for these efforts, not only strengthening the traditional research in stratigraphy and high-resolution geochronology, but also leveraging advancements in open-access digital platforms that empower scientists worldwide.

We envision STRATI 2026 as a milestone in our collective progress. Over six days, participants will share knowledge through thematic sessions, workshops, and field excursions across iconic geological regions. We particularly encourage subcommissions, working groups, and early-career scientists to shape the program, ensuring that diverse perspectives inform the agenda. Together, we will explore how stratigraphy can bridge disciplinary divides, refine global standards and correlations, and illuminate Earth's history with unprecedented clarity.

In the spirit of unity and discovery, we warmly invite researchers, educators, and policymakers worldwide. Let us seize this moment to forge partnerships that transcend borders and advance stratigraphy as a truly global endeavor. Join us in Suzhou to write the next chapter of our planet's story—together.

General information

Website: https://strati2026.org/

Contact:
- ykshi@nju.edu.cn for financial questions
- qiewenkun@nigpas.ac.cn for field excursion questions
- yghuang@cug.edu.cn for session and program questions
- ariana.xu@nju.edu.cn for registration questions
- strati2026@ddeworld.org for other general issues

Congress schedule

June 24th-28th: Pre-conference field excursions
June 28th: Onsite registration, short courses, icebreaker
June 29th-30th: Scientific symposia
July 1st: Mid-conference field excursion
July 2nd-3rd: Scientific symposia
July 4th-10th: Post-conference field excursions

Language

English will be the official language of the meeting and the field trips

Scientific sessions

General and Subcommission sessions both include oral and poster sessions, and parallel sessions will also be scheduled. The following scientific sessions have been proposed covering a wide range of stratigraphic topics (see details on the website):

General Sessions

G1. The Long Fuse to Biological Complexity: Advances in Mesoproterozoic through Cryogenian Stratigraphy

G2. The Middle Age Period of the Earth (1.8–0.8 Ga) ——New Stratigraphic Advances, Boundary Delimitation, and Planetary Spheres Interaction

G3. Co-Evolution of Earth and Life from the Archean to the Proterozoic

G4. The Precambrian-Cambrian Transition: Stratigraphic Record, Biological Evolution and Environmental Changes

IUGS

5th International Congress on Stratigraphy

STRATI 2026

G5. The Palaeozoic World: Events that Shaped Life

Thomas Servais, Lucia Angiolini, Junxuan Fan & Annalisa Ferretti

The Palaeozoic Era, spanning approximately 290 million years from the Cambrian to the Permian, represents one of the most dynamic intervals in Earth's history. It witnessed profound evolutionary innovations, major biotic turnovers, and significant environmental changes that shaped the trajectory of life and the structure of sedimentary basins. Understanding these events and bioevents is crucial for refining stratigraphic correlations, interpreting the interplay between life and Earth systems, and reconstructing global palaeogeography. For these reasons, we propose a dedicated session entitled **"The Palaeozoic world: Events that shaped Life"**.

The Palaeozoic is characterized by a series of globally recognizable events, including mass extinctions, biodiversification episodes, and oceanographic global perturbations. These events are recorded in multiple stratigraphic archives —biostratigraphy, chemostratigraphy, sequence stratigraphy, and magnetostratigraphy— providing a unique opportunity to integrate multidisciplinary approaches. By focusing on the Palaeozoic, this session will address fundamental questions about the resilience and vulnerability of life, the drivers of environmental change, and the stratigraphic expression of global crises. These insights are essential for improving correlations across palaeocontinents and for reconstructing the dynamics of ancient ecosystems.

The proposed session aims to:

1. **Highlight the nature and timing of major Palaeozoic events**, such as the Cambrian Explosion, the Ordovician Radiation, the Late Devonian and end-Permian extinctions, and associated oceanic anoxic events.
2. **Explore bioevents as stratigraphic tools**, focusing on faunal turnovers, evolutionary radiations, and extinction patterns that serve as high-resolution correlation markers.
3. **Discuss causal mechanisms**, including tectonic reorganizations, climate fluctuations, sea-level changes, and geochemical perturbations, and their feedbacks on biosphere evolution.
4. **Promote integration of regional and global datasets**, fostering collaboration among specialists working on different palaeocontinents and depositional systems.

The session will welcome contributions addressing, but not limited to, the following themes:

- **Biotic Events and Evolutionary Dynamics**: Patterns of origination and extinction, biodiversity trends, and ecological restructuring during key Palaeozoic intervals.
- **Chemostratigraphic Signatures of Events**: Carbon, sulfur, and strontium isotope excursions linked to oceanic and atmospheric changes.
- **Sequence Stratigraphy and Sea-Level Fluctuations**: Their role in shaping sedimentary environments and influencing biotic turnovers.
- **Regional vs Global Correlations**: Case studies demonstrating how local records contribute to global event frameworks.
- **Methodological Advances**: High-resolution dating, quantitative biostratigraphy, and integrated stratigraphic approaches for event recognition.

The proposed session on **"The Palaeozoic world: Events that shaped Life"** will provide a platform to synthesize current knowledge, present new findings, and explore innovative approaches to understanding one of the most transformative eras in Earth history. We invite contributions that advance our comprehension of these critical intervals and their stratigraphic significance in order to encourage interdisciplinary research and discussions that will lead to identification of priority areas for future research on Palaeozoic events.

G6. Integrative Stratigraphy and Earth System Interactions Across the Permian-Triassic Transition
G7. Mesozoic Timescale Calibration
G8. Late Holocene to Anthropocene Transformations
G9. Cenozoic Terrestrial Biostratigraphy and Mammalian Evolution
G10. Novel Isotope and Elemental Geochemical Proxies for Phanerozoic Stratigraphy and Ocean Chemistry Reconstructions
G11. From the Paleotethys to the Neotethys: Insights into the Stratigraphic and Paleogeographic Evolution of the Tethys Ocean Realm
G12. Cyclostratigraphy and Its Applications in Geochronology and Paleoclimatology
G13. Understanding Mass Extinctions and Environmental Changes through Geological Time: Causes and Effects
G14. The Stratigraphy of "Events" in Earth History
G15. Trace Fossils as Indicator of Major Global Events and Regional Key Stratigraphic Surfaces
G16. GSSP Proposals To Complete the Time Scale: Problems and Solutions
G17. Quantitative Stratigraphy: Concepts, Principles, Methods and Applications

Subcommission Sessions

S1. Towards Subdivision of the Ediacaran System into Meaningful Stages and Series

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S2. Ordovician Stratigraphy, Ecosystem and the Habitability Evolution

Yan Liang, Lars Holmer, Wen-hui Wang, Bertrand Lefebvre & Renbin Zhan

The Ordovician Period began with elevated global temperatures and the most extensive epicontinental seas in Earth's history. As global cooling progressed and tectonic processes continued across multiple scales, the Great Ordovician Biodiversification Event (GOBE) unfolded worldwide, establishing the fundamental framework of the Paleozoic Evolutionary Fauna (PEF). Then, the diversification was interrupted by the Late Ordovician Mass Extinction (LOME), one of the "BIG FIVE" ever happened in Phanerozoic, however, without severe ecosystem damage. The Ordovician geologic record is globally widespread and well-exposed in most major blocks, and the generations of hardworking Ordovician experts spent about three decades making the Ordovician the first system to have all GSSPs settled in 2007. Since then, more detailed case studies and regional-to-global syntheses have been conducted under a refined integrative stratigraphic framework, along with hypotheses on the patterns and drivers of biodiversity changes. However, some significant debates remain unresolved.

This session aims to accelerate global communication and collaboration to further discuss the stratigraphy, ecosystem and habitability evolution in the Ordovician. Key topics could include: 1) Progress on stratigraphy, including the lithostratigraphy, biostratigraphy, chemostratigraphy, chronostratigraphy, and, all in all, the integrated stratigraphy; 2) New perceptions on the two major bio-events, GOBE and LOME, to decode the evolution of the Ordovician creatures and to explore the drivers or triggering factors; 3) New discoveries and hypotheses about the Ordovician organisms, ecosystem and related subjects; 4) New and/or advanced methodologies relevant to the Ordovician stratigraphic and paleobiologic studies.

We welcome all relevant contributions to this session and look forward to an in-depth and stimulating discussion on the Ordovician study.

S3. Integrated Stratigraphy of the Silurian to Reconstruct Ancient Earth
S4. Multidisciplinary Studies on Devonian
S5. Journey to the Carboniferous
S6. Perspectives on Permian Stratigraphy
S7. Triassic Horizons: Multidisciplinary Approaches to Crises, Correlation and GSSPs
S8. Tropical Seaways Through Time: Stratigraphic, Tectonic and Paleoceanographic Evolution from the Jurassic to the Neogene
S9. Recent Advances in Jurassic Stratigraphy
S10. Marine and Non-Marine Cretaceous Stratigraphic Correlation: New Advances and Integrated Stratigraphy for Palaeoenvironmental Reconstruction
S11. Rapid and Gradual Global Changes: the Paleogene vs. Other Stratigraphic Intervals
S12. Advances in Neogene Stratigraphy and Astrochronology, and the Functioning of Its Earth System
S13. Climate Changes, Terminations, and Thresholds: Stratigraphic Markers in the Quaternary Record
S14. 'GTS2030' – Toward an Open Science Geologic Time Scale

Workshops

W1. A Billion-Year Odyssey of the Earth's Middle Age: New Advances in the Statherian-Tonian Multi-Stratigraphy, Global Correlation and Basin Dynamics
W2. Triassic GSSPs and the Candidates (post-conference field workshop)

Short Course

Stratigraphic forward Modeling: Testing Hypotheses in Carbonate Stratigraphy

Depending on the number of oral presentations proposed, it is possible that the session organizers and the organizing committee may request poster presentations instead of oral presentations.

For abstract submission, please, visit the conference website: https://strati2026.org/

Field excursions

The following excursions are scheduled (Please purchase insurance in advance at your own expense):

Pre-conference Excursions

PF1. Critical stratigraphic boundary intervals in Yunnan Province, SW China (5500 RMB)
PF2. Late Paleozoic to earliest Mesozoic stratigraphy and faunas in Guizhou, South China (3400 RMB)
PF3. The Yanliao and Jehol biotas in North China (4500 RMB)
PF4. Mesoproterozoic successions in Jixian area, Tianjin City, North China (3300 RMB)

Mid-conference Excursions

MF1. Meishan section and Meishan Geopark (800 RMB)
MF2. Tai Lake Xishan Section (800 RMB)

MF3. Ordovician to Silurian strata and Anji Biota in the Anji, Zhejiang (800 RMB)
Yuandong Zhang, Longwu Wang, Junye Ma & Xuejin Wu

The Hanggai section in Anji, Northwestern Zhejiang Province, was ratified as the "Reference Section of the Hirnantian Stage for Lower Yangtze Region, South China". The section exposes continuous Upper Katian to Rhuddanian interval of graptolitic shale and fine grain clastics deposits, in which the Hirnantian Stage is ca. 360 m thick (Wenchang Formation). The section contains fairly diverse fossils, including abundant graptolites, chitinozoans, and sponges, and less abundant brachiopods, trilobites and gastropods, etc. Biostratigraphically, six successive graptolite biozones and a benthic assemblage are identified.

The Anji Biota reported here is a unique deposit with exceptionally preserved sponges and other organisms in deep-water, uppermost Ordovician mudstone. The sponge fossils preserve remarkable details including carbonaceous preservation of soft tissues and axial filaments of spicules. The discovery of Anji Biota, dominated by abundant and diverse sponges and graptolite in the Hirnantian interval opens a new window to probe into the marine benthic community during the Hirnantian Extinction and shed lights on the sponge evolution after the Cambrian Explosion.

Hanggai section in Anji, Zhejiang (left), and diverse sponges and graptolites yielded from the Anji Biota.

Post-conference Excursions

POF1. The Cryogenian-Cambrian stratigraphy and biotas in Guizhou and W. Hunan, SW China (7500 RMB)
POF3. Linxia Basin and Loess in North China (4000 RMB)
POF4. Mesoproterozoic, Cambrian and terrestrial Permian-Triassic successions in the Yuntai Mountain-Shaolin Temple areas, Henan Province, central China (3500 RMB)
POF5. Upper Devonian to lowest Carboniferous successions in Guilin Karst area, Guangxi, South China (4000 RMB)

POF2. From Snowball Earth to Great Mass Extinction: Ediacaran to Triassic Stratigraphic Records in the Three Gorge area, central China (5000 RMB)
Xueqian Feng, Dongjing Fu, Zhongyang Chen & Xiang Fang

The Three George area, western Hubei Province, central China is not only famous with the spectacular landscapes sculptured by the Yangtze River and the greatest dam in the world, but also records one of the most continuous marine Late Neoproterozoic to Mesozoic successions in China, providing the classic book of Earth evolution for this period and displaying excellent stratigraphic and geologic records of several most important events characterizing the life-environment evolutions of Earth, including the Snowball Earth event, early animal evolution, Cambrian explosion (Qingjiang Lagerstätte), **the Great Ordovician Biodiversification**, end-Ordovician mass extinction, two GSSPs of stages within the Ordovician, middle-late Permian mass extinction, Permian-Triassic mass extinction, and Early Triassic hothouse regime.

This 7-day excursion will examine Ediacaran succession that is characterized by Marinoan tillite, cap carbonate, black shale, and massive dolomite, and correlates well with their counterparts exposed elsewhere in China and the world. The well-known Marinoan Snowball Earth event and its aftermath as well as unique records of well-known multicellular Ediacaran biota (Shibantan Biota, including the first footprint of animal ever in Earth history) are also investigated in this route. The Precambrian-Cambrian transition is rather continuous and comprised of black shales containing abundant phosphorus sediments of industrial value. The Qingjiang Lagerstätte, equivalent to the Chengjiang Biota, from the Changyang county of Yichang City witnessed the Cambrian explosion in early Cambrian. The Lower Paleozoic successions are particularly continuous around the Yichang City and yield abundant invertebrate fossils. **To date, at least two stage-level GSSPs of the Ordovician have been established in this area, and the Ordovician/Silurian (O/S) boundary mass extinction is also well recorded herein.** The equivalent of black shale succession yielding huge sources of shale-gas in South China is also examined during this excursion. The Devonian to Lower Permian strata are locally exposed in the Three Gorge area. The middle Permian to Triassic successions are well exposed in the Xiaokou section of the Xingshan county, northern part of the Three Gorge area, displaying lithologic and biotic variations across the Guadalupian-Lopingian and Permian-Triassic mass extinctions. The Lower marine reptile Lagerstätte of the Yuanan Biota is also located in the north of Yichang City. The Middle-Upper Triassic successions are dominated by lacustrine facies sediments, while the Jurassic comprises fluvial facies conglomerate, sandstone and mudstone due to the uplift of the Three Gorge area since the Middle Triassic.

- Day 1: Arrive at Yichang City, then take a bus to the Zigui Town. The trip from the Yichang City to Zigui Town will take about 1 hour.
- Day 2: The Jiulongwan-Huangniuyan section to see the Cryogenian Nantuo Formation, the Ediacaran Doushantuo and Dengying Formations.
- Day 3: The Gunshi'ao section to see the Ediacaran/Cambrian Boundary and Cambrian Shuijingtuo Formation.
- Day 4: The Qingjiang biota at Changyang Town, then back to Zigui Town by the evening
- Day 5: **The two GSSPs of the Ordovician. Wangjiawan and Huanghuachang sections**
- Day 6: The Lianziya section to see the Middle-Upper Permian, then to another point to see the Lower Triassic strata (in the afternoon).
- Day 7: Have a sightseeing of the Three Gorges Dam, then back to the Yichang City.

The complete and continuous successions of the Ediacaran to Triassic of this excursion offer a better understanding of biotic and environmental evolution during the first half pace of Phanerozoic. Additionally, this field excursion provides a unique opportunity to enjoy the spectacular landscapes of the Three Gorges and great dam as well as local cultures of ancient Chu Kingdom in the central part of China.

Post-conference Field Workshop

W2. Workshop on Triassic GSSPs and the candidates (800 RMB)

Social activities and conference dinner

Social activities include the icebreaker party and reception on Sunday June 28th, as well as paid sightseeing for surrounding attractions (run by tour company). The conference dinner will be organized on Tuesday, June 30th, at the venue with traditional Chinese performances.

Venue

Kunshan Crown International Exhibition Hotel: Nestled at No. 1277 Qianjin West road, Kunshan of Suzhou, Jiangsu Province, Kunshan Crown International Exhibition Hotel stands as a comprehensive landmark integrating grand exhibitions, conferences, accommodation, dining, and leisure. This architecturally distinctive complex comprises a 32-story main building, boasting a total construction area of 145,000 square meters. This hotel boasts 680 standard double/twin rooms and ~10 deluxe suite rooms. Several other surrounded hotels can also provide ~1000 rooms.

Travel

There are lots of direct flights from European, North American, Oceanian and African countries to Shanghai Pudong or Hongqiao airports (details on the Strati 2026 website), and Suzhou is next to Shanghai and has direct trains and buses access to the Shanghai Hongqiao airport (there are airport shuttle bus or Shanghai Suburban Railway Airport Link Line between Pudong and Hongqiao airports). **Shuttles will be arranged between Shanghai airports and conference venue on June 28th and July 3rd (the service can be booked with online registration)**. It takes half hour from the Hongqiao airport to Suzhou. More details on the Strati 2026 website.

Visa

Under China's current policies, citizens from **86 countries** can travel to China visa-free for up to 30 days. Additionally, citizens from **10 countries**, including European and American nations, are subject to a 10-day visa free transit policy (see details on the Strati 2026 website). Invitation letter will be provided upon request.

Registration and fees

All fees in Strati 2026 shall be paid based on the RMB amount; the USD amount is for reference only.

- Early-bird registration (January 31st–March 15th, 2026):
  - 2,000 RMB (~290 US$) (professional)
  - 1,600 RMB (~230 US$) (retired professional)
  - 1,200 RMB (~180 US$) (students)
- Standard registration (March 16th–June 27th, 2026):
  - 2,900 RMB (~420 US$) (professional)
  - 2,200 RMB (~320 US$) (retired professional)
  - 1,500 RMB (~220 US$) (students)
- Onsite registration (June 28th, 2026–):
  - 3,300 RMB (~480 US$) (professional)
  - 2,500 RMB (~360 US$) (retired professional)
  - 1,800 RMB (~260 US$) (students)
- Registration fee including icebreaker, lunch, hard copy program, digital proceedings and a bag.
- Accompanying person: 1,000 RMB (~150 US$), access to icebreaker, lunch and a bag.

Important dates

- Dispatch of second circular: December 31st, 2025
- Opening abstract submission: December 31st, 2025
- Opening registration: January 31st, 2026
- Deadline for early bird registration: March 15th, 2026
- Deadline for abstract submission: April 15th, 2026
- Dispatch of third circular: May 30th, 2026

7th International Trilobite Meeting (ITM7)
San Emiliano (Spain), July 6–11, 2026

The **7th International Trilobite Meeting** will take place from **July 6 to 11, 2026, in San Emiliano**. This is a **small meeting focused on trilobite diversity and disparity**, both ecological and morphological. New approaches in the study of diversity fluctuations are providing us with a more precise understanding of evolutionary mechanisms throughout the Palaeozoic. For this reason, the **main theme of the meeting will be "New Insights into the Evolution of Trilobite Diversity and Disparity"**. Contributions addressing both micro- and macro-scale perspectives are welcome. However, the meeting will also be open to **related topics in trilobite (and relatives) paleobiology.**

The meeting also aims to maintain a meaningful way of staying connected and ensure that personal contact remains alive. This is particularly important given that in recent years we have had few opportunities to meet, almost a decade since the last meeting in Tallinn in 2017. The goal is not to hold a large conference, but rather a more intimate meeting in a location in northern Spain, where we can present and discuss our research in a friendly, relaxed atmosphere. The venue will be in **San Emiliano** (596 inhabitants), a small village in the Babia County in the province of León (northern Spain), accessible by bus from Madrid. Once there, we will have exclusive use of the rural hotel (https://vallesanemiliano.com/) and a small, rustic but pleasant space for talks and posters.

The number of participants will be limited to a maximum of **50 people**, with a minimum of 15 required for the event to take place. The **meeting registration fee** will cover **transportation** from Madrid, **accommodation**, **all meals during the four days**, dinner on the first day, and breakfast on the day of departure. The cost will be:

- **Single room:** €650
- **Shared room:** €550

The payment of the meeting fees will be made through this website:
https://eventos.ucm.es/140695/detail/7th-international-trilobite-meeting-san-emiliano-2026.html

Schedule

The plan includes two full days of talks and two full days in the field, with opportunities to visit classical localities in an outstanding landscape.

- **July 6th:** Arrival from Madrid. The meeting point will be Madrid Airport (Barajas, T3) and we will depart by bus after the last participant has arrived, before 4 pm if possible. It can also be reached independently from other airports and cities, and we can pick people up in León. This will be coordinated in the weeks leading up to the meeting.
- **July 7th-8th:** Talks, with short geological visits in the afternoons before dinner at Spanish time
- **July 9th-10th:** Field excursions and open discussion
- **July 11th:** Return to Madrid. It would be possible to make a stop in León for those attendees who would like to stay and explore this beautiful city and its surroundings after the meeting.

Abstract submission guidelines

The abstracts will be published in the **Palaeontological Publications Series**, linked to the editorial services of the **Sociedad Española de Paleontología**.

- All abstracts must be written in **English**, up to a maximum of **5 pages**, and may include no more than **four figures (figures or tables)**.
- Please email your abstract with the subject line: **"7ITM 2026 Abstract – your name."**
- Abstracts must be submitted **together with the registration form** in this website

There is no limit to the number of abstracts that an individual may submit. However, due to scheduling constraints, the total number of **oral presentations** will be **one per author**. The Scientific Committee will review all submissions, and authors will be notified of acceptance by email **after the submission deadline (March 15, 2026).**

Important dates

- October 2025, 2025: Abstracts submission opening
- October 2025, 2025: Registration opens
- March 15, 2026: Opening of the abstract evaluation process
- April 7, 2026: Abstracts submission closing
- May 31, 2026: End of the abstract evaluation process
- June 15, 2026: Registration closes

Organizing Committee

President: Jorge Esteve
Secretary: Antonio Arriola
Members: Javier Fernández-Martínez, Inés Fuertes-Murciego, Álex González-Cloquells, María-Gabriela Suárez & Rodrigo Castaño

Scientific Committee

Jonathan R. Adrain (USA), Diego Balseiro (Argentina), Derek E. G. Briggs (USA), Petr Budil (Czech Republic), Harriet Drage (Switzerland), Juan Carlos Gutiérrez-Marco (Spain), Melanie J. Hopkins (USA), Brenda R. Hunda (USA), Nigel C. Hughes (USA), Lukáš Laibl (Czech Republic), Rudy Lerosey-Aubril (USA), Javier Ortega-Hernandez — (USA), Isabel Rábano (Spain), Fernanda Serra (Argentina), Mark Webster (USA) & Xingliang Zhang (China)

12th European Conference on Echinoderms (ECE12)
London (UK), July 13–17, 2026

The European Echinoderm Conference is a premier gathering for scientists from around the world to share and discuss the latest research on both fossil and modern echinoderms. The 12th edition of this conference is taking place in London 2026! The conference brings together experts across a wide range of fields, including evolution of echinoderms, morphology, physiology, palaeobiology, genomics, developmental biology, ecology and climate change. By fostering interdisciplinary dialogue, the meeting aims to advance research in echinoderm biology and related disciplines while connecting a diverse community of scientists.

Venue / Travel

University College London, 99-105 Gower St, London, WC1E 6AA

Venue Facilities

University College London (UCL) stands as a prestigious venue, blending iconic heritage with cutting-edge facilities. With its striking mix of historic buildings and contemporary spaces, UCL offers a dynamic environment perfect for hosting events of all types and sizes. The campus features spacious, well-lit areas that provide an inspiring setting, whether you're planning an intimate gathering or a large conference.

Located in the heart of London, UCL benefits from its central position, providing easy access to the city's renowned cultural landmarks, dining, and transport hubs. UCL's vibrant atmosphere fosters creativity and collaboration, while offering a tranquil yet highly connected space for any event.

How to reach the University

Buses – UCL is well-served by numerous bus routes that connect directly to the campus and surrounding areas. Routes including 10, 24, 29, 73, and 390 provide easy access to key locations across Central London, making UCL a convenient destination for all.

Underground – The campus is ideally located within walking distance of several major Underground stations. The nearest tube stations to UCL are Russell Square (Piccadilly Line), Euston Square (Hammersmith & City, Circle, and Metropolitan lines), and Tottenham Court Road (Central and Northern lines), all within a short walk.

Local Trains – The closest National Rail stations to UCL are London Euston and King's Cross St. Pancras, both of which provide fast and frequent services to destinations across the UK, as well as London's many local transport connections.

Airports – UCL is easily accessible from several major airports in London:
- **London City Airport**: 30-minute drive or 25 minutes by DLR and Tube (8 miles)
- **Heathrow Airport**: 40-minute drive or 45 minutes by Tube (20 miles)
- **Gatwick Airport**: 1 hour by train (30 miles)
- **Stansted Airport:** 1 hour 25 minute drive or 1 hour 3 minute train to Liverpool Street Station (40.1 miles)

Taxis – Black cabs are readily available in and around the UCL campus and throughout the city. Additionally, ride-hailing services like Uber, Bolt, and FreeNow are widely used and can be easily accessed via their respective apps.

Special Article Collection

For the 12th European Conference on Echinoderms, we will publish a Special Collection of articles across two international peer-reviewed journals produced by the Natural History Museum, *Systematics and Biodiversity* and the *Journal of Systematic Palaeontology*. We invite you to submit manuscripts to be considered for publication in this Special Collection. Manuscripts on extant echinoderms should be submitted to *Systematics and Biodiversity* and papers on fossil echinoderms should be submitted to the *Journal of Systematic Palaeontology*. Please adhere to the style guidelines listed under the Instructions for Authors for the relevant journal (*Systematics and Biodiversity* and *Journal of Systematic Palaeontology*). Manuscripts should be approximately 2500 to 5000 words (not including references) with two to four figures/tables.

There will be no charge to publish in this Special Collection. Papers will be published online as soon as they are ready, with the complete Special Collection made free to access for six months following the publication of the final paper. Please indicate in your cover letter that you wish your manuscript to be considered for publication in the Special Collection based on the European Conference on Echinoderms. If you have any questions, please contact the relevant Editor-in-Chief: Tom White (tom.white@nhm.ac.uk) for *Systematics and Biodiversity* and Imran Rahman (imran.rahman@nhm.ac.uk) for the *Journal of Systematic Palaeontology*.

Mid-Conference field trip

On Wednesday 16th July 2026, we will organise an exciting trip to the world-famous coastal towns of Lyme Regis and Charmouth, part of the UNESCO Jurassic Coast World Heritage Site. The rock formations between these two towns have provided some of the most important fossils in the world, and include seminal sites for early fossil collectors and pioneering palaeontological scientists, including Mary Anning, Rev. William Conybeare, Prof. Richard Owen and Henry De la Beche. These Lower Jurassic and Lower Cretaceous

(~190–100 Ma) rocks continue to be the source of numerous spectacularly preserved fossils, exposed by constant coastal erosion. They preserve spectacular echinoderm fossils, particularly of crinoids (see image). The rich coastal waters also support numerous modern echinoderms including brittle stars, starfish and echinoids. So, there should be something for all conference delegates, particularly as there will be a fairly low tide during the fieldtrip.

Registration

Standard registration fees (after Friday 13th March 2026):

- Student Participant (Undergraduate / Postgraduate): £350.00
- Standard Participant: £450.00
- Mid-Conference Field Trip to the UNESCO Jurassic Coast World Heritage Site:
- £60.00
- Conference Dinner: £80.00

Important dates

- Deadline for Early Bird Registration: Closed
- Deadline for Travel Grant Applications: April 27, 2026
- Deadline for Cancellations for Registrations: May 18, 2026
- Deadline for Invoice Requests: June 15, 2026
- Deadline for Online Registration: July 6, 2026
- Deadline for poster abstract submission: July 6, 2026
- Deadline for submitting MS for the Special Article Collection: December 31, 2026

Organising Committee

Paola Oliveri, Hugh Carter, Maurice Elphick, Jeff Thompson, Imran Rahman, Suzanne Williams, Tim Ewin, Tom White & Guadalupe Bribiesca-Contreras

Scientific Committee

- **Ecology and climate change**: Guadalupe Bribiesca-Contreras, Magdalini Christodoulou, Pen Gorzelak, Camille Moreau, Chester Sands, Erik Simon-Lledó, Angela Stevenson
- **Evolution of echinoderms**: Nidia Alvarez Armada, Erwan Courville, Hugh Carter, Marc Eléaume, Marine Fau, Lucy Jackson, Bertrand Lefebvre, Imran Rahman, Jeff Thompson, Samuel Zamora
- **Morphology and physiology**: Jérôme Delroisse, Maurice Elphick, Alice Leavey, Tania Pineda-Enriquez, Mike Reich, Michela Sungi, Jessica Walker, Noé Wambreuse
- **Genomics and developmental biology**: Jenifer Croce, Ferdinand Marletaz, Paola Oliveri

IGCP 735 regional meeting and field excursion
Kitab Geological National Nature Park (Uzbekistan), August 4–11, 2026

We are delighted to formally invite you to a field meeting that will take place in the Kitab Geological National Nature Park (Kitab District, Kashkadariya Province, Uzbekistan), located on the southwestern foothills of the Zeravshan Range. Completed registration forms and abstracts should be returned by email to **coral06@mail.ru**. The registration deadline is **15 February**, and the deadline for abstract submission is **31 March**.

Bank details for payment will be provided upon receipt of the registration form. Payments must be made in US dollars by bank transfer, with a deadline of **30 April**.

Important dates and provisional schedule

- February 16, 2026: registration closes
- March 31, 2026: abstract submission deadline
- April 30, 2026: payment deadline
- August 4, 2026: arrival, icebreaker reception (evening)
- August 5, 2026: talks
- August 6, 2026: field excursion
- August 7, 2026: field excursion
- August 8, 2026: field excursion
- August 9, 2026: field excursion
- August 10, 2026: historical excursion and conference dinner
- August 11, 2026: departure

Please note that all deadlines are 23:59 p.m. coordinated universal time (UTC) on the given date.

Registration fees

Registration fee is $420 for all participants and $390 for accompanying persons. It includes:

- Transfers
- Accommodation in hostels (double rooms)
- Three meals a day
- Morning and afternoon coffee breaks
- Copy of the abstract volume
- Field guide
- Four field excursions
- Historical excursion to ancient Shakhrisabz

Because of the relatively small size of the meeting, we will not be running a program for accompanying persons.

The registration fee is the same for all participants. The registration fee for accompanying persons will be specified in the second circular.

How to get there

The field campus is located 40 km east of Shakhrisabz. It can be reached by road from the main airports of Uzbekistan - Tashkent and Samarkand. We recommend purchasing tickets to Samarkand, as transfers to and from the campus will be provided. The journey will take some time but is very scenic.

Conference format and themes

The format includes one day of presentations, four field excursions, and a day of historical sightseeing. Special attention will be given to:

- Early Paleozoic total communities
- Exceptional preservation
- Paleoecology
- Poorly studied groups

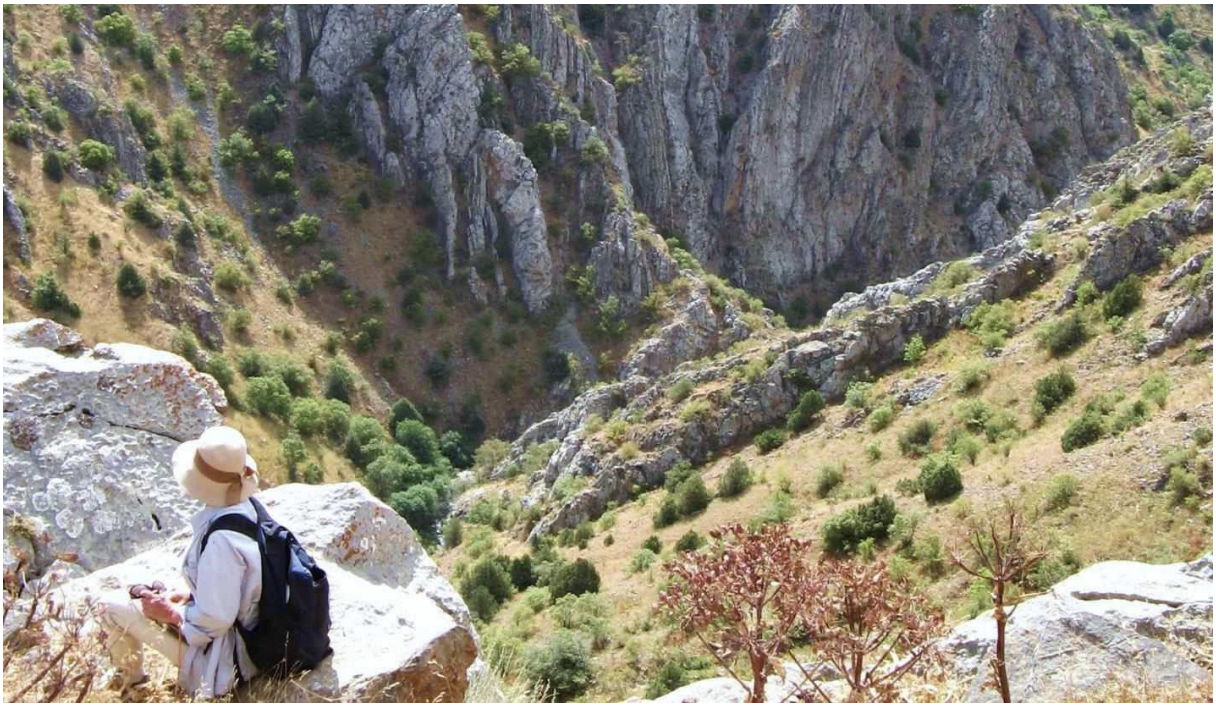
Talks and posters

- Formats: oral presentations and posters
- No more than one oral presentation per presenter
- Standard talk duration: 20 minutes (15 + 5 minutes for questions)
- Maximum poster size: A0, any orientation
- Posters will be displayed throughout the conference

Field excursions

The excursions will cover Ordovician sections of the Novobak and Zinzilban gorges and the Shakhriomon Pass, including:

- Volcanogenic-terrigenous-carbonate complexes
- Sites of the future Kitab Geopark



All routes require extended walking and movement across uneven terrain. Pack animals will be provided for participants with limited mobility- please contact the organizers in advance. For participants with limited ability to ascend the Shakhriomon Pass, alternative sections within the geopark base area will be offered, including the left bank section of the Zinzilban Gorge, the Novobak-2 section, and the Gorlisai section.

Ethics and atmosphere of the conference

We aim to create a warm, open atmosphere within a small scientific community, where discussion, collaboration, and enthusiasm are valued. We especially welcome:

- amateur paleontologists
- early-career researchers
- participants from all countries

Additional Information

- Weather: August in Kitab National Park is hot but not extreme, with a dry climate, cool nights, and occasional rain. It may be particularly hot in Novobak Gorge and Zinzilban Gorge. Sunscreen and a hat are essential.
- Language: The working language of the conference is English.
- Microscopes and samples: Several binocular microscopes will be provided; participants are asked to bring their own hand lenses and hammers.
- Sample collection: Allowed at some sites, restricted at others. If you wish to take samples with you, especially for museum transfer, please notify us in advance.

Organizing Committee

Mirgies Gafforov, Nuriddin Abdiev, Firuza Salimova, Mir-Alisher Ismailov, Shuhrat Abdiev, Abduhamid Sodikov, Mansur Khursanov & Ulugbek Niezov.

Scientific Committee

Alexey Kim, Firuza Salimova, Maya Erina, Nadir Davlatov, Nuriddin Abdiev, Mansoureh Ghobadipour & Leonid Popov.

Contact

Firuza Salimova: coral06@mail.ru

7th International Conference on Palaeogeography
Mendoza (Argentina), October 16–18, 2026

The International Conference of Palaeogeography (ICP) is a biennial event that promotes international academic exchange and interdisciplinary collaboration in palaeogeography and related disciplines. It is also strategically important for predicting and exploring energy and mineral resources worldwide. Since its inception in 2013, the ICP has been held six times in China, including Beijing (2013), Beijing (2015), Chengdu (2017), Beijing (2019), Wuhan (2022) and Nanjing (2024). The seventh ICP (2026) will be held outside China for the first time, and will provide an excellent opportunity to share and discuss the latest achievements in geoscience in a friendly and collaborative environment. It will be held in Mendoza, Argentina, during October 2026; located at the foot of the Andes, this city is world famous for its fantastic geology, cuisine and vineyards.

Organizers

- International Society of Palaeogeography (ISP)
- China University of Petroleum (Beijing)
- Shandong University of Science and Technology (SDUST)
- International Lithosphere Program (ILP)
- Universidad Nacional de Cuyo (UNCUYO)
- Universidad Nacional del Sur (UNS)

Venue

Sheraton Mendoza Hotel, Primitivo de la Reta 989, M5500 Mendoza, Argentina. Located in the downtown of Mendoza, the Sheraton Mendoza Hotel, together with the Hualta and Huentala hotels share a common space, with 356 rooms and a number of meeting rooms. Visiting Mendoza constitutes a wonderful experience for enjoying excellent geological exposures, food and wine. A selected options of complementary activities for attendees and accompanying members will be provided, focused in allowing a wonderful geological and touristic experience in Argentina.

Schedule

October 9–15, 2026:
- Pre-conference field excursion (1) A field trip through the Proto-Andean sedimentary record and proxies for the reconstruction of western Gondwana basins through time (seven days)
- Pre-conference field excursion (2) Andean structural styles: Chos Malal fold-thrust belt, Neuquén Basin (three days)

October 16, 2026:
- Short Course (1) Describing and Understanding Shale/- Mudstone Facies
- Short Course (2) Sedimentology of Shelf Deltas: Key Palaeogeographical Elements
- Short Course (3) Trace Fossils in Palaeoenvironmental Reconstructions.
- Registration. Ice breaker

October 17, 2026:
- Opening Ceremony, plenary talks, oral presentations, poster presentations

October 18, 2026:
- Mid-Conference Excursion (1) Field trip to the highest Andes
- Mid-Conference Excursion (2) The Carnian Pluvial Episode in the Triassic Cuyo Basin
- Mid-Conference Excursion (3) Cambrian peritidal cyclic carbonates in epeiric seas: their main features, completeness and proxies to interpret epeiric seas
- Mid-Conference Excursion (4) City tour and Mendoza vineyards

October 19, 2026:
- Plenary talks, oral presentations, poster presentations. Closing Ceremony,

October 20–24, 2026:
- Post-conference field excursion (1) Facies, depositional environments and reservoirs: an outcrop perspective. The Neuquén Basin as a case study (five days)
- Post-conference field excursion (2) The Aconcagua transect (four days)

Technical themes & sessions

T1: Palaeogeography and major evolutionary events of life
- T1-1: Palaeobiogeography and major biotic transitions
- T1-2: Fossil data and their application to palaeoenvironments and palaeogeography
- T1-3: Integrating multiple datasets in ichnologic analysis
- T1-4: Palaeobiogeography and major evolutionary events of life

T2: Lithofacies palaeogeography and sedimentology
- T2-1: Aeolian depositional systems and desert basins
- T2-2: Fluvial and deltaic sedimentology
- T2-3: Depositional processes in coastal to shelfal environments
- T2-4: Sediment gravity flows and deep-water sedimentology
- T2-5: Mud depositional processes and linkages to basin-fill architecture
- T2-6: Fine-grained sedimentology: synergistic coevolution of Environment-Biota-Minerals
- T2-7: Carbonate sedimentation: from facies analysis to global changes

- T2-8: Non-marine carbonate sedimentology
- T2-9: Volcanic activity: environmental impact and resource significance

T3: Tectonic palaeogeography and global palaeogeographic reconstruction

- T3-1: Global palaeogeographic reconstruction
- T3-2: Tectonic palaeogeography and sedimentation
- T3-3: Tectonosedimentology
- T3-4: Pre-Andean and Andean tectonics

T4: Resource palaeogeography (hydrocarbon and mineral deposits)

- T4-1: Petroleum geology of deep-water depositional systems
- T4-2: Deep and ultra-deep reservoir and hydrocarbon accumulation
- T4-3: Unconventional reservoirs and hydrocarbon exploration
- T4-4: Siliciclastic reservoir geology and hydrocarbon exploration
- T4-5: Reservoir heterogeneity and hydrocarbon development
- T4-6: Depositional architecture and reservoir geology
- T4-7: Organic matter enrichment and petroleum accumulation in continental saline lacustrine basins
- T4-8: Carbonate-evaporite paragenesis system: palaeogeographic reconstruction and resource implications
- T4-9: Dolomitization and dolomite reservoirs
- T4-10: Coal-bearing successions and related mineral deposits
- T4-11: Lacustrine sedimentology applied to hydrocarbon exploration and development
- T4-12: Sedimentary metal ore deposits and palaeogeography
- T4-13: Basin volcanic activities and their potential for hydrocarbon accummulation
- T4-14: Palaeogeographic controls on sweet spot development in unconventional hydrocarbon reservoirs

Mount Aconcagua

- T4-15: Characteristics of shale oil reservoirs, exploration and development technology and paleogeographic control
- T4-16: Application of paleogeography and research on growth potential of oil
- and gas reserves

T5: Stratigraphy and basin analysis

- T5-1: Marine sequence stratigraphy and basin analysis
- T5-2: Non-marine sequence stratigraphy and basin analysis
- T5-3: Palaeogeography in the period of human history
- T5-4: Precambrian sequence stratigraphy and basin evolution
- T5-5: Basin analysis in different tectonic settings
- T5-6: Shelf sedimentology and stratigraphy

T6: Global changes, paleoclimate, and sedimentary events

- T6-1: Climate, ecology and geomorphology in Quaternary palaeogeography
- T6-2: Records of event deposits: processes, mechanisms and implications
- T6-3: Authigenic minerals and global changes: micro-archives of the big picture
- T6-4: Rapid climate changes and environmental crises during the Mesozoic-Cenozoic hyperthermals
- T6-5: Palaeogeography, palaeoclimate, and palaeoceanography of the Late Paleozoic Ice Age
- T6-6: Carbon, nitrogen and sulfur cycles and Earth systems evolution
- T6-7: Asian Cenozoic sedimentation and climate evolution

T7: Technologies and big data for palaeogeographic reconstruction

- T7-1: Multi-scale digital geology and sedimentary simulation
- T7-2: Seismic sedimentology and its application in palaeogeographic reconstruction
- T7-3: Well-logging sedimentology and palaeoenvironment
- T7-4: Geochemical research and its application in palaeoenvironment and resource exploration
- 7-5: Palaeoclimate and palaeoceanographic research using isotopic approaches
- T7-6: Data and modeling of deep-time geography
- T7-7: Astronomical forcing of palaeoclimate and palaeoenvironmental systems
- T7-8: Reconstructing Earth's surface evolution from numerical modeling
- T7-9: Palaeogeographic reconstruction based on big data and AI

Abstract and presentation format

An abstract volume (including oral and poster presentations) will be released at the conference. **The deadline for submission of abstracts is May 30, 2026.**

Abstract format: Each abstract should not exceed one page of A4 paper, including one figure/table as maximum. The content of the abstract includes the title, author's name, author's institution, corresponding author's E-mail, body of the abstract, and keywords. Abstracts should be written in document format (.doc or .docx). The abstract format template and submission pattern are provided on the conference website:
https://www.isp2022.org/en/conferences/

The conference language will be English. The conference will invite a number of renowned scientists to make plenary presentations, and set up a number of thematic sessions. The presentation types and their corresponding times are shown as follows (multimedia ratio type 16:9):

1. **Plenary talk: 40 minutes,** including 35 minutes for talk and 5 minutes for questions and discussions;
2. **Keynote talk: 20 minutes,** including 15 minutes for talk and 5 minutes for questions and discussions;
3. **General oral presentation: 15 minutes,** including 12 minutes for oral presentation (participants may prepare their talks as recorded video and play the video at the conference, with a resolution of not less than 1920 x 1080) and 3 minutes for on-site questions and discussions;
4. **Poster:** the size of the poster is 90 cm x 120 cm (width x height), which needs to be posted in advance in the designated area by the authors themselves.

Please visit **https://www.isp2022.org/en/conferences/** to upload your abstract!

Short Courses

Short Course 1: Describing and Understanding Shale/Mudstone Facies

Short Course 2: Sedimentology of Shelf Deltas: Key Palaeogeographical Elements

Short Course 3: Trace Fossils in Palaeoenvironmental Reconstructions
Luis Buatois & Gabriela Mangano

The recognition that trace-fossil distribution is strongly controlled by environmental factors has led to the success of ichnology as a valuable tool in facies analysis. Intense research during the last decades has resulted in more sophisticated trace-fossil models for different environments. However, not all have been analyzed to the same extent. In this course, we will review the basic concepts of ichnology, the role of environmental factors on trace fossil distribution, and the strengths and weakness of current models. In addition, we will explore perspectives for future developments that may result in the construction of trace-fossil models for less understood depositional environments.

Field excursions

Pre-conference field excursions

(1) A Field trip through the Proto-Andean sedimentary record and proxies for the reconstruction of western Gondwana basins through time (seven days)
Ricardo Astini & Susana De La Puente

This seven days compact and demanding field trip offers a comprehensive introduction to the stratigraphic framework and main geological features of the western margin of Gondwana. Through the use of multiple proxies, we will explore the evolutionary history and key paleogeographic reconstructions that shaped this region. Our journey will traverse various cordilleran regions along the Andes, where we will make detailed observations and examine multiple lines of evidence that contribute to our current understanding of the complex tectonic evolution of the Proto-Andean margin. **From north to south, we will visit stratigraphic sections, including complete Ordovician sequences, near the Argentina–Bolivia border, spanning the Subandean Ranges, the Cordillera Oriental and the Puna Plateau, as well as the stunning geological transects of the Famatina and Precordillera regions, to the south**. By doing so, we will be able to explore both the geology of the autochthonous crust and that of the exotic Laurentian-derived accreted terrane that helped shape the Proto-Andean margin of Gondwana. A particular focus will be placed on the glacial events that impacted this region and their connection to the geodynamics of the Terra Australis orogen. Participants will gain insight into the sedimentary processes, depositional environments, and sequence stratigraphy that characterize these regions, and will also understand how this knowledge has been used to reconstruct the complex paleogeography of this truly unique case on Earth. We will also examine variations in accommodation space and basin types, discussing their tectonic and climatic controls. In addition to geological and stratigraphic exploration, we will engage in discussions on regional tectonics, geomorphology, and landscape evolution. The field trip will also offer excellent opportunities to enjoy breathtaking scenery, savor traditional regional cuisine, and taste some of the finest local wines—an unforgettable blend of science and culture in one of South America's most spectacular settings.

(2) Andean structural styles: Chos Malal fold-thrust belt, Neuquén Basin (three days)

Mid-conference field excursions

(1) Field trip to the highest Andes (one day)
(2) The Carnian Pluvial Episode in the Triassic Cuyo Basin (one day)
(3) Cambrian peritidal cyclic carbonates in epeiric seas: their main features, completeness and proxies to interpret epeiric seas (one day)
(4) City tour and Mendoza vineyards (one day)

Post-conference field excursions

(1) Facies, depositional environments and reservoirs: an outcrop perspective. The Neuquén Basin as a case study (five days)
(2) The Aconcagua transect (four days)

Conference fees

Type of Registration Fee		ISP Member		Non-ISP Member*		
		Attendee	Student	Attendee	Student	Accompanying Person
CNY	Before July 1, 2026 (Early bird)	2,500	1,500	3,500	2,000	1,200
	After July 1, 2026	3,000	1,800	4,000	2,400	1,500
	After September 30, 2026 or Onsite	4,000	2,400	4,500	3,000	2,000
USD (USD)**	Before July 1, 2026 (Early bird)	350 (290)	210 (150)	500 (440)	285 (225)	170 (110)
	After July 1, 2026	430 (370)	260 (200)	575 (515)	345 (285)	215 (155)
	After September 30, 2026 or Onsite	575 (515)	345 (285)	640 (580)	430 (370)	290 (230)

Attendees from Argentina can pay the conference fee in local currency (AR$) at the USD official rate of Banco de la Nacion Argentina.
* Non-ISP members are welcome to join the ISP (https://www.isp2022.org/dy/join/), and complete this registration as an ISP member.
** The full registration includes the icebreaker reception (16-9), two buffet lunches (17/10 & 19/10) and coffee breaks. A reduced-fee option (in brackets) is available, including only coffee breaks.

Important dates

- February 01, 2026: Release of the Second Circular. Opening for abstract submission. Opening for early bird registration
- May 30, 2026: Deadline for abstract submission
- July 1, 2026: Deadline for early bird registration
- July 30, 2026: Deadline for Field Trip registration
- September 20, 2026: Release of the Third Circular and Conference Program
- September 30, 2026: Deadline for normal registration. Starting on site registration fee
- October 17, 2026: Opening of the 7th International Conference of Palaeogeography

4th virtual meeting of IGCP 735
Sonora (Mexico), November 17–20, 2026

Mexico serves as a fundamental link for deciphering the geological evolution of western Laurentia during the Ordovician period. The region provides critical insights into the distribution of marine faunas and the extent of the North American cratonic rocks within a global paleogeographic context.

The most complete Ordovician successions in Mexico are situated in the northern regions, specifically in the states of Sonora, Baja California and Chihuahua. These outcrops represent the southernmost reaches of the North American craton. Interestingly, while these northern faunas are inherently Laurentian, they exhibit a striking affinity with the faunas from the sedimentary sequences of the Argentine Precordillera, suggesting complex paleobiogeographic connections across the Iapetus Ocean.

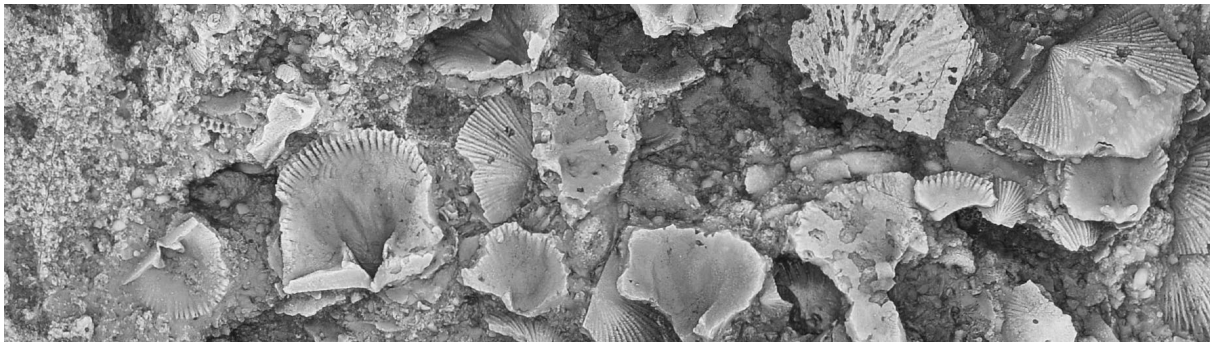
In stark contrast, Ordovician faunas from southern Mexico (Oaxaca) demonstrate a strong affinity with Gondwana. This biostratigraphic evidence supports the tectonic theory that southern Mexico was originally part of the northern margin of modern-day South America. Consequently, the Mexican geological record acts as a unique crossroads, preserving the interaction between two of the most significant paleocontinents of the Paleozoic.

In this context, we are honored to invite the international scientific community to the upcoming meeting of **IGCP Project 735 (Rocks and the Rise of Ordovician Life)**, which will be held virtually from Sonora, Mexico.

The selection of Sonora as the host site is of paramount importance. As the location of the most complete and southernmost Laurentian successions in the craton, Sonora provides an indispensable perspective on the “rocks and life” of the Ordovician. Hosting this event in Mexico highlights the country’s strategic role in correlating North and South American geological histories and invites further collaboration in exploring these globally significant outcrops.

Important dates

- April 15, 2026: Abstract submissions opens
- September 15, 2026: Abstract submissions deadline



Organizing comittee

Universidad de Sonora, Departamento de Geología, Academia de Estratigrafía y Cartografía Geológica, Academia de Geología Regional
Francisco Javier Cuen-Romero, Héctor Arturo Noriega-Ruiz, Rogelio Monreal-Saavedra, Francisco Javier Grijalva-Noriega, Ismael Minjárez-Sosa, Alejandra Montijo-González, Inocente Guadalupe Espinoza-Maldonado, Sofía Navarro-Espinoza & Sebastián Alejandro Valencia-Meza

Universidad Nacional Autónoma de México, Instituto de Geología
Josep A. Moreno-Bedmar & Miguel Angel Torres-Martínez

Universidad Complutense de Madrid, Facultad de CC Geológicas
Jorge Esteve

Contact information

- Francisco Javier Cuen-Romero (francisco.cuen@ciencias.uson.mx)
- Rogelio Monreal-Saavedra (rogelio.monreal@unison.mx)
- Bertrand Lefebvre (bertrand.lefebvre@univ-lyon1.fr)

7th International Palaeontological Congress (IPC7) & 6th annual meeting of IGCP 735 Cape Town (South Africa), November 30–December 3, 2026

We are delighted to be hosting the 7th International Palaeontological Congress (IPC7) in South Africa in 2026. This is the second time that this meeting will be held in the global South and the first time in Africa. The meeting will be held during the height of our very pleasant summer season at the Baxter Theatre Complex and the University of Cape Town between the 30 November – 3 December. The venues have the capacity to host hundreds of delegates, both in large rooms and smaller breakaway rooms.

The fossil heritage of South Africa is renown globally for its importance in understanding the history of life on Earth and extends from the very beginnings of life on Earth to the world-famous hominin relatives that have been recovered here. We will soon be inviting submissions for symposia topics, and we expect the meeting to offer a wide range of symposia, as well as space for general talks. We are also organising a series of fieldtrips to give delegates a feel for the rich fossiliferous rocks in South Africa that span significant periods of time. Furthermore, delegates attending the IPC7 will have the opportunity to visit important museum collections in South Africa.

Venue

The IPC7 meeting will be held at the Baxter Theatre Complex and the University of Cape Town. These venues are set in the heart of the leafy suburb of Rondebosch in Cape Town at the foothills of the Devil's Peak of Table Mountain. The Baxter is a superb venue with cutting edge technologies and capacity to host our large plenaries, and there are also several intimate smaller venues that can be used for breakaways or parallel sessions. In addition, we will use several of the well designed and equipped lecture venues in the recently completed, green, high efficiency Neville Alexander Building (named after the anti-apartheid activist and UCT academic). This building is literally a 3 min walk from the Baxter Complex.

Organising Committee

University of Cape Town
Anusuya Chinsamy-Turan, Miengah Abrahams, Maria-Eugenia Pereyra, Yonatan Sahle Chemere, Andrea Plos & Caitlin Rabe

University of the Witwatersrand
Jonah Choiniere, Julien Benoit & Cameron Penn-Clarke

Iziko Museums of Cape Town

Albany Museum
Rob Gess.

Symposia

There are a wide range of symposia being offered: 29 themed ones, and a general one to cater for those of you whose research does not fall into the symposia proposed. Note that although the symposium conveners have already identified possible speakers, if your work falls within the scope of any of the symposia, when you register, you should select the symposium that most aligns to your research area. Please view a detailed list of all our symposia and the conveners on the conference website.

Here is the link: https://ipc7.site/programme.html

List of the 29 symposia:

- S1 – Major biotic events during the Ordovician and Silurian and their dynamics

Zhan Renbin & Alycia Stigall

Ordovician and Silurian are the key periods during the evolution of earth ecosystem when two globally affected bioevents happened, i.e. the Great Ordovician Biodiversification Event (GOBE) and the Late Ordovician Mass Extinction (LOME). Both events are thought to be closely connected with some major geologic events, and both GOBE and LOME have been the hotspots of Ordovician and Silurian studies because the recovery and re-radiation after LOME during the early Silurian has been being intensively investigated internationally for decades. Starting from 1997, continuous IGCP projects are focusing on these major events: IGCP 410 (1997-2002), IGCP 503 (2003-2009), IGCP 591 (2010-2015), IGCP 653 (2016-2021), and IGCP 735 (2022-2027). Now, international experts are paying their attention to two things, the diversity change during these events and the dynamics controlling their scales and patterns. So, having a particular symposium at IPC7 to exchange our most recent research achievements and to find possible international collaborations is really important.

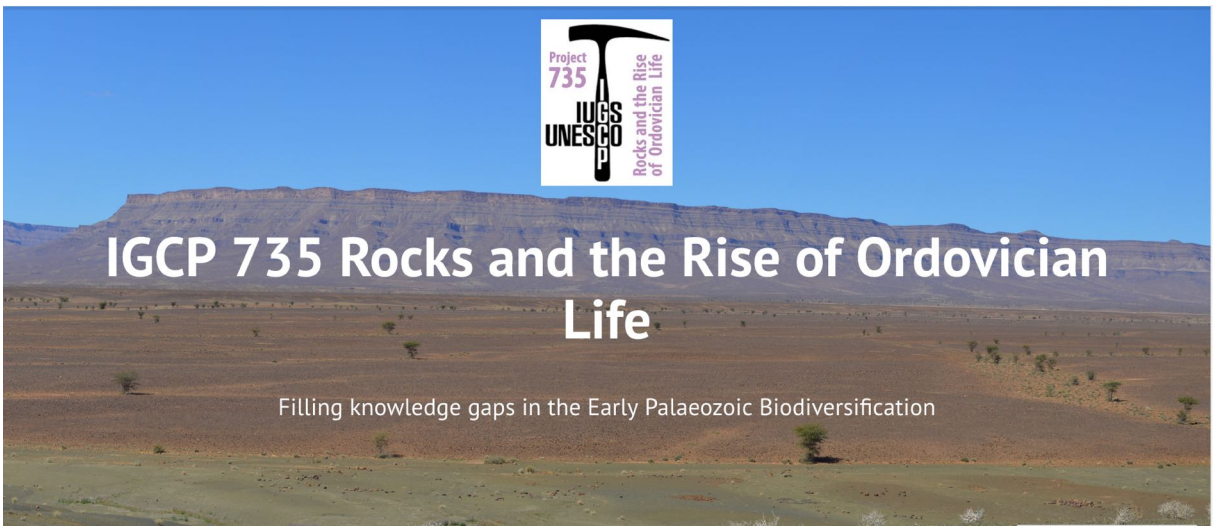
- S2 – Paleoneurology, cognition, and behaviour of vertebrates, from fish to hominins
- S3 – The History and pre-history of palaeosciences, geomyths, and indigenous palaeontology
- S4 – Recent advances in Mongolian Cretaceous Palaeontology and Geology
- S5 – Life in the Phanerozoic Oceans: Evolution, diversity and ecology in deep time marine ecosystems
- S6 – The Precambrian: the earliest chronicles of life on Earth
- S7 – Ichnology – traces as multi-disciplinary lenses into the deep past
- S8 – Biogeography: ranging through a dynamic Earth
- S9 – Devonian stratigraphy, environments and palaeontology with focus on Gondwana

- S10 – Filling knowledge gaps in the Early Palaeozoic Biodiversification

Yves Candela, Khadija El Hariri, Mansoureh Ghobadi Pour, Bertrand Lefebvre, Lena Raevskaya, Oive Tinn, Beatriz Waisfeld & Wenhui Wang

Our understanding of the pattern and tempo of the initial diversification of metazoans in Early Palaeozoic times is more challenged than ever, with raising questions about the accuracy and completeness of the current sets of available palaeontological data and environmental proxies.

This symposium, corresponding to the sixth and final annual meeting of the UNESCO/IGCP 735 "Rocks and the Rise of Ordovician Life" (Rocks n'ROL) - https://rocksnrol.wordpress.com/ - primarily aims at filling the numerous knowledge gaps related to various aspects of the Ordovician diversification: obviously, data gaps within the period from the preceding Cambrian explosion to the post-Hirnantian Silurian recovery do exist, but also major regional biases in knowledge/data during the Ordovician itself, e.g. from Africa, South America, the Near and Middle East, southeastern Asia, Siberia. This symposium is not restricted to talks on palaeo(bio)geographic and stratigraphic gaps, but it also welcomes all presentations contributing to enhance knowledge on less investigated or poorly known aspects of Early Palaeozoic diversifications related to e.g. taphonomic gaps, reef communities, trace fossils, and the early colonization of continental environments by plants and animals.



- S11 – Recent advances in vertebrate taphonomy
- S12 – Ichthyosaur evolution and biology
- S13 – Origins: Triassic and Early Jurassic dinosaurs
- S14 – Paleobionics: the biomechanical factors that drive evolution
- S15 – Pangea in crisis: life on land during the Permian–Triassic
- S16 – Recent advances in dinosaur eggs and reproduction
- S17 – Disease in the fossil record

- S18 – Advances on the histology of the mineralised tissues of vertebrates
- S19 – Flight evolution in vertebrates
- S20 – Communicating palaeosciences
- S21 – New directions in palaeoanthropological research in Southern Africa
- S22 – Cenozoic vertebrates of Africa
- S23 – Neogene primates and the origin and evolution of Hominidae
- S24 – Freshwater paleoecosystems
- S25 – Vegetation change and plant-insect interaction from the Palaeozoic until modern times - Case studies from Africa and beyond
- S26 – Evolution of brain and cranial anatomy through five major extinctions
- S27 – Bridging the molecular gap between life past and present
- S28 – The Afrotheria: Origins & Evolution of Africa's Iconic Mammals
- S29 – General

Field excursions

Field trip leaders have been hard at work developing a range of field trips that cater to diverse areas of interest. Final pricing will be dependent on the number of delegates who register for each tour. The approximate costs provided will be confirmed once numbers are finalised, after which delegates will be invoiced accordingly. A 50% deposit is required to secure your seat, with the final balance payable three months prior to departure.

Pre-conference field trips

- PRE001 – Exploring the Triassic-Jurassic boundary in southern Africa

- PRE002 – The Lower-Middle Palaeozoic of the Cederberg: Cape Supergroup

Cameron Penn-Clarke

Dates – 25 November to 28 November 2026 (3 nights, 4 days). Starts and finishes in Cape Town

Approximate cost – R13 000 per person

Brief description and overview of the trip – The Cape Supergroup provides an unparalleled and near-unbroken 110-140 million yearlong testament of environmental and biodiversity change as southwestern Gondwana migrated from low-subtropical to high-polar latitudes during the Ordovician-Carboniferous. Set within the Cape Fold Belt, the Cederberg is a rugged and untamed landscape that is arguably one of the best locales in West Gondwana to study the Middle-Late Palaeozoic given its stratigraphic completeness, particularly of the Ordovician-Devonian. These mountains lay witness to several important bioevents and biocrises, let alone being a point of origin for several important type specimens that would later characterise the Hirnantia and Malvinoxhosan biotas in South Africa. **Lowermost strata of the Table Mountain Group, particularly the Graafwater and Peninsula formations, have provided tantalising evidence for life's earliest movements onto the African continent as well as early paralic-shallow marine ecosystems during the Middle-Late Ordovician. Uppermost Ordovician glacigene strata of the Pakhuis Formation suggest a shift towards colder climates during the Hirnantian glaciation. Postglacial shales of the Cedarberg Formation, particularly the world-famous Soom Shale Lagerstätte, show**

that South Africa became a refugium for scatterlings of the Hirnantia fauna. In the Cederberg area, several Soom Shale Lagerstätten are known with exceptional preservation of low-diversity, cold water communities of vertebrates, arthropods, annelids, molluscs and brachiopods in addition to several enigmatic taxa. Whilst much of the Nardouw Subgroup (uppermost Table Mountain Group: Silurian-lowermost Devonian) has not proven to be fossiliferous in the Cederberg area, its sandstone rich lithologies are host to several dramatic geomorphic landforms that dot the landscape, of which Stadsaal Cave and the Wolfberg Arch best known. Overlying the Table Mountain Group are shales of the Bokkeveld Group that record a large-scale deepening of polar Gondwanan seaways during global hothouse conditions of the Early Devonian. These rocks host the truly West Gondwanan endemic Malvinoxhosan biota. Their rise and demise are closely linked to changes in environment that are recorded in these strata as well as the overlying Witteberg Group.

Arguably as important as the geology and palaeontology of the Cederberg is its deep-seated natural and cultural history. Lying at the heart of the Cape Floristic Region (a Protected Areas Serlial World Heritage Site), it is home to an estimated 9000 plant species of which 69% are endemic. Of these endemic plants, the endemic, but critically threatened, Clanwilliam Cedar (*Widdringtonia wallichii*) owes its name to the area. Evidence for human habitation in the Cederberg is extensive, with evidence being drawn from Stone Age artefacts and rock shelter paintings going back to at least 100,000 years. An important site in the Cederberg is Stadsaal Cave which is renowned for its cave paintings depicting elephants and large game that precolonial San societies came into contact with. Settler communities and missionaries that moved into the area from the early 18th century onwards displaced much of the original San and Khoekhoe communities in the Cederberg, absorbing much of these peoples into the distinctive Rhenish-Moravian missionary settlements of Wuppertal and Langkloof among others. Other than agriculture, conservation and tourism feature greatly in the Cederberg catering to those who enjoy the outdoors.

- PRE003 – Day trip to West Coast Fossil Park (2 hour drive from Cape Town)

Post-conference field trips

- POST001 – Devonian Ecosystems Fieldtrip (fly to Gqeberha)
- POST002 – Karoo Transect: Trans-Karoo Excursion from ice floes to desert dunes.

Travel Grants

There are a few travel grants already advertised on our website. Note that some are specifically targeted for delegates from other parts of Africa, postgraduate students from around the world, and there are two specific ones for Argentinian delegates.

Accommodation

There are several different accommodation types available that will suit all pockets. There will be extremely reasonably priced University residence accommodation available (the cheapest has 2 person shared bedrooms, and shared bathroom facilities), but there are others that have private rooms and bathrooms with shared kitchen facilities, and yet others that are completely private. The booking for these University accommodations will be open from early January. Aside from the University accommodation, there are several B & Bs, that are a short walk to the venue. Hotels are abit further out, but easily accessible to the venue by car. There are parking areas available near the venue, in case you wish to stay further out and drive in each day.

Registration, Fieldtrips, and Abstract submission

Registration costs are indicated below (they include catering and refreshments). We are currently finalizing costs for the fieldtrips. We expect these to be on the website early in January, when the registration opens. **The abstracts submission portal is now available on the website**: https://www.ipc7.site

- Early Bird Fee (IPA Members): R5,500.00 (~330 US$)
- Early Bird Fee (Non-Members): R6,500.00 (~400 US$)
- Regular Standard Fee (IPA Members): R8,000.00 (~490 US$)
- Standard Fee (non-Members): R9,000.00 (~550 US$)
- Developing country Fee (Professionals): R3,500.00 (~210 US$)
- Developing country student Fee: R3,000.00 (~180 US$)
- Foreign Student reduced fee: R4,500.00 (~275 US$)

Important dates

- June 30, 2026: Abstract submission closes
- July 31, 2026: Notification to authors of outcomes
- August 31, 2026: Early Bird registration closes
- September 1, 2026: Standard fees open

15th International Symposium on the Ordovician System (ISOS15) Xi'an (China), May 20–24, 2027

The 15th International Symposium on the Ordovician System will be held at the Paradise Resort in Xi'an City during May 20–24, 2027. This symposium will exhibit the recent progresses of research on the Ordovician System from a global and multidisciplinary perspective, and aims to strengthen the collaborations and communications within the Ordovician community all over the world.

It has been 20 years since the 10th International Symposium on the Ordovician System was held in Nanjing from late June to early July, 2007 when we had a very successful indoor meeting and wonderful pre- and post-conference field excursions respectively. More than 70 Ordovician colleagues outside China took part in all those activities including visiting three Ordovician GSSPs, i.e. the base of the Darriwilian in western Zhejiang Province, East China, and the base of the Dapingian and the base of the Hirnantian in Yichang district, western Hubei Province, Central China.

This time, during the ISOS15, all interested delegates will have the opportunity to visit several classical Ordovician sections in northwestern China. The relatively short pre-conference field excursion will be in northern Sichuan and southern Shaanxi provinces, where some well-exposed and fossiliferous Ordovician sections will be visited. They are quite different from those Ordovician sections in Central and Southwest China although they all belong to the South China paleoplate. The post-conference field excursion will be a brand-new route for most of our foreign friends. We will focus on the western part of the North China paleoplate, particularly the Ordos Basin in central-western Shaanxi, southern Ningxia, eastern Gansu and southwestern Inner Mongolia. During the 4-day meeting in Xi'an, a one-day mid-conference excursion will be arranged to visit some nearby sections and some othersites.

We are looking forward to seeing all of you, distinguished Ordovician colleagues and friends in Xi'an in May 2027!

Venue

Paradise Resort Xi'an (Chinese pinyin: Xi'an Qujiang Huibinyuan), Yanta South Road, Qujiang New District, Xi'an, China.2

Organizers

- State Key Laboratory of Palaeobiology and Stratigraphy (LPS), Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences (NIGPAS)
- State Key Laboratory of Continental Evolution and Early Life, Geology Department, Northwest University
- Palaeontological Societyof Jiangsu, China

Scientific committee

Chairs: Thomas Servais, Renbin Zhan, Alycia Stigall

Members (listed in alphabetical order)**:** Sachiko Agematsu-Watanabe, Annalisa Ferretti, Lars Holmer, Petr Kraft, Bertrand Lefebvre, Yan Liang, Gabriela Mángano, Patrick I. McLaughlin, Tõnu Meidla, Elena Raevskaya, Claudia Rubinstein, Firuza Salimova, Beatriz Waisfeld, Wenhui Wang, Charles Wellman, Seth Young, Yongyi Zhen

Organizing committee

Chair: Renbin Zhan

Vice Chairs: Yuandong Zhang, Zhifei Zhang

Secretary-General: Rongchang Wu

Vice Secretary-General: Xiang Fang, Yazhou Hu

Members: Yan Liang, Zhongyang Chen, Xiaocong Luan, Xin Wei, Wenjie Li, Guanzhou Yan, Yue Liang, Fan Liu

Important dates

- March 31, 2026: Issue of the First Circularand Preliminary Registration
- October 31, 2026: Issue of the Second Circular (with fees indicated)
- November 1, 2026: Opens for Early bird registrationand Abstract or Summary Submission
- February 28, 2027: Deadline for the submission ofabstract or extended summary
- April 30, 2027: Issueofthe Third (the Last) Circular (with detailed arrangements)

Preliminary schedule

- May 20, 2027: Arrival, registration and ice breaker. Delegates arriving from the pre-conference excursion 3
- May 21, 2027: Opening ceremony. Oral and poster presentations
- May 22, 2027: Oral and poster presentations
- May 23, 2027: Mid-conference excursion. Conference dinner
- May 24, 2027: Oral and poster presentations. Closing ceremony
- May 25–31, 2027: Delegates departure. Post-conference excursion

Field excursions

Pre-conference field excursion

A pre-conference field excursion is scheduled for the northern margin of the Yangtze Platform, South China. Participants will visit several classic stratigraphic sections in northern Sichuan and southern Shaanxi provinces, examining Ordovician to the earliest Silurian strata and fossils. In this region, the Lower Ordovician is generally absent or incomplete. The Middle Ordovician, predominantly composed of clastic rocks interbedded with limestone layers, unconformably overlies the Cambrian rocks. These Middle Ordovician sections yield abundant fossils at some horizons, including graptolites, trilobites, brachiopods, bryozoans, bivalves, and gastropods. The Upper Ordovician, consisting mainly of reticulated limestone, is also fossiliferous and exhibits notable differences from the coeval strata in the interior of the Yangtze Platform. A stratigraphic hiatus between the Upper Ordovician and the overlying Silurian is observed at some sections, likely resulting from the regional Kwangsian Orogeny, while at the largely continuous Zhongliangshan section both Hirnantian shelly fauna and Rhuddanian graptolites are preserved.

The excursion will start from Chengdu, the capital city of Sichuan Province, proceed through the historic cities of Guangyuan and Hanzhong, across the Qinling Mountains, and conclude in Xi'an, Shaanxi Province.

Duration – 4 days
Maximum number of participants – 40 persons
Excursion leaders – Xiang Fang, Zhongyang Chen, Wenjie Li, Xuejin Wu

Mid-Conference field excursion

This one-day Mid-Conference field excursion is scheduled for nearby section around Xi'an city proper.

Duration – 1 day
Maximum number of participants – 60 persons
Excursion leaders – Yazhou Hu, Yue Liang, Fan Liu

Post-conference field excursion

A post-conference field trip to the southern and western Ordos Basin is planned. Paleogeographically, the North China paleoplate is divided into three paleogeographic provinces by distinct stratigraphic sequence, lithofacies and fossil fauna, i.e. the North, South and West paleogeographic provinces. The Ordos Basin belongs to the West paleogeographic Province of North China. The Ordovician succession in the southern Ordos Basin is mainly dominated by warm water carbonates on the platform. In the western Ordos Basin, the Ordovician is characterized by the deposition of marginal platform or slope facies. All sections we are going to visit are fossiliferous.

We will start with the Ordovician of platform facies, check the wonderful sequence of marginal platform facies, and finish with the thick, complete and fossiliferous slope facies. At all sections and most stops, delegates will have opportunities to make their own collections if they like.

Duration – 6–7 days
Maximum number of participants – 50 persons
Excursion leaders – Rongchang Wu, Xiaocong Luan, Guanzhou Yan, Xin Wei

Invitation and visa

An official invitation letter will be available for delegatesupon request for their visa application at the Embassies or Consulates of China in their own countries. Such an invitation letter will be arranged by electronic version (PDF file) signed by the Chair of the Organizing Committee with the official seal and will be sent to delegates as email attachments. Those who need an **Invitation Letter** are supposed to provide the following information when making their preliminary registration:

1) Full name (Family and given names);
2) Gender;
3) Date of birth;
4) Nationality;
5) Passport number and valid dates (a scanned file of the passport is required);
6) Institution or affiliation;
7) Periods of stay in China.

Note – With respect to the VISA to China, please pay attention to the visa policy of the Embassy/Consulate of China in each particular country.

Transportation

All delegates are suggested to stay in the Paradise Resort located in the center of Qujiang New District, a famous Tang culture tourist area in Xi'an. It is about 42 km from Xi'an Xianyang International Airport, and 24 km from Xi'an North Railway Station (highspeed railway station). We will arrange coaches to pick up delegates from both airport and high-speed railway station to the hotel. Public underground transportation from airport/railway station to the Paradise Resort Hotel is also very convenient and cheap.

Accommodation and hotel reservation

Paradise Resort: We will reserve enough hotel rooms for potential delegates in advance with a special discount. Delegates who are in need may contact us to facilitate and benefit their reservations.

Sponsors

- Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences
- Northwest University

Contact

Rongchang Wu
E-mail: rcwu@nigpas.ac.cn
Telephone: 025-83282235
Mobile phone: +8613675134003

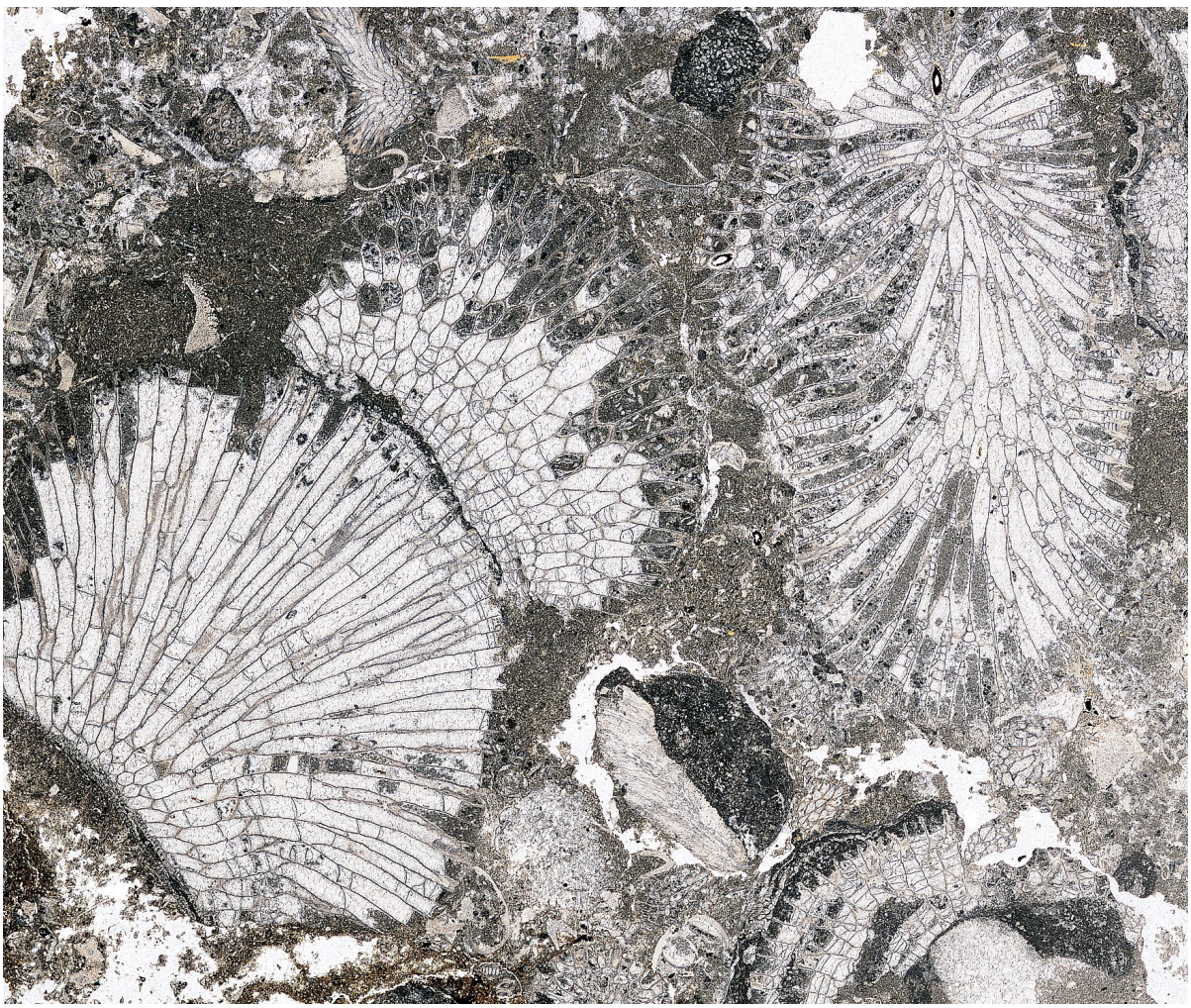
Detailed costs and registration information will be posted in the second circular issued by the end of October 2026.

13th North American Paleontological Convention (NAPC13)
Knoxville (USA), May 22–26, 2028

NAPC is a major international paleontological convention that convenes every four years. We are planning four days of indoor sessions with concurrent sessions, a mid-conference field trip and workshop day, and pre- and post-meeting excursion opportunities. Please join us in Knoxville, TN, situated on Ordovician bedrock and adjacent to the beautiful Smokey Mountains. Reach out the Alycia Stigall and Colin Sumrall with questions or suggestions for how you might contribute to sessions, field trips, or workshops.

7th International Conodont Symposium (ICOS7) Harrisonburg (USA), late May–early June, 2028

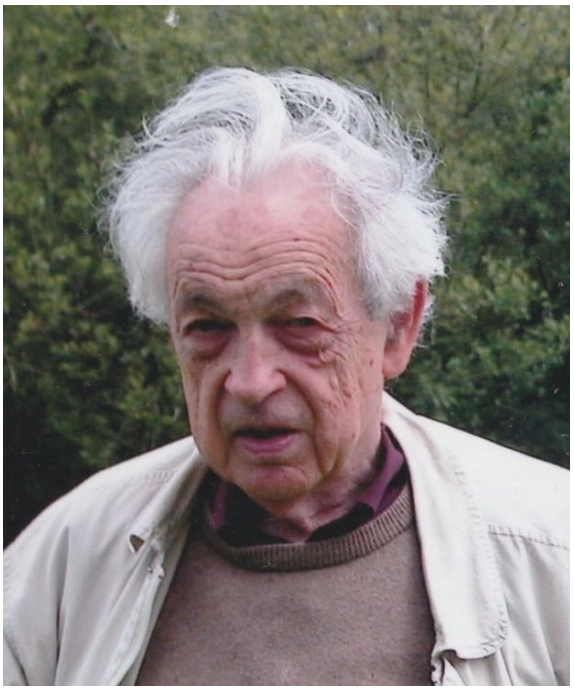
The 7th International Conodont Symposium (ICOS7) is planned to be held on the campus of James Madison University in Harrisonburg, Virginia, USA in June of 2028. Harrisonburg is situated within world-class karst geology in the Shenandoah Valley of the Valley and Ridge province and provides convenient access to the Blue Ridge, Piedmont, and Allegheny Plateau regions. The meeting planning committee includes Stephen A. Leslie, Jeffrey Over, John Repetski, Nicholas Hogancamp, Randall Orndorff, John Haynes, Mercer Parker, and Daniel Goldman. ICOS7 is planned to follow the North American Paleontological Convention, which is scheduled for late May of 2028 in Knoxville, Tennessee. A first circular with additional details will be distributed in the fall of 2026.



Thin section from the Vasalemma Quarry (Katian), Estonia, containing bryozoans and other fossils (©Andrej Ernst).

IN MEMORIAM

Philippe LEGRAND (1930–2025)



Our cherished colleague Philippe Legrand died at the age of 95 near Bordeaux, France. He studied classics at the Lycée Saint Jean de Passy, Paris 16^{éme} before moving towards a career as an engineer. He entered the Preparatory Mathematics Elementary class and then Higher Mathematics. Following health issues, he had to give up and moved towards university studies by taking different degrees in chemistry, geology, etc. He then entered the French Petroleum Institute and began his career at the Compagnie Française des Pétroles, which later became the oil company known today as Total. He actively participated in the exploration of the Algerian Sahara in geology and in hydrocarbon research. After the Algerian independence, he worked to renew contacts between French and Algerians. As a result, he was decorated by the French government ("Mérite National") in 1972. In 1976, he returned to France to take over the management of Total's research laboratories in Bordeaux. He remained there until his retirement and continued throughout his retirement to publish on graptolites.

Philippe worked for most parts of his life on the early Palaeozoic (Cambrian–Ordovician–Silurian–Devonian) successions of Algerian Sahara. He published numerous papers on the stratigraphy and sedimentology, but is best known to us due to his publications of Ordovician to Devonian graptolites. He commonly used graptolites to date the investigated outcropping and subsurface successions and provided important information to define the system boundaries between the Cambrian/Ordovician, Ordovician/Silurian and Silurian/Devonian in the region.

In his palaeontological work, he provided an enormous amount of information on the graptolite faunas of the Ordovician/Silurian boundary interval and their biogeographic limitations. His specialization on these faunas often strongly dominated by endemic taxa (largely *Normalograptus* species and their relatives) culminated in his PhD thesis (Legrand, 1999; unpublished), in which he described and illustrated numerous biserial graptolites from the Ordovician/Silurian boundary interval. These taxa were subsequently published in a number of papers.

His earlier works, however, included some highly important descriptions of chemically isolated graptolite material from Tremadocian (Lower Ordovician) boreholes, of which especially the description and illustrations of *Rhabdinopora flabelliformis* should be mentioned (Legrand, 1974: *Dictyonema sociale mehaigueni* – *Dictyonema sociale*

praeafricanum). Other taxa included *Adelograptus bagueli* Legrand, 1964, *Adelograptus messaoudi* Legrand, 1964, and also the unusual *Choristograptus louhai* Legrand, 1964, the last of which was later found in a small exposure of the Fezouata Formation in the Moroccan Anti-Atlas.

The original palaeontological material derived from the work of Philippe Legrand (both the published specimens and the unpublished material), as well as his scientific library, have been donated by his family and have already been transferred to the palaeontological collections and library of Lyon 1 University, France, where in the coming years, after appropriate classification and inventory, they will be made available to researchers who may require it (for inquiries, please contact: emmanuel.robert@univ-lyon1.fr).

Jörg Maletz, Damien Legrand & Juan Carlos Gutiérrez-Marco

Selected publications (in chronological order)

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Graptolite taxa described by Philippe Legrand

Adelograptus bagueli Legrand, 1964
Adelograptus messaoudi Legrand, 1964
Choristograptus louhai Legrand, 1964
Didymograptus v-fractus wieli Legrand, 1964 (this is probably a synonym of *Corymbograptus retroflexus*)
Diplograptus africanus africanus Legrand, 1970 (now *Neodiplograptus*)
Glyptograptus (*Glyptograptus*) *tariti* Legrand, 1970, p. 41 (now *Normalograptus*)
Lingulobolus (?) *septentrionalis* Legrand, 1973
Lingulella mehaïgueni Legrand, 1973
Lingulella africana Legrand, 1973
Ectonoglossa (?) *hafsa* Legrand, 1973
Dictyonema sociale nilii Legrand, 1973
Dictyonema sociale mehaïgueni Legrand, 1973
Dictyonema sociale praeafricanum Legrand, 1973
Dictyonema sociale incommodus Legrand, 1973
Climacograptus (Climacograptus) venustus venustus Legrand, 1977, p. 158 (=*Normalograptus* (*Normalograptus*) *pseudovenustus* Legrand, 1986, p. 147 [not synonyms: = *Normalograptus pseudovenustus* according to Underwood papers
Climacograptus (Climacograptus) venustus venustulus Legrand, 1977, p. 166
Climacograptus (Climacograptus) normalis ajjeri Legrand, 1977, p. 171 [now *Normalograptus ajjeri*]
Climacograptus (Climacograptus) normalis djerani Legrand, 1977, p. 171
Diplograptus (?) kiliani Legrand, 1977, p. 183
Climacograptus (*Climacograptus*) *imperfectus* Legrand, 1986, p. 151 [now *Normalograptus imperfectus*]
Climacograptus (Climacograptus) normalis brenansis Legrand, 1986, p. 151
Climacograptus (Climacograptus) tilokensis Legrand, 1986, p. 152
Normalograptus Legrand, 1987, p. 62
Pseudorthograptus Legrand, 1987, p. 62
Neodiplograptus Legrand, 1987, p. 62
Normalograptus (?) *foureaui* Legrand, 1993, p. 421

Normalograptus (?) *flamandi* Legrand, 1993, p. 421(now *Metaclimacograptus*)
Clinoclimacograptus (?) *monodi* Legrand, 1993, p. 423
Metaclimacograptus (?) *asejradi* Legrand, 1993, p. 421
Petalolithus(?) *meridionalis* Legrand, 1998, p. 211 (now *Parapetalolithus meridionalis*)
Normalograptus (*Normalograptus*) *inazaouawe* Legrand, 2001,p. 144
Normalograptus (*Normalograptus*) *targuii* Legrand, 2001,p. 148
'*Glyptograptus'* ('*Glyptograptus'*) *chudeaui* Legrand, 2001, p. 152
Glyptograptus (*Glyptograptus*) *tamariscus* inflatus Legrand, 2002, p. 222
Diplograptus foliaceus tinrherti Legrand in Kichou-Braîk et al., p. 677. (now *Pseudamplexograptus tinrherti*)
Normalograptus (*Normalograptus*?) *nseirati* Legrand, 2009,p. 360
Normalograptus (*Normalograptus*) *gelidus* Legrand, 2009,p. 361
Normalograptus (*Normalograptus*) *arrikini* Legrand, 2009,p. 363
Normalograptus (*Normalograptus*) *pretilokensis* Legrand, 2009, p. 363
Neodiplograptus inezzani Legrand, 2009, p. 363
Neodiplograptus incommodus Legrand, 2009, p. 364
'*Glyptograptus' saharensis* Legrand, 2009, p. 363

Fossil taxa dedicated to Philippe Legrand

Austerops legrandi Khaldi, 2014 - KHALDI, A. 2014. *Les trilobites du niveau à faune benthique variée (FBV) dans la Saoura-Ougarta : systématique et paléoécologie*. Mémoire de Magister, Université d'Oran. 108 pp.

Marhoumacrinus legrandi Prokop & Petr, 1987 - PROKOP, R.-J. & PETR, V. 1987. *Marhoumacrinus legrandi*, gen. et sp. n. (Crinoidea, Camerata) from Upper Silurian – Lowermost Devonian of Algeria. *Sborník Národního muzea, ř. B*, **43**(1), 1–14.

Normalograptus legrandi Koren' and Rickards, 2004. - KOREN', T.N. & RICKARDS, R.B. 2004. *Palaeontology*, **47**, 859–918.

Philippe Legrand (right) and B.-D. Erdtmann (left) discussing the *Dictyonema / Rhabdinopora* problem at the Long Beach Graptolite Meeting 1995.

Barry WEBBY (1934–2025)

Barry Webby was a renowned palaeontologist and international authority on the Ordovician System. His research (which actually spanned over 700 million years from the Neoproterozoic to the Quaternary) included published studies on radiolarians, conodonts, sponges (particularly stromatoporoids), tabulate and rugose corals, trilobites, nautiloids, plus trace fossils and Ordovician algae. He also focussed on Silurian and Devonian geology and palaeontology. While he concentrated on stratigraphy and fossils from Australasia, a significant number of his papers were of global extent, with studies in Britain, Norway, Malaysia and China.

Barry's publication record consists of more than 140 refereed papers, monographs, edited books, and chapters contributed to books. A major achievement was the publication in 2015 of the revised *Treatise on Invertebrate Paleontology Part E* on Porifera, particularly focussing on stromatoporoid sponges, consisting of two volumes with a total of 1223 pages. His coordinating editor role in producing these two volumes, as well as contributing several chapters, spanned almost a decade. Perhaps he was best known internationally as one of the three leaders of (and certainly the driving force behind) the highly successful International Geological Correlation Project 410 (1997-2001) on "The Great Ordovician Biodiversification Event". From his leadership of this project emerged the famous 'Webby book' with the same title as the project, which has been cited innumerable times since and will continue to be referenced for many years. Like the Treatise on Invertebrate Paleontology project, this book fully involved Barry in wrangling contributions from numerous experts around the globe, keeping to strict deadlines, as well as writing several chapters himself.

Barry was a strong supporter of Australasian palaeontological research and championed its advancement in many practical ways. He was a founding member of the Association of Australasian Palaeontologists (AAP) in 1975 and served as one of the initial editors of *Alcheringa* – the Australasian journal of palaeontology – from 1977 to 1978. In 2016 he was awarded the highest honour bestowed by the AAP – the Robert Etheridge Jr Medal for lifetime achievements in palaeontology. He was also active in local scientific societies, particularly the Linnean Society of NSW (of which he was President in 1977-1978, and subsequently Vice-President for several years). He was invited by the Royal Society of NSW to present the Clarke Memorial Lecture in 1991, and was awarded the Royal Society of Victoria Silver Research Medal for 1987.

Barry participated in many international scientific conferences, visiting Ordovician outcrops world-wide to fully acquaint himself not only with those rocks and the fossils they contained, but also to establish friendships and scientific collaboration with palaeontologists in many countries. Barry achieved further international prominence in the study of Ordovician geology and fossils through his leadership of the global Ordovician community of

researchers. He was Secretary (1982-1990) and subsequently Chairman (1990-1996) of the Subcommission on Ordovician Stratigraphy. He organised the 6th International Symposium on the Ordovician System held at Sydney University in 1991 and served as Chair of this gathering of Ordovician researchers from 17 countries.

Barry was born in 1934 in Wanganui, New Zealand – despite spending the majority of his life in Australia, he never gave up his New Zealand citizenship and proudly supported the All Blacks. Indeed, both at his school in New Plymouth (where he was halfback in the First XV rugby team), and during his undergraduate years at Victoria University, Wellington NZ, he played rugby with considerable prowess. He also excelled in geology at university, being awarded the prestigious Cotton Prize as the top geology student, graduating in 1957 with a B.Sc (majoring in Geology and Zoology) followed two years later by a Master of Science in Geology with First Class Honours. His first four scientific papers based on his studies there were published between 1958 and 1960.

After briefly working with the New Zealand Geological Survey in Greymouth, on the west coast of the South Island, Barry won a scholarship to undertake Ph.D. at the University of Bristol in England, for which he meticulously mapped the Devonian sequences of West Somerset. He published 11 papers on the Devonian palaeontology (crinoids, corals, brachiopods), stratigraphy and structure of west Somerset from 1962-1966, forming the basis of the award of his D.Sc. from the University of Bristol in 1983.

In 1964, his long academic career (40 years) at the University of Sydney commenced when he took up a Lecturership in Geology. He was appointed a Senior Lecturer in 1968, subsequently rising to Associate Professor in 1974. Barry's favourite field area was in central west NSW, particularly around Cliefden Caves and Fossil Hill, on which he published numerous papers and supervised many undergraduate students in mini projects on the outcrop. He was an inspirational teacher and mentor to many students in the former Geology Department at the University of Sydney, several of whom followed in his footsteps and have distinguished themselves as palaeontologists. They include his Ph.D students Vic Semeniuk, Ross McLean, Ian Percival, and Peter Kruse. Barry was also instrumental in mentoring Dr Yong Yi Zhen (now palaeontologist with the Geological Survey of NSW) in the early stages of his career.

Barry's passing is a great loss in particular to the worldwide Ordovician community, but he has left us with a very significant legacy of diligent scholarship combined with outstanding global leadership in advancing Ordovician research. He will long be remembered through his substantial body of research publications, and for his innovative teaching methods.

Ian Percival

Barry Webby (at right of monument) in 1998 at the official ceremony unveiling the GSSP for the base of the Darriwilian Stage of the Middle Ordovician, marked by the first appearance datum of the graptolite *Undulograptus austrodentatus*; Huangnitang, Changshan County, Zhejiang Province, southeast China.

Following is a list of Barry's peer-reviewed publications from 2001-2025. For his earlier papers, and additional details of Barry's career, please refer to:

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WEBBY, B.D., ELIAS R.J. YOUNG, G.A., NEUMAN, B.E.E. & KALJO D. 2004. Corals. In: WEBBY, B.D., PARIS, F., DROSER, M.L. & PERCIVAL, I.G. (eds), *The Great Ordovician Biodiversification Event*. Columbia University Press, New York, 124–146.

NITECKI, M.H., WEBBY, B.D., SPJELDNAES, N. & ZHEN, Y.Y. 2004. Receptaculitids and algae. In: WEBBY, B.D., PARIS, F., DROSER, M.L. & PERCIVAL, I.G. (eds), *The Great Ordovician biodiversification event*. Columbia University Press, New York, 336–347.

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Anthony (Tony) WRIGHT (1937–2025)

Tony Wright died suddenly and unexpectedly at his home in Wollongong at the age of 87, cutting short a productive and scholarly career. He was a highly regarded palaeontologist who studied fossils from the Ordovician, Silurian & Devonian Systems mainly in Australia and New Zealand, and to a lesser extent in Iran, France, and Belgium. His research predominantly focussed on studies of rugose and tabulate corals, trilobites, brachiopods, and graptolites. He was a world-leading specialist in a group of operculate corals of Silurian and Devonian ages.

Tony commenced geological studies at the University of Sydney in 1957, completing his B.Sc (Hons) in 1960 supervised by the late Gordon Packham. He embarked on a Ph.D (also under Gordon's supervision) from 1962-1965, the first three years being funded by a Commonwealth Postgraduate Scholarship. In his final year Tony was awarded the Linnean Macleay Fellowship by the Linnean Society of NSW, commencing his long association with the Society. His PhD was conferred in 1966 for his thesis project on the Devonian coral and brachiopod faunas of the Mount Frome area near Mudgee in NSW.

Tony's first academic role was a Lecturer in Geology at Victoria University of Wellington, New Zealand from January 1966 – December 1969. He then briefly joined the teaching staff of Oregon State University in Corvallis (USA), before returning to Australia in early 1971 to take up a Lectureship at the University of Wollongong where he remained for the rest of his career. He was subsequently promoted to Senior Lecturer and then Associate Professor before retiring in 1997. His research then continued as an Honorary Principal Fellow with the University and also as a Research Affiliate of the Australian Museum. In 2000, he was appointed as a Fellow of Emmanuel College at Cambridge which he remained until his death.

Tony published 95 refereed papers, monographs, edited books, and chapters contributed to books. Tony's research on Silurian graptoloids and dendroids was undertaken in collaboration with the late Professor Barrie Rickards of Cambridge, with whom he wrote nearly one-quarter of all his papers; this productive research partnership (which only ceased with Barrie's untimely death) advanced the study of Silurian representatives of this group in Australia more than anyone previously.

Though much of Tony's research concentrated on Silurian and Devonian palaeontology, he was also very productive in describing Ordovician fossils. He discovered the first Ordovician conodonts known from New Zealand, co-authored several papers on Ordovician trilobites of New Zealand, and described Ordovician trilobites, brachiopods and graptoloids from Iran.

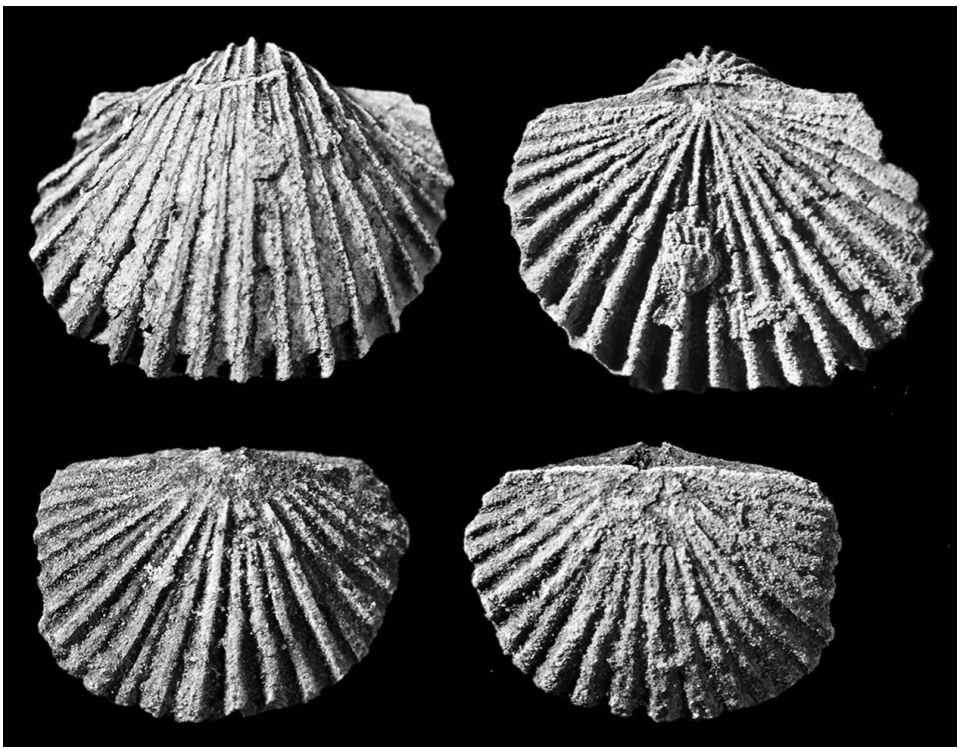
With his knowledge of both Australian and New Zealand geology, Tony was a strong supporter of Australasian palaeontological research. He was a long-term member of the

Association of Australasian Palaeontologists (AAP) from 1975 up to his death and served for five years from 2001-2006 as the Editor of *Alcheringa* – the Australasian journal of palaeontology – continuing his association with the journal as editorial advisor from 2007-2010. He was also active in local scientific societies, particularly the Linnean Society of NSW (joining the Council in 1974, serving as President in 1982, and was subsequently Vice-President for several years until retiring from the Council in 1987).

He was well-known internationally as the primary organiser of a conference at the University of Wollongong in 1999, on Palaeobiogeography of Australasian Faunas and Floras. Subsequently he was the lead author (along with the late John Talent, Gavin Young and John Laurie) of the widely-cited 'PAFF volume' (an AAP *Memoir*) with the same title as the conference but abbreviated for convenience. This book stands as a monumental work summarising information on all the then-known biogeographically-significant fossils from all parts of the Phanerozoic geological history of Australia and New Zealand (bar the Triassic). At the time of its compilation, almost every active Australian palaeontologist contributed to this volume. It remains the go-to reference book for overseas geoscientists seeking basic information on the stratigraphic distribution of Australasian fossils.

Tony was an inspirational teacher and mentor to many students at the University of Wollongong. He was held in high regard by all his colleagues throughout the world and was sought out by editors to review manuscripts – his comments on these were invariably incisive and constructive. Although he had achieved much in his long career, he was still very active in research and his untimely passing is a great loss to Australasian palaeontology.

Ian Percival



Middle Ordovician brachiopods from the Katkoyeh Formation, east-central Iran;
photographs extracted from a paper co-authored by Anthony J. Wright (Percival *et al*., 2009: fig. 2V–Y),
published in *Memoirs of the Association of Australasian Palaeontologists* (vol. 37, p. 315-325).

Svend STOUGE (1942–2025)

Geology and palaeontology have lost one of their well-known characters of the past half century. Professor Svend Sandbergh Stouge was first and foremost a geologist, enjoying fieldwork in many of the more exotic parts of world together with his native Denmark. A key focus of his research was micropalaeontology, more specifically conodonts, where he was a world-leading expert.

Through his enthusiasm, sense of fun and genuine interest in his science, Svend provided encouragement to his colleagues, together with students at all levels, and professional and amateur geologists and palaeontologists alike.

Svend was a strong supporter of the Palaeontological Association including his co-organization of the Annual Meeting (in Copenhagen, 2001) and latterly as Editor-in-Chief of the Association's publications portfolio. He was an honorary member of the Association.

Svend was born in Copenhagen on the 19th March 1942 into one of Denmark's aristocratic families. He could have used the title Baron, but that was not Svend's style. He was awarded the degree of Cand. Scient. in 1974 from the University of Copenhagen (advisor Prof. Valdemar Poulsen). Shortly after a year as an assistant professor in the Roskilde University Centre, he left Denmark to commence a Dr. Phil. in the Memorial University of Newfoundland, supervised by Prof. Lars Fåhræus. This started his life-long engagement with the island, its Ordovician geology and conodont faunas, especially on the western edge of the province. Svend held various postdoc positions ultimately joining the Geological Survey of Canada, progressing to senior geologist.

He returned to Denmark in 1983 as a postdoctoral fellow funded by the Danish Research Council researching Ordovician sea-level changes. From the mid-1980s to the mid-1990s he was employed by the Geological Survey of Denmark (later the Geological Survey of Denmark and Greenland or GEUS) in various roles focused on biostratigraphy with supervision of graduate students. Whereas Svend's main area of expertise remained on Ordovician geology, his career at the survey took him much higher in the stratigraphic column and occasionally into the petroleum industry. On leaving the survey he joined the Natural History Museum of Denmark, supported by grants from the Danish Research Council and Carlsberg Foundation together with consultancy work.

Svend was a visiting professor in many institutions including Universitá di Sassari, Sardinia, Italy, the Roskilde University Centre, the Nanjing Institute of Geology and Palaeontology in the Chinese Academy of Sciences, Beijing University and the Geological Survey of China, Wuhan.

Svend's research output was significant and substantial. His monograph on the conodont faunas from the Table Head Group in western Newfoundland (*Fossils and Strata* 1984) is much cited and forms the basis for much research on this interval. Many of his publications focused on the use of conodonts in biostratigraphy and palaeobiogeography, even constraining the timing of Middle Ordovician asteroid impacts. He published many biostratigraphical and monographic works with his partner Gabriella Bagnoli.

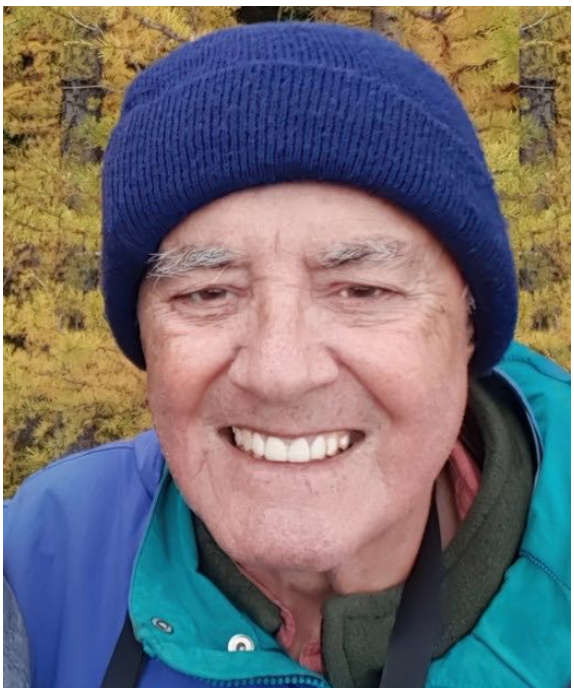
Svend led and participated in many expeditions and field camps including many to Newfoundland, Northeast and Northwest Greenland, Northeast Svalbard, Russia and North and South China. His contribution, outside research and teaching, to Danish geology was immense, as secretary, vice president and president of the Geological Society of Denmark, editor for the Geological Survey Bulletin, and working with colleagues and students as a titular professor in the University of Copenhagen, located latterly in the Natural History Museum of Denmark. He engaged in further editorial work on an international a stage as editor-in-chief of *Lethaia*, *Fossils and Strata* and the publication canon of the Palaeontological Association.

Svend was in so many ways an unsung hero, one that many of us relied upon for advice, guidance and his encyclopaedic knowledge. A more formal lack of recognition did not bother him; he was a product of Danish *Janteloven* and disliked arrogance and pretension. Svend would much rather enjoy the company of colleagues and friends in a convivial atmosphere and discuss the age and importance of the *evae* transgression over a couple beers and the occasional aquavit.

Svend was a very private person with many separate strands to his life. He was an accomplished double bass player (specialising in folk and jazz music), a talented former handball player and was playing badminton competitively until a few weeks before his death on the 12th April, after a short illness. He is survived by his partner and co-researcher Gabriella and his daughter Kristine together with his son Niels. Our community has lost a giant and a much-valued colleague and friend.

David A.T. Harper, Arne T. Nielsen, Jan A. Rasmussen, Emma Sheldon & Jakob W. Hansen

Michael Edward BROOKFIELD (1944–2026)



Michael Edward Brookfield, born on June 8, 1944, in Carmarthan, Wales (Caerfyrddin, or "Merlin's Fort" in Welsh), passed away peacefully in Guelph on the evening of February 4, 2026, leaving behind a legacy of scientific achievement and family devotion.

Michael (Mike) started his life with travel and adventure that was to stick with him his whole life. As a toddler he moved with his parents Frank and Cordelia (Bunny) and his younger sister to Kenya, where his father worked for the Magadi Soda Company. He often recalled his early memories of living by the salt lake and flamingos of Lake Magadi, riding a rhinoceros, and going away to boarding school. He also survived an early childhood illness thought at the time, wrongly, to be polio. The family then moved to Scotland, where his father worked for Imperial Chemical Industries (ICI), and Mike acquired an education, although not a Scottish accent.

Mike had a passion for science and experimentation from an early age. He blew up glass houses with nitroglycerin, used pellet guns to sink models of battleships, brought hydrochloric acid home in his backpack, made toxic gas by accident causing an evacuation of the house, and built a Meccano crossbow (no longer available!). But his true passion was geology – walking over the heath to collect rocks and look at interesting outcrops in high mountain ranges. Mike's passion for geology was an ever-present guiding light in everything he did for the rest of his life. He studied geology first at Edinburgh University, then pursued a doctorate at Reading University.

It was in Reading that Mike met his future devoted partner, Kathleen (Kate) Brookfield. They were married in 1968, a marriage of shared adventure that was to last over 57 years. Their first adventure was moving from England to Canada in 1969 via CP Cruise ship when Mike began his teaching career as a professor of geology at the University of Guelph.

The Canadian adventure was the tip of the iceberg when it came to Michael and Kate's adventures. Together he and Kate lived in Cambridge, England; Chandigarh, India; and Taipei, Taiwan. Their travels took them from the Soviet Union to the Caribbean, Egypt, Australia, and the West Coast of Canada, and many places in between. In later years they were fans of "repositioning" cruises, where they would fly to the Caribbean to get on a cruise to Europe, often to visit friends and family in the UK along the way. Their joint adventure concluded when Kate passed away late in 2025, two months before Michael.

Mike also had many adventures on his own, usually pursuing his love of geology. When planning vacations, interesting rocks or sediments were a requirement of the destination. He enjoyed teaching youth and students of all ages about his passion, notably his students at the University of Guelph, where he taught for 39 years starting in 1969. In that time, he was also

visiting Professor of Geology at Panjab University, Chandigarh, India and Scientific Advisor to the Croatian government. After he retired in 2008, Mike continued to be very active around the world and served as a visiting Fellow at the Institute of Earth Sciences, Academia Sinica, Taiwan, adjunct professor at University of Massachusetts, and Visiting Professor at Jackson School of Geosciences, University of Texas, Austin. He was also a Fellow of the Explorer's Club and Associate Fellow of the Egypt Exploration Society.

But "the field" was where he thrived, tramping up mountains and through remote valleys to look at rocks, take samples, and learn about local culture. He loved to take anyone who would listen into the field with him, from toddler to graduate student, and had a knack for storytelling and sharing his knowledge. Wherever he went, he studied the local geology, from Scotland to Canada, Egypt, and India. The Himalayas were special for him, capturing his focus for most of his professional career. In dozens of harrowing, dangerous, and often downright reckless trips, he explored the regions, connected with the locals and advanced the body of work on the geology of the area. Michael had a hand in dedicating an area in India to be protected based on its geological importance.

Mike retired from the University of Guelph in 2008, but this did not slow down his dedication to his work. He continued to work with colleagues around the world, through associations with Academia Sinica (Taipei), the University of Massachusetts, Boston, and the University of Texas at Austin. Upon his death, he had produced almost 150 publications to his name, including six books, and had been cited in academic papers or texts over 6,000 times and was still working on another paper. In the weeks before he died, he continued to correspond with colleagues around the world, from the US to India to China. Dozens of people from all corners of the world continue to read his papers.

Mike's interests in geology were extremely broad. His undergraduate thesis was on Precambrian, Devonian and Jurassic rocks of northeastern Scotland! His PhD received in April, 1973 was based on his studies of paleoenvironments of Upper Jurassic sediments in Dorset, England. From there he went on to work on many geologic issues ranging in age from Proterozoic to Quaternary, but with special emphasis on the Ordovician, Permian-Triassic boundary, and Jurassic. He had expertise in carbonate sedimentation, desert processes and sand dunes, ophiolites, paleontology, petrology, radiometric dating, structural geology, and tsunamites.

Mike's connections to the Ordovician were many. Early in his career, Mike pioneered in the study of hardgrounds from the Upper Ordovician (lower Katian) Simcoe/ Trenton Group in the vicinity of Lake Simcoe, Ontario carrying over experience from studying the Jurassic in England. Mike was very thorough in the field and documented his sites with detailed maps and photos and was intrigued with spatial patterns in hardground encrusting organisms like bryozoans and edrioasteroids. He was known for his advocacy of Late Ordovician (Katian) cool water oceans recorded in bryozoan rich and coral poor carbonates in the Ordovician in Ontario. He also collaborated in studies of Sr isotopes in the Ordovician. In the past decades, Mike and his collaborators published several papers on implications of new zircon-based dates for the Ordovician-Silurian boundary at Dobbs Lin and various levels in the Katian of eastern North America especially the Mohawk Valley. He was working on a paper on a series of Katian bentonites at the time of his passing. Mike was always one to think outside the box and develop and test creative hypotheses that challenged paradigms. In that sense he was an inspiration to his many colleagues.

Michael Brookfield was father to two children, Robert and Caroline. Despite his best efforts by taking many photos of them (as "scale") next to rock cuttings on their trips, neither followed his path into geology. He was loving and supportive for their other interests, from childhood into their adult lives. He also very much enjoyed spending time with his grandchildren Liam, Amelia, and Cole. The grandchildren and other neighbors and friends enjoyed reading the incredible but true "Tales from Grandpa Mike" that chronicled many of his almost unbelievable adventures, especially in the Himalayas.

Mike Brookfield was quite modest and sometimes quiet in gatherings, but always friendly and curious about the people he met. Mike was inclusive of all cultures, religions and lifestyles, and was a fierce supporter of justice and empathy. He enjoyed finding out about each person he met, to ask about their country and culture, and inevitably had stories about his travel or colleagues he knew in the city or country. His style of humor tended to bad puns and some off-color jokes (Monty Python and the 1950s Goon Show were particular favorites), but always from a place of fun and love for humanity. He often read biographies and historical novels, visited museums and watched documentaries to learn about the world around him. Michael loved music, especially opera, and played piano for much of his life after being self-taught as a child. Mike Brookfield was truly a renaissance man and a passionate explorer who shared his passion for geology and life in general, with his family and his many colleagues. He seemed to have nine lives, surviving several harrowing bush plane and helicopter rides, and brushes with death in the Himalayas and yet coming off each quite nonchalantly. He used each one of his "lives" to the fullest, not fearing death, sometimes taking a fatalistic if also optimistic viewpoint, but loving life. Two weeks before his passing, despite a fading body from cancer, he was hopeful to take a cruise trip from the Bahamas to Europe, and a trip to Calgary. His optimism, generosity, tenacity and stoicism helped him to live a full life with many contributions to geology and earth history. Mike Brookfield will be sorely missed, but long remembered for his many contributions and friendships, with a smile.

Carlton E. Brett, with major input from Robert and Caroline Brookfield (son and daughter of Michael)

Mike Brookfield in the Canadian Rockies near Lake Louise

Ingve GRAHN (1945–2025)

Yngve Grahn, a renowned micropalaeontologist and stratigrapher, passed away on 16 July 2025 in Estepona, Spain, after several years of ill health. He had resided there for the past fifteen years. Internationally recognized as a leading authority on chitinozoans and chitinozoan biostratigraphy, Yngve made seminal contributions to the study of these organic-walled microfossils and their stratigraphic applications. His prolific scientific output – comprising approximately 95 peer-reviewed papers, along with numerous abstracts, reports, and other publications – reflects both the depth and breadth of his geological scholarship.

Born in Malmö, southern Sweden, Yngve spent his early years and completed his primary and secondary education in the city. After working for about twelve years in Malmö (1960–1972), primarily as a postal sorting clerk and newspaper distributor, he pursued supplementary studies before enrolling in geology at Lund University in 1972. He obtained his B.Sc. degree from Lund University in 1976 and earned his Ph.D. from Uppsala University in 1982. Following the completion of his doctorate, he held a one-year post-doctoral fellowship at The Ohio State University, USA (October 1983–September 1984), where he conducted pioneering research on Ordovician and Silurian chitinozoans from the Appalachian region and the Cincinnati Region of Ohio and Kentucky. In 1993, Yngve was appointed *docent* (Reader) in geology at Stockholm University. His trial lecture, entitled "Ordovician and Silurian glaciations in northwest Gondwana", exemplified his ability to synthesize palaeontological, stratigraphic, and palaeoclimatic data – an integrative perspective that characterized much if his scientific legacy.

Yngve's professional career began at the Geological Survey of Sweden (SGU) in Uppsala, where he served successively as Geologist (1977–1984), Senior Geologist (1984–1985), and Principal State Geologist (1985–1989). During his tenure at SGU, he carried out palaeontological and stratigraphic research in the Ordovician and managed the fossil collections. Although these were productive years, he eventually felt that his work was not fully appreciated, and in 1988 he accepted a position in Rio de Janeiro, Brazil, as a consultant for Petrobras, the national oil company.

He subsequently returned to Petrobras on several occasions, working there during four extended periods up to 2016. His contributions included teaching specialized courses on organic-walled microfossils, conducting research on the pre-Carboniferous stratigraphy of Brazil, and developing considerable expertise in petroleum geology. Between 1997 and 2004, he also served as Visiting Professor at Universidade do Estado do Rio de Janeiro. During an extended interval between his appointments in Brazil, he returned to Sweden to work as a visiting researcher at Stockholm University and at the Swedish Museum of Natural History (1991–1992, 1995–1997). Between 1992 and 1995, he held the position of temporary curator

at the Swedish Museum of Natural History, where he continued his palaeontological research and contributed to the study and curation of the museum's extensive fossil collections.

Yngve's first scientific paper, published in 1978, dealt with chitinozoan stratigraphy and palaeoecology of the Ordovician–Silurian boundary beds of Scania (Skåne), southern Sweden. This study marked the beginning of a distinguished research career devoted largely to the study of Ordovician and Silurian chitinozoans. Over the following decades, he produced a substantial body of work on these microfossils from numerous regions around the world, with publications on the subject continuing until 2011. The majority of these studies focused on the systematics, taxonomy, and stratigraphic utility of chitinozoans, but he also made notable contributions to understanding their ultrastructure, biological affinity, and palaeoecology—research that significantly advanced knowledge of this important group of microfossils.

Following his relocation to Rio de Janeiro in 1988, Yngve became deeply involved in research on the geology and stratigraphy of the Amazonas, Parnaíba and Paraná basins of Brazil, as well as the Tarija Basin in northwestern Argentina. His investigations in these regions yielded numerous publications on the Ordovician–Devonian miospore and chitinozoan stratigraphy of these intracratonic basins, on the regional palaeographic evolution of NW Gondwana, and on evidence for early Silurian glaciations in Brazil.

As a person, Yngve was an independent and distinctive character. Unconcerned with outward appearances, he pursued his own path with quiet determination and intellectual integrity. He held a deep appreciation for literature, classical music – particularly opera – and for solitary travel, often to Asia, reflecting his introspective nature. After retiring from Petrobras, Yngve settled permanently in Estepona, southern Spain, where he enjoyed a peaceful and contemplative life until his passing. He leaves behind an enduring legacy of scholarly publications and fond memories among his colleagues and friends. It was both a privilege and pleasure to have known him.

Per Ahlberg, with input from Robert Lilljequist and Louis Liljedahl

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Richard A. FORTEY (1946–2025)

Richard Fortey was both an internationally leading palaeontologist and a highly acclaimed communicator of the Natural Sciences to the general public through a succession of popular science books and television programmes. His high standing in both areas was recognised by election to Fellowships of both the Royal Society (1997) and the Royal Society of Literature (2009) and the award of an OBE in the 2023 New Year Honours List 'For services to Palaeontology and Geology' which was presented to him by the Prince of Wales in the June of that year. These accolades were in addition to numerous awards both his contributions to science and his writing and the conferment of Honorary degrees from several British universities. His 'service' to science included membership of the councils of the Palaeontological Association (including President), Palaeontographical Society (including President), The Geological Society (including President in its 200th Anniversary year), The Systematics Association and the Royal Society as well as membership of the editorial boards of several journals. Despite all his achievements he remained modest, amiable and very approachable. His loss to science and its communication is immense and his death robs those who knew him of a friend, an extremely knowledgeable research colleague and a humorous and most entertaining companion whether in the field, at a conference bar or at the dinner table.

Richard was born in London. He obtained his BA (1968) and PhD (1971) at Cambridge University and spent his entire career at the Natural History Museum, London, where, following his retirement in 2006 he continued as an extremely productive honorary researcher. His early life is documented in his eminently readable 2021 autobiography, *A Curious Boy; The Making of a Scientist*, which essentially ends with his immersion in the trilobites (and graptolites) of the Lower Ordovician of Spitsbergen during his PhD study and a subsequent expedition there by a group from the Oslo Palaeontological Museum and the Norwegian Polar Institute; the museum team included David Bruton with whom he remained a friend and sometime collaborator for the rest of his life. Richard's publications on the Spitsbergen fossils set the scene for two of the recurring themes in his subsequent career – high quality systematic palaeontology based on careful observation and the documentation of depth-related faunal associations.

Richard was an internationally outstanding trilobite researcher but his works also included significant contributions on other early arthropods, arthropod relationships and phylogeny, graptolites, the Cambrian explosion, stratigraphy and palaeogeography. His publication output was remarkable, with about 270 papers in palaeontology and other geological fields (1968-2024) together with nine popular science books, several contributions on mycology, and a great diversity of other publications including (under pseudonyms) humorous books.

Amongst Richard's immense scientific output, his contributions to the understanding of the Ordovician World comprise about two thirds of the 270 papers noted above. He studied Ordovician trilobites from many countries around the World from the Arctic to Australia, western USA to East Asia. In doing so he produced, either alone or with collaborators, a very large body of systematic work together with papers on high level classification, evolution, morphology, and biodiversity change. He developed strong insights into the living trilobite animal both from a functional morphological point of view and from the recognition that some trilobites or groups of trilobites lived at different depths within the water column and others were part of the benthos at different water depths.

The recognition by Richard that the distributions of shallower-water trilobite taxa tended to be the most endemic and thus the best indicators of provinciality was the basis for a number of pioneer studies, many with his friend and colleague at the Natural History Museum, Robin Cocks, on the palaeobiogeography of Lower Palaeozoic faunas. In a series of well-cited papers, they clarified the positions of continents around the ancient Iapetus Ocean, recognised and named an ocean, Tornquist's Sea, identified the edges of continents based on their deep-water marginal faunas and emphasised the relationship of endemicity and cosmopolitanism to water depth.

Richard's wide geographical experience of faunas and stratigraphies, and his considerable expertise on graptolites made him an important contributor to Ordovician correlation. He was a Titular Member of the Ordovician Subcommission (1989–2008), an important contributor to the discussions on the faunas around the Cambrian-Ordovician boundary and whilst recognising some limitations and problems, he was a vigorous proponent of the importance of the Ordovician series in the historical type area of the System in the UK and their potential use internationally. He coordinated a team of workers that 'modernised' British Ordovician chronostratigraphy by formally defining the Anglo-Welsh series and stage boundaries on the basis of continuous, conformable and fossiliferous sections with the widest correlateable value. The conventional, commonly imprecisely defined, boundaries were replaced by clearly defined bases in rock. The aim was to 'use minimal change to maximise utility' although in some cases this involved significant revision from the looser historical usage. The result was a detailed chronostratigraphical scheme that became the 'Left Hand Column' on the correlation charts of the Ordovician rocks of the British Isles in the 2000 Geological Society of London Special Report that Richard coordinated and now forms a key regional scheme in terms of international Ordovician correlation.

Richard Fortey collaborated widely in his research. Four long-standing collaborations are particularly worthy of mention, that with Robin Cocks on Ordovician palaeobiogeography noted above, the extensive trilobite and stratigraphical work with Bob Owens and with Adrian Rushton, and work on early arthropods with Derek Briggs. Many others of us also worked with Richard and benefitted from his tremendous knowledge and insights over the years. Ordovician research and science in general have lost one of their great contributors and communicators.

Alan Owen & David Harper
(with thanks to Hans Arne Nakrem for the photograph and to Greg Edgecombe for providing us with a full list of Richard Fortey's publications)

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Professor Richard Fortey in the Geologisk Museum, Oslo on the occasion of a memorial meeting for his close colleague Dr Robin Cocks, June 2024. Richard was photographed in part of the exhibition, which deals with the history of the museum and the history of geology in Norway, appropriately beside the bust of Professor Waldemar Christofer Brøgger (1851–1940). Photo courtesy of Hans Arne Nakrem.

Clive BURRETT (1948–2025)

Clive Burrett was born in London, UK. He studied geology for a B.Sc (Hons) at Queen Mary College, London University and graduated in 1970. Clive came to the University of Tasmania in Hobart straight from his graduation, commencing as a Demonstrator (Lecturer level A) and shortly thereafter starting his Ph.D (part time) on the "Middle-Upper Ordovician conodonts and stratigraphy of the Gordon Limestone Sub-group, Tasmania". He was heard to bemoan on occasion how few conodonts there are in the Gordon Limestone (averaging just two specimens per kg) and how many drums of acetic acid it took to find them. But he did manage to discover and describe *Tasmanognathus careyi*, the first Ordovician conodont published from Tasmania, in 1979; subsequently several new species of this distinctive genus have been described from North China, Tarim and South Korea, and it is also known from one species in the North American Midcontinent fauna, all of early Late Ordovician (Sandbian) age. Improvements in processing the shallow water Ordovician limestones of Tasmania eventually resulted in a diverse and relatively abundant conodont fauna being described from the Late Ordovician Benjamin Limestone (Zhen, Burrett & Percival 2010) based in large part on Clive's Ph.D studies. Deepwater Ordovician conodonts from the difficult-of-access south coast of Tasmania were documented in Burrett, Stait & Laurie (1983).

Clive finished his PhD in 1978 and then gradually worked his way through the promotions system at the University of Tasmania, attaining Reader by 2000, despite taking leave to teach at Sultan Qaboos University, Muscat (Oman) from 1992 to 1994. He was Head of the School of Earth Science for three years (1997–2000). He taught thousands of undergraduate geologists (and supervised numerous postgrads) at the University of Tasmania and was consistently rated as an exceptional teacher.

Clive may have trained as a conodont specialist, but his geological passion was always tectonic reconstructions. He got off to a good start with his very first paper, *Plate tectonics and the Hercynian orogeny*, published in *Nature* in 1972. Very quickly this passion settled to a lifelong interest in tectonics, geology and the palaeontology of SE Asia and China. He produced the first terrane analysis of Eurasia. There were forays into other areas. Clive worked initially on the Palaeozoic of Tasmania, branching out into the petroleum potential in the Permian and older sediments. He had a quick look at Tasmanian correlates in Antarctica. In 2000–2002, he worked on Proterozoic reconstructions and postulated whether Tasmania came from Laurentia.

Over time, Clive broadened his research scope to encompass geodynamic settings and metallogeny as well as U-Pb zircon geochronology, areas where he made lasting contributions to our understanding of Southeast Asia's complex geological framework. From 2003 to 2014,

he was involved in major projects, conducted at CODES at Utas and sponsored by several international and Australian companies, that examined the tectonic and metallogenic evolution of Southeast Asia. Those years were marked by intensive field campaigns, cross-disciplinary discussions, and integration of regional to global datasets—an approach that Clive always championed. He was never content with narrow or isolated studies; instead, he sought to place local geological features within the broader geodynamic context, showing how SE Asia fits into the Tethyan tectonics. Clive played a pivotal role in these projects. He was a stimulating collaborator. He contributed not only his profound scientific expertise but also his unique ability to synthesize complex datasets into coherent palaeo-tectonic models. The outcome of this collaboration was a series of widely cited, high-impact publications that advanced both academic understanding and practical exploration strategies across the region.

Clive retired in 2006. He moved to northern Thailand, where he set up house over a fish farm and continued working on various geology projects around SE Asia, both as a consultant and with various Thai institutions. Initially he maintained contact with the geology department at Chang Mai University. From 2009 he was an honorary researcher at the Palaeontological Research and Education Centre at Mahasarakham University in Northeast Thailand, working on the tectonics, regional geology and palaeontology of mainland SE Asia. He was still publishing papers in 2025. Through these achievements, Clive left an enduring legacy in Southeast Asian geology—one that will guide researchers and inspire students for many years to come.

Clive made many contributions to the Geological Society of Australia (GSA). He served on the executive committees of both the GSA and the Association of Australasian Palaeontologists. He was secretary (1972) and chairman (1987–1990) of the Tasmanian Division of GSA, and was scientific editor of the 1989 volume *Geology and Mineral Resources of Tasmania* published by the Tasmanian Division of GSA. Clive was appointed a distinguished fellow of the GSA in 2010.

Dr Clive Burrett passed away on the 4th September 2025 at the age of 77 in Khon Kaen Hospital, northeastern Thailand.

Ian Percival (thanks to Dr Ron Berry, a former colleague of Clive's at the University of Tasmania, for providing the majority of the text and the photo of Clive for this tribute)

ORDOVICIAN RESEARCH REPORTS & CONTACTS

Datu ADIATMA (USA)

Datu is a postdoctoral scholar at Florida State University. He is involved in research projects focus on constraining changes in redox conditions during the early Paleozoic (late Cambrian to Ordovician). One of the overarching goals of this project is developing high resolution redox sensitive proxy records (e.g., trace metal concentrations, I/Ca, and Tl isotopes) from shale and carbonate sections from Laurentia and Baltica.

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Sachiko AGEMATSU-WATANABE (Japan)

Sachiko has been spending somewhat more time on the Triassic conodonts in recent years, but she is also interested in the microfossils around the OS boundary.

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Guillermo ALBANESI (Argentina)

Guillermo conducts research on Lower Paleozoic conodont faunas from South America. His work encompasses diverse projects in the Precordillera and northwestern Argentina, in collaboration with G. ORTEGA, former doctoral students, and several colleagues. Under his supervision, G.M. DELLA COSTA and F.E. LÓPEZ successfully defended their Ph.D. dissertations in 2025, while E.K. RUEDA is expected to complete hers in 2026. He also maintains collaboration with M.J. MANGO during his final year as an assistant researcher at CONICET.

His research program focuses on conodont taxonomy, biostratigraphy, paleoecology, paleobiogeography, and evolutionary studies based on carbonate and siliciclastic sequences of the Ordovician System in Argentina. Guillermo serves as Professor of Paleontology and Director of the Centro de Investigaciones Geológicas Aplicadas (CIGEA) at the Facultad de Ciencias Exactas, Físicas y Naturales (FCEFyN), Universidad Nacional de Córdoba (UNC), Argentina. The CIGEA hosts a micropaleontology laboratory specifically equipped for conodont preparation. His office is located at CIGEA, and the conodont collections are curated at the Museo de Paleontología of the university.

Between 2022 and 2026, Guillermo also serves as Chief of the Pander Society, the international society of conodont specialists. In addition, together with A.K. SCOMAZZON, he is editing a forthcoming Virtual Thematic Issue of Marine Micropaleontology, Elsevier, which will feature approximately 18 contributions on conodont research derived from the 6th International Conodont Symposium (ICOS 6), held in Mafra, Brazil, from December 7–10, 2025.

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Thomas ALGEO (USA)

Tom works on problems of paleoenvironmental reconstruction in deep-time Earth systems, with foci on development of geochemical proxies (elemental, isotopic, and biomarker) for paleoenvironmental analysis and investigation of the mass extinction causation. He is particularly interested in changes in oceanic conditions during the Ordovician and their co-evolutionary relationship to major bioevents such as the GOBE and LOME.

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Martina AUBRECHTOVÁ (Estonia)

Martina relocated from Prague, Czech Republic, and is currently a postdoctoral research fellow at the University of Tartu. Her research project focuses on the palaeogeography, palaeoecology and palaeoenvironmental significance of early Late Ordovician cephalopod assemblages from Estonia. Besides that, she continues to cooperate on a study investigating the peculiar internal morphology in the enigmatic species *Orthoceras bonum* from the Middle Ordovician of the Prague Basin.

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Gabriella BAGNOLI (Italy)

Gabriella continues studies on taxonomy and biostratigraphy of Cambrian and Ordovician conodonts from Sweden, Newfoundland (Canada), China and Korea.

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Chris BARNES (Canada)

Chris is slowly continuing/completing his conodont paleontology/stratigraphy/isotope geochemistry research. The main projects being: a) new studies of Ca and Sr non-radiogenic isotopes to investigate causal factors for the Late Ordovician mass extinction (with Manuel RICO and Annalisa FERRETTI); and b) Ordovician and Silurian conodont biostratigraphy, bioevents, eustasy and thermal maturation, mainly for Laurentia. His career's collection of conodonts in 43 microfossil cabinets was donated to, and archived by, the Geological Survey of Canada in Calgary, Alberta.

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Juan L. BENEDETTO (Argentina)

Juan is continuing studies on phylogeny, biostratigraphy, and biogeography of the Ordovician and Silurian brachiopods from the Precordillera and Central Andean basins of Argentina. A quadripartite schema of phylozones has been proposed for the uppermost Cambrian-lower Tremadocian of the Central Andean basin of Argentina and Bolivia. The base of the Ordovician is indicated by the first appearance of *Kvania lariensis*, which is almost time-equivalent to the *Jujuyaspis keideli* trilobite biozone. Together with Fernando LAVIÉ, he is studying the Early and Mid Ordovician craniids from northwestern Argentina, and together with Nexxys HERRERA SÁNCHEZ, Blanca TORO, and other colleagues, he is reviewing the stratigraphy and biostratigraphy of the Ordovician-Silurian transition in the Precordillera basin.

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Carlton E. BRETT (USA)

Carlton's research activities for 2024 include:

A) *Late Ordovician Cincinnatian stratigraphy and paleoecology: Tennessee-Ohio-Indiana-Kentucky*: Research with PhD student, Ian FORSYTHE, in 2025 is greatly advancing our understanding of the sequence stratigraphy of Katian sections in the Nashville Dome area of central Tennessee. One interesting spinoff of the field work was the discovery of new rugose corals, tentatively identified as *Eurogrewingkia* from the upper Katian Fernvale Formation at several locations; these are substantially older than these previous first appearance of the genus in eastern Laurentia. The corals and others from Tennessee are presently under study by Dr. Robert ELIAS (University of Manitoba).

In addition to some important documentation of a few additional Nashville area sections field stratigraphic research was extended in two directions. First, reconnaissance studies of upper Katian (Cincinnatian) strata in the Chattanooga area were made near the eastern Tennessee-Georgia border. For the first time, it was possible to make detailed correlations to the much better known sections of the Nashville area and extend the sequence stratigraphic framework developed for the northern Cincinnati Arch (Brett *et al*., 2020) into the Appalachian Basin. Ian hopes to submit manuscripts on the lithostratigraphy and sequence stratigraphic framework of the late Katian (Richmondian of North American terminology) strata in Tennessee in the coming months.

Second, exploratory trips to southern Tennessee-Alabama border area were made with amateur paleontologist Richard KEYES of Huntsville, Alabama to document upper Katian strata. It is evident that a good deal of the Cincinnatian succession is cut put beneath a major unconformity associated beneath the Fernvale Formation, which was informally referred to as the Mannie Shale Member. However, the uppermost (preserved) Katian Mannie Shale is richly fossiliferous and records a late Katian warm water fauna that shows in incursion of taxa from the upper Mississippi Valley (northern Illinois, Iowa, Minnesota) including many brachiopods that otherwise do not appear in more southeasterly (modern directions, during Katian) areas. In addition, this Mannie faunal incursion shows many similarities with another, as yet unpublished immigration pulse (documented independently in MS theses of Dr. Robert FREY (1976), retired geologist, Dayton, OH, and Dr. Richard FLUEGEMAN (1979), professor at Ball State University) in the uppermost Cincinnatian Elkhorn Formation of the Cincinnati Arch region. Another project with FREY, FLUEGEMAN and Dr. Jisuo JIN (Western Ontario University, London, Ontario) aims to document these brachiopod dominated faunas and discuss their implications for a warming related very late Katian incursion perhaps associated with a late phase of the so-called Boda events.

A collaborative project with present and past graduate students Ian FORSYTHE, Cole FARNAM, Sam LITTLE and, several earlier students, aims to improve correlations and examine patterns of sea level, climate, and faunal change during the entire Katian-Hirnantian stage interval in eastern North America. Former MS student Sam LITTLE (now PhD candidate at University of Southern California) and Carlton published a paper (Little & Brett, 2025) based on their research on the several immigrational events of the so-called "Richmondian Invasion" based on Sam's quantitative analysis of exhaustive faunal lists, compiled unit by unit on the entire Richmondian at several dozen localities in Ohio and Indiana by the late William Henry SHIDELER (Miami University of Ohio; Shideler in Marak, 1994, Ohio Geological Survey Special Publication). The results of this study point to several significant and counterintuitive ideas, first the Richmondian invasion was not a single event of incursion and modification of community structure but rather involved

several pulses. Previous studies were binned at too coarse a scale to detect these short term bioevents. In terms of a higher resolution sequence stratigraphic framework, it is evident that at least four pulses of coordinated immigration took place, mainly associated with the transgressive systems tracts of depositional sequences. Moreover, there were more than 20 short-lived but widespread incursions of single species recorded as widely traceable epiboles.

A second paper is now being completed, based on field sampling that demonstrates a pattern of return to overwhelmingly incumbent-dominated assemblages for intervals up to several hundred thousand years. Furthermore, rather than showing any clearcut pattern of negative impact of "invaders" on incumbent (pre-existing or "native" species) biotas, there is evidence in some cases that some incumbent species (notably the orthid *Cincinnetina meeki*) actually proliferated during times of strong incursion of "exotic" (primarily warm water) taxa. This upcoming paper tentatively suggests that pulses of successful coordinated invasion may record expansion of taxa from the Maquoketa "province" into the Cincinnati basin owing to climatic warming; reversions to native dominated assemblages likewise may represent opposite climatic responses.

Together with former and present students and Glenn STORRS of the Cincinnati Museum, Carlton is completing the editing and illustration of some 12 written chapters for an anticipated synthesis on Cincinnati Arch stratigraphy and paleontology to be published by Cincinnati Museum. As noted previously, the aims of this project and its scope have been expanded to include sections on astrochronology, carbon isotope stratigraphy and implications for eustasy and climatic change. The aim is to bring at least the first volume of this work to completion in 2026.

B) *Research on Ordovician-Silurian boundary sequence and chemostratigraphy*: Research on the late Katian, Hirnantian, and early Silurian strata of eastern Laurentia continued in 2025. A paper on new evidence of Hirnantian strata (including some previously attributed to lower Silurian), biostratigraphy faunas in Ohio, Indiana, and Kentucky partly resulting from a dissertation by former PhD student Cole Farnam (presently with Nanoscience Technology), present student, Lincoln SHOEMAKER, Jisuo JIN, Bob ELIAS, and Chris WAID (Ohio Geological Survey) was just published in January (Farnam *et al*., 2026). This paper, intended as the first of a series on these strata and faunas, documents newly discovered fossiliferous outcrops as well as previously known sections and summarizes sequence stratigraphic, biostratigraphic, and carbon isotopic evidence that these record latest Hirnantian time. Discussion is particularly aimed at providing an updated sequence stratigraphy for eastern North America across the Hirnantian to Rhuddanian interval and the implications for latest Ordovician to early Silurian sea-level. This study also gives some new insights into the immediate post-extinction faunas.

In addition, a report on stratigraphic distribution of conodonts and amended conodont zonation of the uppermost Hirnantian-Rhuddanian-early Aeronian in the Cincinnati Arch, by Christopher WAID of the Ohio Geological Survey and several colleagues has been accepted for publication early in 2026 (Waid *et al*., 2026). This work provides an update of conodont zonation across the Ordovician-Silurian boundary in eastern North America and also has implications for the stratigraphic placement of that boundary in cratonic successions for which graptolite data are lacking.

Carlton is continuing to work with MS student, Lincoln SHOEMAKER, on detailed paleoecology of these Hirnantian/lowest Silurian sites in the eastern US midcontinent to characterize paleoenvironments and temporal changes of Edgewood type communities in the immediate aftermath of the Late Ordovician mass extinctions (LOME). Lincoln was discoverer of new Lagerstätten (obrution deposits) in the Hirnantian of Indiana, and he is

studying the well-preserved echinoderm fauna. In a paper presented at the *Geological Society of America Annual Meeting*, an overview of paleoecology was provided, as well as a comparison of the new assemblage with other known Hirnantian and Rhuddanian crinoid and asteroid assemblages from eastern North America. The new faunal assemblage resembles the Edgewood and latest Hirnantian to earliest Silurian Manitoulin and Cabot Head faunas of New York and Ontario, Canada. This unique occurrence provides important insights into the post-extinction recovery, particularly of echinoderms, in this critical interval.

C) *Marine bioevents through the Phanerozoic*: At the invitation of Prof. Annalisa FERRETTI (University of Modena and Reggio Emilia), Carlton devoted considerable literature research this past year to provide a review of marine bioevents for a special issue of *Palaeogeography, Palaeoclimatology, Palaeoecology* on the nature of the stratigraphic record (Brett & Zambito, 2026). In collaboration with Dr. James ZAMBITO, Carlton developed a rather comprehensive review of Phanerozoic bioevents ranging from local obrution deposits to faunal epiboles and migrational events, to global mass extinctions and abrupt evolutionary radiations. This article, following on the seminal works of Otto WALLISER, was published on-line in December formally published in early 2026. It provides a summary of events in each geologic system/period and summarize some qualitative hypotheses to account for the extreme variability of bioevent frequency through time including documentation of timing relative to C isotopic excursions on a series of diagrams adapted with permission from CRAMER and JARVIS (2020, in *GTS 2020*), as Appendix A. The long Ordovician Period stands out as having two phases: an early interval of low large-scale volatility, and a Darriwilian to Katian interval of increasing bioevent volatility coincident with the GOBE diversification episodes and culminating in the greatly destabilized late Katian–Hirnantian (LOME) mass extinctions. This underscores two very differing climatic and evolutionary regimes in the Ordovician. The causes of the enhanced bioevent volatility- a pattern continued into the Silurian Period- remain obscure but recent findings, linking bioevents with interval of abrupt climate change possibly triggered by massive volcanic eruptions (LIPS), provide fruitful ground for further research (see reviews by Harper, 2023, *Natl. Sci. Rev*; Rasmussen *et al.,* 2023; *Trends in Ecol., Evol.*). This tentative summary was put out largely to stimulate further research on bioevents in general and on the causes of their varying frequency and intensity through time.

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Yves CANDELA (Scotland)

Yves is continuing the study of Ordovician and Silurian brachiopods from Belgium in collaboration with Bernard MOTTEQUIN (Royal Belgian Institute of Natural Sciences - RBINS, Brussels), Thomas SERVAIS (CNRS, France) and David HARPER (Durham University, UK). The latest paper of this collaboration was published early February this year in the Bulletin of Geosciences. Yves is continuing collaboration with David HARPER on

other projects. Yves is also continuing collaboration with Bing HUANG (NIGPAS, PR of China), however, this mainly concerns the Silurian Period.

As curator of invertebrate palaeobiology at the National Museum of Scotland, most of Yves' time is dedicated to the curation and care of the invertebrate palaeontology collection, as well as welcoming research visitors.

Yves is still editor of the Earth and Environmental Science Transactions of the Royal Society of Edinburgh (EESTRSE), editor of the Scottish Journal of Geology, and Secretary of the *Groupe Français du Paléozoïque*. The special issue (comprising 17 articles) to honour the late Prof. Euan CLARKSON's superb career is nearing publication with EESTRSE; this special issue titled *A palaeontological odyssey: a tribute to Euan Clarkson DSc, FRSE (1937–2024)* is co-edited by Yves CANDELA, David A.T. HARPER, and Alain W. OWEN.

Yves is also involved as co-editor of other special volumes with *Palaeoworld*, *Geobios*, and *Bulletin of Geosciences*.

IGCP project 735 "Rocks and the Rise of Ordovician Life: Filling knowledge gaps in the Early Palaeozoic Biodiversification" led by Bertrand LEFEBVRE (France) and also comprising Mansoureh GHOBADI POUR (Iran), Khadija EL HARIRI (Morocco), Beatriz WAISFELD (Argentina), Oive TINN (Estonia), Wenhui WANG (China), Elena RAEVSKAYA (Russia) and Yves is in its fifth and final year now and has attracted so far 233 colleagues representing 47 countries. The full list of publications (well over 300) mentioning IGCP735 is available on our website, and are relevant to *Ordovician News*. If you are interested in joining this project, please check our website: https://rocksnrol.wordpress.com/ or drop us a line directly. Do not forget to send us a line when a paper acknowledging the project is published; we will add it on our website to our list of papers. The website also lists future meetings in which IGCP735 is organising or involved.

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Marcelo G. CARRERA (Argentina)

Marcelo is working on the evolutionary history of Paleozoic sponges and bryozoans (taxonomy, paleoecology and paleobiogeographic significance). In particular, he is currently studying new findings related to Lower Ordovician reefs (new sponge components) from western Argentina. He is also participating in the study of Ordovician gastropods as part of a supervised PhD Thesis.

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Zhongyang CHEN (China)

Zhongyang is working on the Early Palaeozoic conodonts and stratigraphy. His research interest is currently focused on the Early Palaeozoic conodonts in China and other tropical Gondwanan regions, especially biostratigraphy and biogeography.

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Se Hyun CHO (Republic of Korea)

Se Hyun works on Cambrian–Ordovician stratigraphy, sedimentology, and chemostratigraphy of the eastern part of the North China Block, particularly in the Taebaeksan region of the Korean Peninsula. His recent studies integrate lithostratigraphy, microfacies analysis, biostratigraphy, and carbon isotope chemostratigraphy to refine regional correlations and reconstruct the evolution of early Paleozoic epicontinental platforms.

Recent work includes a lithostratigraphic revision of the late Cambrian Sesong Formation and sedimentological studies of early Darriwilian re-inundation patterns recorded in the Makgol Formation, focusing on metre-scale cycles and sequence stratigraphic architecture. He has also investigated the regional expression of the Great Ordovician Biodiversification Event using quantitative microfacies and skeletal abundance data from Middle Ordovician carbonates. Ongoing research addresses Furongian carbon isotope chemostratigraphy of the Sesong–Hwajeol succession, evaluating how depositional setting influences the expression of SPICE and TOCE/HERB carbon isotope excursions and the reliability of chemostratigraphic correlation.

Se Hyun Cho

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Helena COUTO (Portugal)

Helena is working on the study of Paleozoic stratigraphy, paleontology and on associated gold and antimony mineralizations in Dúrico-Beirã area (North Portugal). These studies aim at contributing to a better knowledge of the Paleozoic stratigraphy and paleontology of the Valongo Anticline and to define prospecting guides for gold and antimony deposits.

Helena Couto

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Taniel DANELIAN (France)

Taniel has recently analysed a number of Tremadocian radiolarian specimens at the Ghent University's Centre of X-ray Tomography (UGCT) in Belgium. Analysis of 3D reconstructions of *Protoentactinia gracilispinosa* by Kozur *et al.* (1996), one of the oldest entactinarian radiolarians, clarified, for the first time, the skeleton development from a central spicule and the repeatedly branching pattern of spicules of its subglobular test. Results were presented in the last InterRad conference in Italy (Harutyunyan *et al.*, 2025). In addition, Taniel has recently conducted a factor analysis of an exhaustive sample-based dataset of early Palaeozoic (Cambrian/Miaolingian to Silurian) radiolarian species occurrences and detected three evolutionary faunas composed of specific radiolarian families (Danelian & Monnet, 2026). They seem to correlate with major climatic and biotic changes known in the Ordovician: *i*) the transition between the first and second evolutionary faunas is sharp and underlined by profound changes in taxonomic composition and turnover during the Middle Ordovician; it is correlated with the sudden early Darriwilian climate shift, global cooling and the main phase of the Great Ordovician Biodiversification Event (GOBE); *ii*) the transition between the second and third evolutionary faunas is correlated with the Late Ordovician Mass Extinction (LOME; Katian–Hirnantian) and associated climate cooling.

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G. Susana DE LA PUENTE (Argentina)

Susana is working on chitinozoans, associated palaeoplankton and microfossils of Palaeozoic basins, including the Central Andean Basin, Precordillera, Famatina, Patagonia, Tandilia and Ventania regions in Argentina, and the Praga Basin in a collaboration project. Her work on chitinozoans and closely linked sedimentological studies contributes to a better understanding of Palaeozoic biodiversity and basin evolution. In collaboration with Dr. Gustavo VOLDMAN and Dr. Emilio VACCARI, she is carrying out new studies on Ordovician chitinozoan associated with well constrained conodonts from Argentina. Results will complete the proposed biostratigraphy for these basins. Results on Silurian sedimentological and palaeontological studies of Tandilia, in a collaborative project, have been presented in a Sedimentology Meeting and published (Olivo *et al*., 2025). In 2025, Susana advised an undergraduate student on chitinozoan techniques, resulting in a successful thesis defense, and she is currently guiding three PhD students on sedimentology and stratigraphy projects (of other geological periods). She has established the Laboratory of Palynology and Microfossils, and she also supervises postgraduate activities in the Doctorate of Geosciences program (Doctorado en Geociencias), both at the Universidad Nacional del Comahue (Argentina).

In 2025, Susana was invited to present a conference at the V Argentine Meeting on Palaeontology of the Neuquén Basin (Patagonia, Argentina), which focused on the oldest fossil records of the basin. She also led the coordinating group for a thematic session on 'Palaeoceanography' at the XII Argentine Meeting on Marine Sciences & XX Oceanography Colloquium, aimed to explore palaeoceanographic records and interdisciplinary methodologies to understand the evolution of oceans through geological time. Palaeoceanography was included for the first time in these meetings and has successfully

developed in two sessions. Susana has presented new results on Ordovician and Silurian palaeoplankton assemblages from the Central Andean Basin of northwestern Argentina. These findings, which include previously undocumented chitinozoans, from a high-resolution sampling section allow to assess microplankton diversity across key palaeoenvironments. In collaboration with different researchers, she shared further progress on palaeontological and sedimentological records from the Silurian of Tandilia. These findings contribute to understanding the biostratigraphy, palaeoenvironments and geological history of these regions. Results of the sessions of this meeting will be published as scientific articles in a special volume during 2026.

G. Susana de la Puente

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Gisella M. DELLA COSTA (Argentina)

Gisella is a biologist and Professor of Philosophy of Science, graduated from the National University of Córdoba (UNC), Argentina. She holds a PhD in Biology, with a research focus on the biostratigraphy and taxonomy of Ordovician conodonts from the Argentine Precordillera. Her main research interests are centred on a comprehensive understanding of the conodont group, with particular emphasis on biostratigraphy and the functional analysis of the conodont apparatus, including palaeoecological, palaeoenvironmental, and evolutionary aspects. She aims to enhance the quality of conodont studies by increasing sampling efforts and critically revising identified conodont species using advanced statistical methods to minimise taxonomic subjectivity in species identification.

Gisella is currently looking for a postdoctoral position on conodonts.

Gisella M. Della Costa

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André DESROCHERS (Canada)

André serve as Scientific Director of the Anticosti UNESCO World Heritage Site (Société du patrimoine mondial Anticosti, Québec, Canada) and Adjunct Professor in the Department of Earth and Environmental Sciences at the University of Ottawa. Research activities continue to focus on the Ordovician–Silurian transition on Anticosti Island, developed as a globally significant reference section for the end-Ordovician mass extinction and early Silurian recovery. Current work integrates carbonate sedimentology, sequence stratigraphy, biostratigraphy, and chemostratigraphy within an international research framework supported by our Anticosti research incubator.

Ongoing collaborative projects include:

A) *Chitinozoan paleoecology and Ordovician–Silurian biostratigraphy* (with N.D.H. VAN FAALS, J.-F. GHIENNE, T. VANDENBROUCKE);

B) *High-resolution stratigraphy and timing of the end-Ordovician mass extinction* (with J. ZIMMT, C. KLOCK, J.-F. GHIENNE);

C) *Late Ordovician continental weathering and nutrient fluxes associated with the Hirnantian glaciation* (with G. BAYON and J.-F. GHIENNE);

D) *Fossil micrometeorites and extraterrestrial dust flux across the Ordovician–Silurian boundary* (with F. JONCKHEERE and S. GODERIS).

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Jan Ove R. EBBESTAD (Sweden)

Jan Ove continues working on Ordovician arthropods as well as gastropods and other molluscs from Baltica, Avalonia, Laurentia and peri-Gondwana settings. A field guide to the Ordovician of Västergötland and Dalarna for the Ordovician meeting ISOS 14 was published for the post-meeting excursion. A study was published on Early Ordovician cheirurine trilobites from Baltoscandia in collaboration with Helje PÄRNASTE, Magne HØYBERGET, Arne T. NIELSEN and Maximo A. ROJO, where two of the earliest described species of this group are redescribed. In collaboration with Marika POLECHOVÁ and Björn KRÖGER, the chapter on the molluscs from the late Floian Cabrières Biota (southern Montagne Noire, France) was written. Also, although in Swedish only, Jan Ove wrote the Ordovician chapter with Vivi VAJDA, in the new and richly illustrated book on the Geology of Sweden. 2025 also marked the 100th anniversary of the study by Elsa WARBURG on the Late Ordovician Boda Limestone trilobites of Dalarna, Sweden. WARBURG was also the first female palaeontologist in Sweden. A popular science paper was published with Anette HÖGSTRÖM in Swedish but an English version will appear in the *Palaeontological Association newsletter*.

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Cole EDWARDS (USA)

Cole continues to work on Ordovician stable and radiogenic isotope stratigraphy. Collaborations with Matt SALTZMAN (The Ohio State University) continue, along with his former Ph.D. students (Christopher CONWELL and Datu ADIATMA), on conodont biostratigraphy and radiogenic isotope chemostratigraphy of the Middle–Late Ordovician. Chris CONWELL recently published a paper in *Palaeo3* on using Sr isotopes measured from conodonts from Baltica to compare with global datasets to better constrain the factors that enhance conodont apatite preservation of seawater Sr. This paper continues their work on using conodont-based Sr records to estimate seawater Sr, which helps further related projects

that have a more Paleozoic perspective. Other endeavors have extended higher up in the timescale by studying anoxia during the Devonian, where projects are wrapping up and new ones are starting.

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Robert ELIAS (Canada)

Robert is studying Ordovician corals from limestone beds beneath volcanic ash layers in west-central Vermont, as part of a multidisciplinary project with Charles MITCHELL (USA) and others. He is working on corals from latest Ordovician to earliest Silurian strata in the Cincinnati Arch region, with Cole FARNAM and Carlton BRETT (USA). Research is underway on Late Ordovician (Richmondian) corals from the Nashville Dome area in north-central Tennessee, with Ian FORSYTHE and Carlton BRETT (USA).

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Andrej ERNST (Germany)

Andrej continues his studies of Baltic Ordovician bryozoans. The focus shifted to the bryozoan faunas from the Hirnantian-Rhuddanian interval. Otherwise, Sandbian-Katian bryozoans from Estonia, Sweden, and Norway remain the object of study.

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Cristiana J.P. ESTEVES (Belgium)

Cristiana is a PhD candidate at UGent, supervised by Thijs R.A. VANDENBROUCKE and Patrick I. McLAUGHLIN. In the coming months, she will defend her submitted dissertation, entitled “Upper Ordovician chitinozoan taxonomy, biozonation, and chronocorrelation in the U.S. midcontinent”. In 2025, she completed and published a memoir in the *Journal of Paleontology* (Esteves *et al*., 2025), presenting a comprehensive taxonomic study of chitinozoans from Katian units of the Cincinnati region (USA).

From October 2024 to January 2025, Cristiana was a visiting researcher at the Nanjing Institute of Geology and Palaeontology of the Chinese Academy of Sciences (NIGPAS),

where she collaborated with Prof. Yan LIANG on the revision of all the described species within the genus *Desmochitina*. She also contributed to a study led by Lorenzo LUSTRI and Yu LIU (Yunnan University, Kunming, China; Lustri *et al*., 2025) and is currently collaborating with paleontologists from the Czech Republic (Petra TONAROVÁ, Czech Geological Survey, and Jana BRUTHANSOVÁ, National Museum, Prague) to develop a chitinozoan biozonation framework for Upper Ordovician units of the Prague Basin.

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Xiang FANG (China)

Associate Professor in NIGPAS, Nanjing, Xiang is still working on the Early Palaeozoic cephalopods and relative stratigraphy, as well as the exceptionally preserved fauna in Ordovician and Silurian. Currently, his research interest is focused on the Early Palaeozoic cephalopods in China and other tropical Gondwanan regions, especially on their palaeobiological and macroevolutionary patterns.

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Oldřich FATKA (Czech Republic)

Although he has been retired since 2024, Olda retains his professorship in the department and continues to teach and conduct research. He is currently working on Cambrian and Ordovician trilobites alongside Petr BUDIL, Matěj ŠILINGER and several hobby-collectors. Olda is also working on different aspects of exceptionally preserved Cambrian to Silurian fossils of the Barrandian area. Together with Martin VALENT he is continuing the study of Ordovician hyoliths. The Czech-Austrian bilateral programme, the MOBILITY project, has made it possible to complete the revision of a small collection of Ordovician material gathered by the end of the 19th century. This collection originates from a Tertiary diatreme breccia in Semtín, located over 70 km east of the Prague Basin, and is housed in several institutions in Austria and the Czech Republic.

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Annalisa FERRETTI (Italy)

Annalisa continues to investigate Ordovician conodont faunas from Europe and beyond, working in collaboration with other specialists in the field. Her recent publications have examined the influence of diagenesis on bioapatite mineralogy and on crystallization patterns through geological time.

Ferretti *et al.* (2025) investigate the Uqua Section, which is a key reference locality for Ordovician conodont research in southern Europe. A previously undescribed assemblage of over 1,500 specimens is documented, representing the *Amorphognathus ordovicicus* Biozone. The fauna matches the regional *Hamarodus–Dapsilodus–Scabbardella* biofacies and lacks a typical Hirnantian signature.

Annalisa has co-edited with Marco BALINI, David A.T. HARPER and Thomas SERVAIS (Ferretti *et al*., 2026a) the thematic issue of *Palaeogeography, Palaeoclimatology, Palaeocology* entitled "From rock to time: evolutionary lineages and the calibration of the Chronostratigraphic Scale", resulting from the General Plenary Session at the 4th International Congress on Stratigraphy STRATI 2023 held in Lille, France (July 11–13, 2023). This issue includes several contributions of particular interest to researchers working on the Ordovician (Ferretti *et al*., 2026b). Geologists' recognition of deep time led to global stratigraphic correlation using fossils, lithology, and later radiometric, chemical, magnetic, and orbital markers, transforming the geological time scale from a relative to a numerically calibrated framework. Ferretti *et al*. (2026c) trace the major conceptual and methodological advances that underpin modern efforts to subdivide Earth history into increasingly precise and globally applicable chronostratigraphic units.

Even if not related with Ordovician material, the investigation on bioapatite focused on a comparison between recent and fossil material. Using μ-XRD and LA-ICP-MS, Medici *et al*. (2026) compare crystallinity and REE patterns in Recent and fossil catshark bioapatite, revealing diagenetic shifts in bioapatite lattice parameters, carbon incorporation, and organic-rich regions. These patterns highlight functional differences between tissues.

Finally, Ferretti (2025) presents a commemorative tribute to two towering figures in Palaeozoic stratigraphy, Enrico Serpagli (1936–2023) and Maurizio Gnoli (1948–2023).

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Barry FORDHAM (Australia)

Barry hopes to get back to a small collection of Ordovician conodonts one day ...

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Alexis GERBE (Germany)

Alexis is a doctoral student at Ludwig-Maximilians-Universität Munich under the supervision of Joachim HAUG and Alexander NÜTZEL. His PhD project investigates a Lower Ordovician (middle Tremadocian) Orsten-type assemblage that has yielded several thousand (most likely) parasitic organisms. Thanks to their exceptional three-dimensional preservation and the presence of soft tissues, his research aims to reconstruct their ecology, ontogeny, and evolution, and to shed light on the early evolution of parasitism.

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Mansoureh GHOBADI POUR (Iran/UK)

Mansoureh is currently preparing two manuscripts on Middle to Upper Ordovician trilobites from Iran and Kazakhstan for the memorial volume dedicated to Richard FORTEY, in collaboration with Leonid POPOV and Lucy McCOBB. Her research on Furongian to Tremadocian trilobites from the North Tien Shan (Kendyktas) and Malyi Karatau is ongoing. She will continue to serve as a co-leader of IGCP Project 735, “Rocks and the Rise of Ordovician Life: Filling Knowledge Gaps in the Early Palaeozoic Biodiversification”. She served on the scientific committee for the “IGCP735 Regional Meeting in Llandrindod Wells (Wales, UK), 4–11 July 2025”, and will serve in the same position for the “IGCP735 Field Conference in Kitab Geological National Nature Park (Kitab District, Kashkadariya Province, Uzbekistan), 4–11 August 2026”.

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Jessica Carolina GÓMEZ (Argentina)

During the last year (2025), Jessica has been working as a postdoctoral fellow at the Laboratory of Palynostratigraphy and Paleobotany (LPP) at CICYTTP under the direction of Dr. Mercedes DI PASQUO (CICYTTP –CONICET, ENTRE RÍOS-UADER) and Dr. Jimena TROTTEYN (CIGEOBIO-CONICET, San Juan-UNSJ). Jessica is currently the webmaster of the Latin American Association of Paleobotany and Palynology (LAAPP) (https://alpaleobotanicapalinologia.blogspot.com/).

This year, she conducted a palynostratigraphic and palynofacial study of the Late Ordovician in the Precordillera, Province of San Juan, emphasizing paleoenvironmental and paleobiogeographic reconstructions of western Gondwana. She has participated in projects related to the Ordovician-Silurian boundary: a) "Ni and Hg isotope chemostratigraphy as indicators of coeval volcanism in the Cretaceous-Paleogene, Permian-Triassic, and Ordovician-Silurian transitions", directed by Dr. Alcides SIAL at NEG-LABISE in Brazil.

The results of these projects have contributed to the reconstruction of the succession of events in the Ordovician-Silurian Transition; b) Pollen catalog of native and cultivated species of the Province of Entre Ríos with emphasis on the City of Diamante, directed by Dra. Mercedes DI PASQUO (LPP-CICYTTP-CONICET-ARGENTINA); and c) Herbarium of the Laboratory of Palynostratigraphy and Paleobotany, Center for Scientific Research and Technology Transfer to Production: Past, Present, Future, directed by Dra. Mercedes DI PASQUO (LPP-CICYTTP-CONICET-ARGENTINA).

Studies in the Central and Eastern Precordillera of San Juan Province provided: a) A scolecodonts assemblage from the La Pola (Sandbian–Katian) and Don Braulio formations in the Eastern Precordillera; b) preliminary identification of *Gloeocapsomorpha prisca* in the Eastern Precordillera of Argentina; and c) an analysis of C, N, Hg isotopes and elemental chemostratigraphy across the Ordovician–Silurian transition in the Argentine Precordillera. Jessica also addressed alternative topics such as the First record of scolecodonts from the Winnipeg Shale (Upper Ordovician) in the northern Black Hills of South Dakota, U.S.A., and the petrogenetic study of the El Verdalito Granodiorite through petrological and petrographic analysis, Venezuela.

Jessica was selected for *the Leonard Rieser Young Scientist Award 2025*, in the area of "Environmental Science, Ecology, and Biodiversity". This Award is established to reward and recognize the creative careers of young scientific researchers from Latin America and the Caribbean. She collaborated in the organization of *Paleoevents and extinctions in palynology and paleobothanisms of the Paleozoic*, CAPA-Argentina 2025 (https://docserver.santafe-conicet.gov.ar/share.cgi?ssid=7b26c26de9264dfbb1f3f2b456e58572).

Jessica Carolina GÓMEZ

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Pierre GUERIAU (Switzerland)

Pierre started as a permanent laboratory scientist at the University of Lausanne in June 2025, where he runs the optical microscopy and imaging, aquarium, acid digestion, and palaeontology facilities. Part of his time is also devoted to palaeontological research, focusing on the taxonomy and palaeoecology of Palaeozoic arthropods and on deciphering fossilization mechanisms through the use and development of advanced spectro-imaging techniques. More specifically regarding the Ordovician, Pierre is involved in the study of fossil arthropods from the Fezouata, Cabrières, and N'kob biotas.

Pierre Gueriau

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Juan Carlos GUTIÉRREZ-MARCO (Spain)

Throughout 2025, Juan Carlos was engaged in organising, in Seville (Andalusia, southern Spain), the business meeting of the Silurian Subcommission. This included the *Golden Spike* ceremony for the replacement Global Stratotype Section and Point (GSSP) of the Telychian Stage of the Llandovery Series, located on the shore of the El Pintado Reservoir, north of the city. The book of abstracts from this meeting may be downloaded free of charge via the link attached to the reference by Gutiérrez-Marco & Romero (2025).

With regard to Ordovician topics, he continues to be active in Morocco, Argentina, Peru, Colombia and Spain. He also collaborated with Jörg MALETZ on graptolite-related matters and even with archaeologists, following the discovery of an Ordovician trilobite during a Roman excavation in north-western Spain, originating from a locality some 400 km away in the south-central region of the Iberian Peninsula (see Fernández Fernández *et al.*, 2025).

Completed and forthcoming for publication in 2026 are the discovery of Ordovician scolecodonts from Peru (with Petra TONAROVA, Olle HINTS and Josefina CARLOROSI); a monograph on the Ordovician gastropods of the same country (with Jan Ove EBBESTAD); the late Cambrian and Early Ordovician trilobites from the Peruvian Altiplano (with Franco TORTELLO and Isabel RÁBANO); a study of a large problematic discoidal fossil from the Ordovician of Morocco (with Diego GARCÍA-BELLIDO and Sara ROMERO); large palaeoscolecid burrows from the same area (with Dirk KNAUST); various Ordovician fossils from north-western and central Spain (with Isabel RÁBANO, Sara ROMERO and Jorge COLMENAR); and several collaborations on graptolites and echinoderms with the scientific teams of Lyon, Lausanne, Prague and Montreal, partly related to fossil Lagerstätten in south-western France and Morocco.

In 2026, Juan Carlos will take part in several trilobite studies for the special volumes in honour of Richard FORTEY (with Sofia PEREIRA, Sara ROMERO and Isabel RÁBANO) and possibly for the trilobite congress to be held in Spain. He will also continue his collaboration with Dirk KNAUST on Lower Ordovician trace fossils from Spain; with Jörg MALETZ on graptolites; with Yves CANDELA and Jorge COLMENAR on brachiopods; and with various colleagues in Argentina, Peru and Colombia on Ordovician topics from their respective countries.

Juan Carlos Gutiérrez-Marco

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David HARPER (Scotland, UK)

Research continues on a range of Ordovician brachiopod and other faunas. With Yves CANDELA research progresses on the brachiopods faunas of Belgium and southern France including the newly discovered Cabrières biota (now in press) and a revision of the brachiopods from the Landeyran Valley, Montagne Noire. Together with Bernard MOTTEQUIN, Yves CANDELA and Thomas SERVAIS research continues on Ordovician brachiopods from Belgium (see e.g. Candela *et al*., 2025, 2026) and next is the substantial Late Ordovician brachiopod fauna from Grand-Manil.

Following a study on the diversity and disparity of plectambonitoid brachiopods (CANDELA, HARPER and GUO 2025), a comparable project on the strophomenoid

brachiopods continues. A similar study is planned for the orthide brachiopods. Collaboration with ZHANG Yuchen together with SPROAT, C.D., RONG Jiayu and ZHAN Renbin has concluded on the substantial Katian brachiopod faunas from Tarim and South China; the large monograph (in Chinese and English) was published early in 2026.

'*A palaeontological odyssey: A tribute to Euan Clarkson DSc, FRSE (1937–2024)*' edited by CANDELA, Y., HARPER, D.A.T. and OWEN, A.W. will be published later this year in *Earth and Environmental Sciences Royal Society of Edinburgh*, with some of the 17 papers of interest to Ordovician specialists.

'*Geography and Life before Pangea: A volume in honour of Robin Cocks*' *Geology Society Special Publication* (edited by DOWDING, E., BETTS, M., HARPER, D.A.T. and Torsvik, T.H.) is far advanced with a number of papers on Ordovician topics, including HARPER, D.A.T., RONG Jiayu and ZHAN Renbin summarising a history of palaeobiogeographic research on Ordovician brachiopods.

A number of papers relevant to the Ordovician are included in FERRETTI, A., BALINI, M., HARPER, D.A.T. and SERVAIS, T. (eds) 2026. Cutting time in slices. *Palaeogeography, Palaeoclimatology, Palaeoecology*, Virtual Special Issue.

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Linda HINTS (Estonia)

Linda continues with colleagues Peep MÄNNIK, Jaak NÕLVAK, Helje PÄRNASTE, Oliver LEHNERT and Michael JOACHIMSKI study of paleontological materials from one section in western part of Moskow Basin and hopes to finish the manuscript in the near future. At the initiative and leadership of Mark Harris (USA), Linda participated together with other Estonian colleagues in the project on Upper Ordovician facies, sequences and basin development in Estonia. Corresponding manuscript has been submitted for publication in *Estonian Journal of Earth Sciences*.

Linda Hints
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Lars HOLMER (Sweden)

Lars is mainly continuing his joint work with J.J. ÁLVARO, L. POPOV, and P. AHLBERG investigating the distribution of Cambro-Ordovician glendonites and associated possible hydrothermal deposits and phosphorites in Baltoscandia, with support from the Geological Survey of Sweden.

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İzzet HOŞGÖR (Turkey)

İzzet is working on the study of Palaeozoic stratigraphy, palaeontology and on petroleum geology in SE Türkiye. His research interest is currently focused on the Early Palaeozoic invertebrate fossils and ichnofossils in Turkey and other northern Gondwanan regions, especially biostratigraphy and biogeography. A palaeontological evaluation of the discovered Hirnantian (Late Ordovician) palaeostomate bryozoans and associated biota of the northern Arabian Plate in southeastern Turkey was accepted and available online published in September 2025 (*Palaeoworld*). İzzet was a member of the team of authors, together with Andrej ERNST and Olev VINN.

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Juwan JEON (South Korea)

Juwan is a post-doctoral researcher at Korea University (Seoul, South Korea), concurrently fulfilling his mandatory military duty as a South Korean citizen but freely continuing his work on Ordovician and Silurian stromatoporoids. Collaborations with Zhong-Yang CHEN, Sehyun CHO, Suk-Joo CHOH, Wen-Jie LI, Qi-Jian LI, Stephen KERSHAW, Jino PARK, Carl STOCK, Ursula TOOM, Mongkol UDCHACHON, Ren-Bin ZHAN, Yuan-Dong ZHANG, and Yong-Yi ZHEN (in alphabetical order of surnames) continue on stromatoporoids around the world.

This year, he and his colleagues completed several studies on Ordovician stromatoporoids, which were published in the *Estonian Journal of Earth Sciences*, *Palaeoworld*, and *PNAS*. In particular, the oldest known stromatoporoid, *Lophiostroma leizunia* Jeon, was reported from the Lower Ordovician Fenhsiang and Honghuayuan formations; this species is notable for having a phosphatic skeleton. A diverse stromatoporoid fauna from the Upper Ordovician Koumenzi Formation of the North Qilian Mountains was also described and published in Palaeoworld. Several other stromatoporoid studies are still ongoing.

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Petr KRAFT (Czech Republic)

Petr continues to study fossil associations in the Prague Basin with an emphasis on graptolites and graptolite stratigraphy. He also continues to study fossil interactions and taphonomy in the Bohemian Darriwilian. Together with his student Monika LUPTÁKOVÁ, he is finalizing a study on Tremadocian dendroid graptolites; together with Jana BRUTHANSOVÁ, he completed a study on a special conulariid-dominated ecosystem. He also continues field research in the Prague Basin, focusing mainly on localities with graptolites.

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Ed LANDING (USA)

Ed (emeritus at New York State Museum) is wrapping up the conodont and trilobite biostratigraphy, carbon isotope stratigraphy, and sequence stratigraphy of the classic NE Laurentian Beekmantown Group (carbonate shelf-dominated uppermost Middle Cambrian–lower Middle Ordovician [lower Dapingian]) in eastern New York and adjacent Vermont. This involves completion of work on the uppermost unit, the Providence Island Formation. The Providence Island (and synonymous Carillon Formation, southern Quebec; Bridport Formation, western Vermont) is an unconformity-bounded depositional sequence that reflects a eustatic fall–rise interval under the Laurentian Tippecanoe sequence. The restricted marine, locally evaporitic and planar stromatolitic facies of the Providence Island has surprisingly abundant and diverse conodonts. The carbon isotope stratigraphy has been done by Bosiljka Glumac (Smith College, Northampton. Massachusetts). The Providence Island work compliments earlier reports not listed in earlier *Ordovician News* reports (but available for download at Researchgate / Ed Landing):

A) Entire Beekmantown Group (Kröger & Landing, 2010 [*Palaeogeography Palaeoclimatology Palaeoecology*]; Landing, 2002 [*New England. Intercollegiate Geological Conference, 94th, & N. Y. State Geological Association 74th*], 2007a, b [*NY State Museum Bulletin* 510], 2012a [*Palaeogeography Palaeoclimatology Palaeoecology*], 2012b [*AAPG Bulletin*], 2015 [*Bulletin of Marine Science Engin.*]; Landing & Webster, 2018 [*New England Intercollegiate Geological Congress, 110th, & NYS Geological Associatio, 90th*]; Landing & Westrop, 2015 [*Geological Magazine*], Landing *et al*., 1992 [*NY State Museum Bulletin* 474], 2024 [*Geological Society, London, Special Publications* 542]; Salad Hersi *et al*., 2021 [*Geological Society of America Field Guide* 60];

B) Upper Cambrian of upper Little Falls & middle Tremadocian Tribes Hill formations (Kröger & Landing, 2007 [*Journal of Paleontology*]; Landing, 1988 [*NYS Museum Bulletin*]; Landing & Bartholomew, 2024 [*GSA Today*]; Landing & Kröger, 2009 [*Journal of Paleontology*]; Landing *et al*., 1996 [*Journal of Paleontology*], 2003 [*Journal of Paleontology*], 2010 [*Geological Magazine*]; Westrop *et al*., 1993 [*Canadian Journal of Earth Sciences*]);

C) Upper middle Tremadocian Rochdale Formation [previously Fort Ann Formation, abandoned] (Kröger & Landing, 2008 [*Geological Magazine*]);

D) Floian Fort Cassin Formation (Kröger & Landing, 2009 [*Journal of Paleontology*]).

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Bertrand LEFEBVRE (France)

Bertrand continues his work on the systematics, palaeoecology and palaeobiogeography of Palaeozoic echinoderms. Last year, his Ordovician research activities focused primarily on preparing manuscripts concerning the late Floian Cabrières Biota (southern France) for the thematic volume coordinated by Farid SALEH in *Lethaia*. With Martina NOHEJLOVÁ (Prague), Bertrand supervised Christophe DUPICHAUD's PhD thesis on the anatomy and phylogeny of Cambrian–Ordovician echinoderms. Christophe defended his PhD thesis in Lyon on October 14, 2025. Since October 2025, Bertrand has been supervising with Grégory BEAUGRAND (Wimereux) the PhD thesis of Vincent DE OLIVEIRA SANTOS on the palaeobiogeographic and palaeoecological aspects of the diversification of a clade of stylophoran echinoderms (anomalocystitid mitrates) during the Great Ordovician Diversification Event, as well as its post-Hirnantian recovery in the Silurian–Devonian.

With Yves CANDELA, Khadija EL HARIRI, Mansoureh GHOBADI POUR, Elena RAEVSKAYA, Oive TINN, Beatriz WAISFELD and Wenhui WANG, Bertrand is one of the co-leaders of the IGCP project 735 “Rocks and the Rise of Ordovician Life: Filling knowledge gaps in the Early Palaeozoic Biodiversification” (Rocks n' ROL).

Since 2022, Bertrand has also been leading a four-year project funded by the French Research Agency (ANR), in collaboration with colleagues from Dijon (Alexandre POHL), Lille (Thomas SERVAIS) and Wimereux (Grégory BEAUGRAND). This project, entitled “Evolution of the Cambrian-Ordovician Biodiversification Onset Over Space and Time” (ECO-BOOST), aims to combine empirical palaeontological data with palaeoclimate and (macro-)ecological models to analyze the onset of the Cambrian–Ordovician radiations in time and space. In this context, Bertrand co-supervises with Grégory BEAUGRAND and Alexandre POHL the PhD thesis of Alexis BALEMBOIS (Wimereux), which focuses on modelling biodiversity in time and space and reconstructing latitudinal biodiversity gradients in the Early Palaeozoic.

However, most of Bertrand's research activites in 2025 focused on Devonian echinoderms. He was invited for three months in Göttingen, Germany (Gauss professorship) to work with Reimund HAUDE (Göttingen), Mike REICH (Brunswick) and Teresa FRANKE (Bonn) on exceptionally preserved echinoderms from the Lower Devonian of Germany (Hunsrück Slate) and Argentina (Talacasto Formation). His other Devonian-related activities in 2025 included projects dealing with echinoderm assemblages from Belgium (with Bernard MOTTEQUIN and Sébastien OLIVE), France (Armorican Massif, with Florian NOIRIT), and Spain (Master's internship of Vincent DE OLIVEIRA SANTOS, with Samuel ZAMORA and Jorge ESTEVE).

Bertrand Lefebvre

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Stephen A. LESLIE (USA)

Stephen is primarily working on Middle and Late Ordovician, and a bit on early Silurian, conodont biostratigraphy and integrating the biostratigraphy with studies of Ordovician paleoclimate change. Work continues with Dan GOLDMAN integrating graptolite and conodont biostratigraphy in dark shale successions. Stephen continue to work with Antun HUSINEC on Late Ordovician to early Silurian conodont biostratigraphy and carbon isotope

stratigraphy in the Williston Basin, as well as with John HAYNES, Achim HERRMANN, John REPETSKI and Randall ORNDORFF in the central Appalachians.

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Ming LI (China)

Ming continues her research on Early Ordovician (Tremadocian) graptolite phylogeny and biostratigraphy. Last year, her primary work focused on North China, specifically on graptolite taxonomy and stratigraphic division in the Tremadocian. Additionally, she conducted systematic studies on the age and distribution of Ordovician marine red beds in Yunnan.

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Yan LIANG (China)

Yan continues her work on Ordovician chitinozoan, primarily focusing on taxonomy, biostratigraphy, morphological function, and biological affinity. A systematic work on the Early and Middle Ordovician Dawan Formation at the Gudongkou section (ca. 60 km north of the Hunghuachang GSSP) has been carried out and is now published in *Journal of Micropalaeontology*. Three new taxa are established: *Conochitina clavatus* sp. nov., *C. tenellensis* sp. nov., and *Lagenochitina yangtzensis* sp. nov. The two regional biozonal species, *Bursachitina maotaiensis* and *Sagenachitina dapingensis*, are proving very useful for regional correlations. The network analysis is applied based on data from the Dawan Formation and its contemporaneous units on the Yangtze Platform to test whether chitinozoan assemblages have palaeogeographical significance, and the result appears to be positive. This is a very interesting point and worth digging deeper. Together with her master's student, Shouhan WU, they carried out a systematic study on the Lower Devonian chitinozoans in Guangxi, South China, and a new taxon, *Angochitina lingliensis* sp. nov., was erected in a Chinese journal.

In 2025, she attended the IGCP 735 regional meetings in Wales and Crozon, as well as the project's 5th annual meeting in Changsha, to keep abreast of the latest research advances and explore potential collaborations. She also visited Prof. Thomas SERVAIS at Lille University and sampled the Rigenée chitinozoans in Belgium. Together with colleagues from NIGPAS and Guangzhou Institute of Geochemistry, CAS, she visited Tallinn University of Technology to collaborate with Prof. Olle HINTS and Dr Jaak NOLVAK.

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Thibaud LIEFFROY (Estonia)

Thibaud is pursuing his PhD in Estonia, under the supervision of Olle HINTS and Peep MÄNNIK in Tallinn University of Technology (TalTech). His is preparing an article focused on taxonomic diversity of Latvia, which will be submitted soon. In parallel, his is working on a wider comparison of Baltoscandian conodont assemblages with Chinese and Argentinian ones. His research seeks to fill unresolved aspects of Ordovician conodont bio stratigraphy and faunal turnovers, developing the use of conodonts as geochemical proxies in the aim to reconstruct (1) Ordovician climate evolution in Baltica palaeo-continents and (2) ecological dynamics within the baltoscandian palaeo-basin. Moreover, he is pursuing his collaboration with the GFZ Helmholtz Centre for Geosciences (Potsdam, Germany) team to provide phosphatic δ18O from Latvian specimens, leading to another article presenting new insights about the Ordovician climatic variations.

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Fernando Enrique LOPEZ (Argentina)

Fernando is a geologist, recently Ph.D. graduated, and professor at the Universidad Nacional de San Juan (UNSJ), Argentina. His research focuses on the Ordovician and Silurian graptolite biostratigraphy of the Precordillera. His aim is to improve the biostratigraphic framework of South America, enhance temporal correlations, fill gaps in the fossil record, and introduce new graptolite faunas and taxa in the region. Moreover, he is starting new multi-proxy studies of Silurian sequences of the Precordillera, including Chemostratigraphy, Biostratigraphy, and Taphonomy.

In the last year, Fernando completed and defended his Ph.D. thesis in Biostratigraphy and Taxonomy of Ordovician graptolites from the Argentina Western and Central precordilleras, under the guidance of Dr. Gladys ORTEGA, Dr. Aldo L. BANCHIG, and Dr. Guillermo L. ALBANESI. Additionally, he is carrying out several biostratigraphic and paleoecological studies of Ordovician and Silurian successions of Precordillera.

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Gerardo A. LO VALVO (Argentina)

Gerardo is completing his PhD on the disparity of graptoloids from a macroevolutionary and macroecological perspective, under the guidance of Dr. Blanca TORO and Dr. Diego BALSEIRO. In the future, he plans to continue working on the disparity patterns of trilobites in the Cambrian-Ordovician period with Dr. Fernanda SERRA and Dr. Diego BALSEIRO. Focused on analytical paleobiology, Gerardo is open to collaborations and actively looking for short-term fellowship opportunities.

Gerardo A. Lo Valvo

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Xiaocong LUAN (China)

Xiaocong is interested in Ordovician–Silurian sedimentology and stratigraphy, focusing on the environmental background of bioevents. Ongoing studies include ferruginous time-specific facies (TSFs) and paleo-productivity during the GOBE, and Ordovician cool-water deposits in South China.

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Monika LUPTÁKOVÁ (Czech Republic)

Monika is a PhD student at the Charles University. She is currently collaborating with Petr KRAFT to finish her research on Tremadocian dendroid graptolites from Newfoundland, which are deposited in the B.-D. ERDTMANN‘s collection at the Museum of Bohuslav Horák in Rokycany. Additionally, she is advancing her studies on the fossil associations of the Dobrotivá Formation (Prague Basin, Czech Republic).

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Jörg MALETZ (Germany)

Jörg is working on Cambrian to Silurian graptolites worldwide. One focus is the research on the graptolites of the Miaolingian to Furongian (Upper Cambrian) with ZHANG Yuandong and ZHU Xuejian (NIGPAS, Nanjing, China). Important new information for the construction of early graptolite tubaria and thecal differentiation is available fitting new data

from Ordovician taxa found in North German glacial boulders of Scandinavian origin with Ronald KLAFACK (Rostock, Gemany). Work on Ordovician faunas from Morocco, Spain, Portugal and France is under way with Juan Carlos GUTIÉRREZ-MARCO (Madrid, Spain). Recently discovered graptolites from Bohemia, initially described by Heinrich GÖPPERT (1860) as plant fossils and found in the collection at Harvard University (USA), will be published soon with Rudy LEROSEY-AUBRIL.

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Peep MÄNNIK (Estonia)

Peep is working on evolution, taxonomy and palaeoecology of conodonts, conodont-based high-resolution stratigraphy, bioevents and palaeogeography. He is also interested in sequence stratigraphy, palaeoclimatology and evolution of sedimentary basins. Studies under the project PRG1701 "From Greenhouse to Icehouse: Reconstructing Ordovician Climate Transitions and Biotic Responses in Baltica" are in progress. Also, joint studies together with colleagues from Estonia, Germany, Poland, Sweden, U.K. and USA on evolution and high-resolution stratigraphy of the Early Palaeozoic faunas and sedimentary basins on different palaeocontinents continue.

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Alexander (Sandy) D. McCRACKEN (Canada)

Sandy (retired in 2017 from the Geological Survey of Canada – Calgary office) has stopped new conodont work but as a part-time volunteer periodically advises colleagues in the GSC. He returned his microscope and remaining collections to Calgary in the fall of 2025. He also works with members of the Geological Association of Canada's Paleontology Division on its *Palaeontographica Canadiana* monograph series, conference meetings and awards. Sandy now lives in Nanaimo, British Columbia. He is in online contact with the Calgary office monthly or so; regular mail does not get forwarded so please send only emails or email attachments to his personal email address.

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Patrick I. McLAUGHLIN (USA)

Pat is a Principal Research Scientist at the Illinois State Geological Survey (USA), where he runs the Basin Analysis Laboratory which conducts biochemostratigraphy and elemental facies analysis. His research in 2025 continued to focus on refining Upper Ordovician chronocorrelation across the Taconic and Midcontinent paleobasins in the eastern U.S. and Canada to provide temporal and environmental context for the formation of large REE-enriched phosphorites and ironstones. He co-advised the PhD work on Cristiana ESTEVES and MS studies by Kaatje PIERS and Lena LARDINOIS with Thijs VANDENBROUCKE at Ghent University (Belgium). This year also included final sampling for a project with Alyssa BANCROFT, Ryan CLARK, and Jack MALONE at the Iowa Geological Survey focused on carbon isotope chemostratigraphy and phosphate geochemical mapping.

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Tõnu MEIDLA (Estonia)

Tõnu is holding the position of Professor of Palaeontology and Stratigraphy at the University of Tartu (Institute of Ecology and Earth Sciences) and is working on different aspects of the Ordovician litho-and biostratigraphy, ostracods and stable isotopes in Estonia, Latvia and Lithuania (together with L. AINSAAR, A. LEPLAND, M. HARRIS, O. HINTS, P. MÄNNIK and S. RADZEVIČIUS). He is also voting member of the Subcommission on Ordovician Stratigraphy and the chair of the Estonian Commission of Stratigraphy.

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Michal MERGL (Czech Republic)

Michal is currently working on lingulate brachiopods from the early Floian of the Prague Basin sampled in 2025, and continues in laboratory works on fossils from the middle Ordovician taphonomic window observed three years ago. In 2025, he published no paper on the Ordovician fossils.

Michal Mergl

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Ana MESTRE (Argentina)

Ana is working on different topics related to biostratigraphy and taxonomy of the Lower – Middle Ordovician conodonts, integrated with sedimentology, stratigraphy, and basin evolution of of the Precordillera and Famatina regions during the Ordovician–Silurian.

In collaboration with Anders LINDSKOG (Kristianstad University), André Navin PAUL (University of Frankfurt), and Urs SCHALTEGGER (University of Geneva), her work integrates conodont biostratigraphy with U-Pb zircon dating of K-bentonites from the Lower–Middle Ordovician of the Precordillera.

She is part of a multidisciplinary team (Susana HEREDIA, Juan Pablo MILANA, Daniel POIRE, Estefania ASURMENDI, and Josefina CARLOROSI) investigating the clay mineral assemblages of the Ordovician–Silurian sedimentary succession in the Precordillera. Together with Josefina CARLOROSI, Daniela MONTI, and Franco TORTELLO, she continues to study Lower–Middle Ordovician conodonts and trilobites. This collaborative project focuses on the comparison and correlation of Ordovician faunas from the Precordillera, Famatina, and Eastern Cordillera, shedding light on the paleobiogeographic connections of the region.

She actively participates in a project with Blanca TORO, Nexxys HERRERA, Juan Luis BENEDETTO, and Claudia RUBINSTEIN, focused on a high-resolution biostratigraphic analysis across the Ordovician–Silurian boundary in the Precordillera. She is currently collaborating with Susana HEREDIA on a project focused on stratigraphy and conodont biostratigraphy of carbonate Ordovician sequences in La Pampa province. Additionally, she contributed to several parts for the Stratigraphic Lexicon of Argentina (Vol. III): Ordovician.

Ana Mestre

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James F. MILLER (USA)

James is retired and living in Cleveland, Ohio. He is working on a manuscript on the Cambrian-Ordovician boundary. In 2013, he was presented with the Gilbert Harris Award for Systematic Paleontology by the Paleontological Research Institution. Last October, he was presented with the Pander Society Medal based on 60 years of research on upper Cambrian and Lower Ordovician conodonts. After checking, no other person has received these two awards.

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Charles E. MITCHELL (USA)

Chuck retired from UB in January of 2020. Erin SCHUSTER, the last of the graduate students working under his supervision, completed her doctoral degree (*Graptolite Ecology through the Late Ordovician Mass Extinction*) in January 2025. Despite being retired, Chuck continues to pursue several topics related to the Ordovician Earth. Among these are:

A) *Evolution and diversity history of Mid and Late Ordovician graptolites.* This work includes several projects but has led most recently to publication of an analysis of graptolite species turnover during the Late Ordovician Mass Extinction (LOME) based on a compilation of occurrence data from paleotropical sections around the globe. The work is part of a collaboration with H. David SHEETS, Michael J. MELCHIN, and Chris HOLMDEN, in which they document a set of three episodes of high graptolite species turnover through the latest Katian and Hirnantian ages. Diplograptine species went extinct at accelerated rates during each of these episodes and experienced no originations while neograptine species simultaneously diversified. These turnover events closely correspond to expectations of the Turnover Pulse hypothesis developed by Elizabeth ERBA based on events during the Neogene glaciation. That correspondence together with changes in metapopulation size and species abundances documented in the report together with previous results on C and N isotopes as well as biomarkers, argues that the mass extinction was primarily a response to Hirnantian climate change. The physical and oceanographic effects of the Hirnantian glaciation evidently altered nutrient supplies and plankton community compositions and led to ecological displacement and loss of habitat. In contrast, hypotheses that rely on the direct effects of anoxia are not well fit by the observed features of these turnover events. Thanks to support from a Canadian Natural Sciences and Engineering Council Discovery Grant to Mike MELCHIN, this is an open access publication.

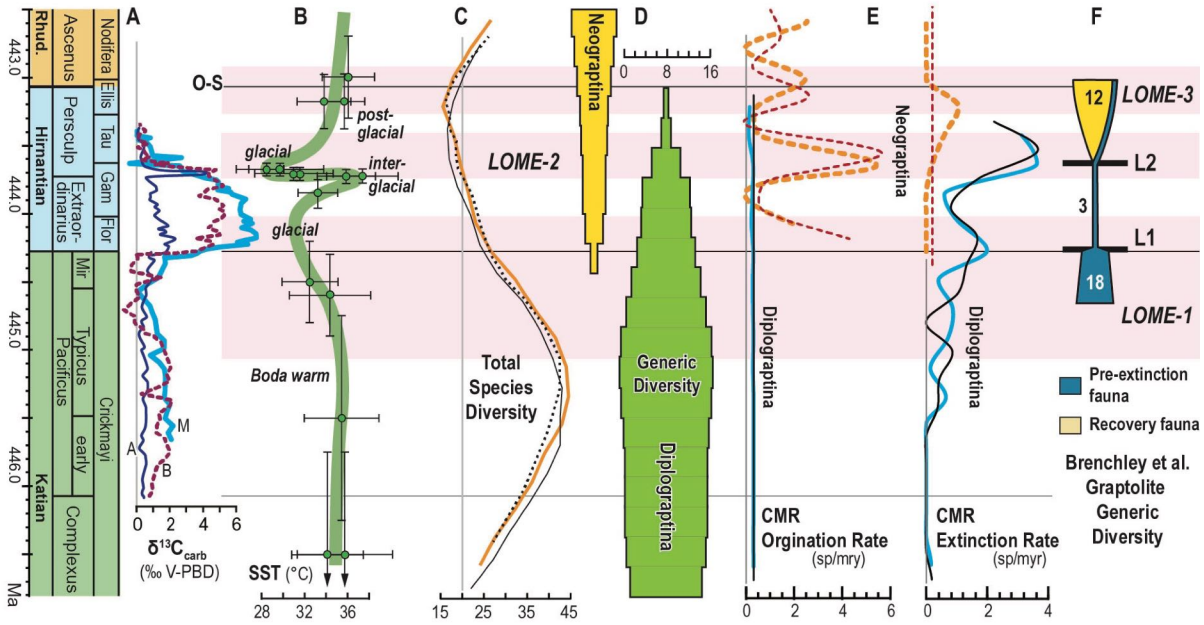

Figure [= Fig. 12 in Mitchell *et al*. (2026)]. Comparison of time series of several measures of graptolite faunal turnover, including the three phases of the LOME (shaded horizontal bands), to those of estimated sea surface temperature, $\delta^{13}C$, and to the Brenchley et al. (2001) model of graptolite generic turnover through the LOME. (A) $\delta^{13}C$ trajectories from Anticosti Island (narrow black curve "A"), Blackstone River (dashed curve "B"), and Monitor Range (thick blue grey line "M"). (B) Sea surface temperature (SST) with 2σ uncertainty in SST and estimated uncertainty in sample age. (C) Graptolite species diversity. (D) Estimated mean standing diversity of graptolite genera in the Diplograptina and Neograptina. (E) Capture-Mark-Recapture estimates of species origination and extinction intensity for the Diplograptina and Neograptina. (F) The Brenchley *et al*. (2001) interpretation of graptolite generic diversity change through the LOME.

B) *Timing and mechanisms of emplacement of the Taconic allochthons in New York and Vermont, USA.* As part of a long-term collaboration with Robert D. JACOBI (also UB), Chuck is working with Robert J. ELIAS, Stephen A. LESLIE, Margaret D. THOMPSON

and James L. CROWLEY on the dating of a deformed but largely autochthonous succession of Trenton Group carbonate rocks exposed in western Vermont beneath the overthrust Taconic allochthons. The strata contain early rugosan corals and other shelly fossils as well as conodonts and a set of volcanic ash beds that appear to belong to the Hagan complex of ash beds that are widely distributed in eastern Laurentia. The sampled ash beds contain zircons that have produced a set of high precision age dates. These data allow the team to trace the age of black shale overstep on to the Late Ordovician carbonate margin of Laurentia as well as the timing and rate of emplacement of the thrusted rocks into that subsiding basin and to compare them to related events along the length of the Appalachian orogenic belt. These insights in turn will provide new constraints on the tectonic setting and possible causes of this contractional orogenic event. This work is on-going.

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Ogechukwu Ann MOGHALU (Estonia)

Ogechukwu continues to work on her PhD project at Tallinn University of Technology under the supervision of Ursula TOOM and Olle HINTS. The project focuses on Early Palaeozoic trace fossils in the Baltic region and their links to paleoenvironmental conditions, with emphasis on the Ordovician-Silurian transition. Studies cover trace fossil taxonomy, abundance, diversity, disparity and ethology. These have been combined with microfacies, lithofacies, microfossil and micro-CT analyses to better understand the Late Ordovician environment(s). Oge has presented her preliminary results at several conferences, and the first manuscript from the project is almost complete.

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Diego MUÑOZ (Argentina)

Diego is a CONICET researcher at the Instituto de Geología de Costas y del Cuaternario "Dr. Enrique Jorge Schnack" (IGCYC - Universidad Nacional de Mar del Plata and CIC-PBA) and continues to investigate Palaeozoic deposits in Argentina and other Gondwana regions. He is mainly devoted to studying marine siliciclastic trace fossils, particularly cruzianids. He is particularly interested in the relationship between trace fossil occurrences and their probable producers and in studying the ichnological record from a palaeobiological perspective. He participates in the creation of a new Paleontological Collection at the National University of Mar del Plata (a probable acronym for ichnological material: IGCyC-Icn), which is expected to house Ordovician material. He published an article about substrate colonization in stasis moment after the Late Ordovician Extinction Event (Olivo *et al*., 2025) and an abstract about the paleogeography of the Balcarce Fm. after the LOME.

He published an abstract showing the potential use of brachiopod body size variability in order to understan slight environmental variations through time.

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Elise NARDIN (France)

Elise is currently working on echinoderm blastozoans focusing on systematics, palaeoecology, and phylogeny. She collaborates with Bertrand LEFEBVRE, Martina NOHEJLOVÁ, Chris PAUL, Christophe DUPICHAUD, Yamouna MAKLHOUF, and Samuel ZAMORA, on the systematics, morphology, and phylogeny of "cystoids" and eocrinoids. She is also interested in the paleogeographic and ecological dynamics of Cambrian-Ordovician echinoderms. Undergoing projects also focus on quantitative assessment of reef palaeoecology, and environmental evolution of the subpolar peri-Gondwanan margin.

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Martina NOHEJLOVÁ (Czech Republic)

Martina's research focuses on Ordovician echinoderms, with a particular emphasis on systematics, palaeoecology, palaeobiogeography and phylogeny. Her recent work covers eocrinoids (including the new Cambrian genus *Atlaseocrinus*), solutans (Silurian taxa from Wales) and stylophorans (respiratory structures). Over the past year, she has collaborated extensively with an international team of colleagues, including Bertrand LEFEBVRE, Elise NARDIN, Farid SALEH, Vincent DE OLIVEIRA SANTOS, Camille VIDAL-MARTY, Lucy JACKSON and Samuel ZAMORA. Martina was the co-supervisor of Christophe DUPICHAUD, who successfully defended his PhD thesis in October. She is currently a hosting editor for a special volume of *Bulletin Geosciences* dedicated to the third virtual IGCP 735 meeting in Prague. This volume is scheduled for publication as the first issue of 2026.

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Alan OWEN (Scotland, UK)

A paper with the late Keith INGHAM on the enigmatic trilobite *Bohemilla* from the Katian of Girvan, SW Scotland is in press and another, on the dionidid trilobites, is now well advanced. After a pause in activity, work is resuming on the description of the highly diverse trilobite fauna of the upper Katian Slade and Redhill Mudstone Formation of South Wales with Lucy McCOBB (National Museum of Wales, Cardiff) and Patrick McDERMOTT (Carmarthen, Wales).

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Tõnn PAISTE (Estonia)

Tõnn is involved in a new project (https://www.etis.ee/Portal/Projects/Display/1e829271-aca6-4092-900c-94227c6892b2) funded by the Estonian Research Council from 01.01.2026 to 31.12.2030, entitled: "The Silicate Weathering Rate and Its Role in Global Changes During the Ordovician-Silurian" (PRG3119). The Principal Investigator is Peeter SOMELAR. This project explores the link between global weathering patterns -reflecting changes in atmospheric composition and climate- and the major biodiversification events from the Ordovician to the Silurian.

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Ian PERCIVAL (Australia)

Ian is an Honorary Research Associate at the Geological Survey of New South Wales. He was heavily involved in editing for much of 2025, initially including the final stages of *Australasian Palaeontological Memoir* 57 (Cambro-Ordovician Studies VII) as a co-editor. He also saw two major projects come to fruition in the form of *Australasian Palaeontological Memoir* 56 (as one of several co-authors to Yong Yi ZHEN's Ordovician conodont studies in the Amadeus and Canning basins), and another publication on latest Cambrian-earliest Ordovician conodonts of far-western NSW, in *Alcheringa*. Ian also continues cooperative studies on Ordovician corals of eastern Australia with Yong Yi ZHEN and Dr Guangxu WANG (NIGPAS, Nanjing).

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Marika POLECHOVÁ (Czech Republic)

Marika continues her research on Ordovician bivalves, focusing on systematics, paleoecology, paleobiogeography, and phylogeny. Her study material primarily comes from the Czech Republic and France. She was collaborating with Jan Ove EBBESTAD and Björn KRÖGER on molluscs from the Cabrières Biota (France), and with Czech colleagues Petr BUDIL and Oldřich FATKA on Late Ordovician fossils from the Semtín breccia (Czech Republic). An article regarding a new echinoderm Lagerstätte from Czech Republic has been completed (Fatka *et al*. 2025). Additionally, she served as the main editor of a Special Issue of the *Bulletin of Geosciences* dedicated to Jiří KŘÍŽ, published at the end of 2025. A paper on bivalves from the Montagne Noire (Polechová 2025) is included in that issue.

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Leonid POPOV (United Kingdom)

Leonid has been retired for several years but still keeps an honorary position at the National Museum Wales. He continues his taxonomic study of brachiopods, focusing on the Late Ordovician brachiopods of the Ishim Region in northern Central Kazakhstan and the Early Ordovician brachiopods of the South Urals.

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Gaëtan POTIN (Switzerland)

Gaëtan is a final-year PhD student at the University of Lausanne, defending his thesis at the end of March 2026. During his master's and PhD, he worked on radiodonts, an emblematic order of Cambro-Ordovician nektonic stem lineage arthropods. A huge part of his work is to study the diversity and the ecology of radiodonts from the Early Ordovician Fezouata Shale Formation in Morocco. In 2025, he described *Falciscaris mumakiana*, a giant benthivore radiodont from the Fezouata Biota. He is also involved in the study of two newly discovered Ordovician Lagerstätten: the N'kob Biota in Morocco, and the Cabrières Biota in France.

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Brian PRATT (Canada)

Amongst a variety of mainly Cambrian projects, Brian has been continuing his study of the sedimentology and paleoecology of the Upper Ordovician Selkirk Member of the Red River Formation of southern Manitoba. This is the famous Tyndall Stone, a popular dimension stone in Canada. He and Graham YOUNG prepared a long review paper about this stone which can be downloaded free of charge. They also nominated it as an IUGS Heritage Stone. Colin Sproat is collaborating.

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Sigitas RADZEVICIUS (Lithuania)

Sigitas is working on different aspects of lithostratigraphy, graptolites, and chemostratigraphy in the Ordovician of Lithuania. However, most of his current interest is focused on the Ordovician geological sections in Lithuania.

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Enrique Alberto RANDOLFE (Argentina)

Enrique continued his postdoctoral project under the direction of Dr. Juan José RUSTÁN and Dr. Diego BALSEIRO, focused on resolving the basal relationships of Dalmanitidae with other members of the Infraorder Dalmanitiformes. One of the long-term objectives is to study the changes in the disparity of this infraorder in the Ordovician-Devonian interval using geometric morphometrics. In collaboration with researchers from the University of Campinas and the University of Brasilia, he described the first Ordovician dalmanitid from the Hirnantian of the Paraná basin, Brazil, assigned to the genus *Mucronaspis*. Currently, he is working to update Trilomorph, an openly accessible database for morpho-geometric information of trilobites, with data from Cambrian-Ordovician trilobites.

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John E. REPETSKI (USA)

As retired USGS Emeritus, John continues to work on conodonts and biostratigraphy of late Cambrian and Ordovician conodonts and biostratigraphy. Currently, with colleagues J.F. TAYLOR, J.D. LOCH, J.F. MILLER, Justin STRAUSS and others on the Cambrian / Ordovician boundary interval in the U.S. Cordillera. Also, histological and morphological studies with colleagues D. MURDOCK, P. SMITH, and others. With Randy ORNDORFF, Mercer PARKER, and Steve LESLIE, work continues on Ordovician successions in the Appalachians in support for several USGS mapping projects. Continuing work on conodonts from some impact structures. John is also working on issues relating to the Floian/Dapingian interval. Currently splitting work between home and office.

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Sara ROMERO (Spain)

Sara is currently holding a predoctoral research contract at the Complutense University of Madrid (Spain). Her PhD thesis focuses on the study of Middle and Upper Ordovician trilobites from the Iberian Range (Spain), under the supervision of Juan Carlos GUTIÉRREZ-MARCO, Sofia PEREIRA, and Fernando GARCÍA JORAL. In addition, her research includes the study of other Ordovician trilobite and brachiopod assemblages from southwestern Europe and Morocco, in collaboration with Juan Carlos GUTIÉRREZ-MARCO, Isabel RÁBANO, Sofia PEREIRA, and Jorge COLMENAR.

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Claudia RUBINSTEIN (Argentina)

Claudia is actively researching marine and terrestrial palynomorphs from the Early to Middle Paleozoic, with a primary focus on Argentina and South America. Her work encompasses biostratigraphy, biodiversity, paleobiogeography, and paleoenvironments. In collaboration with Blanca TORO (CICTERRA, Córdoba), she is investigating the Paleozoic record of the Central Andean Basin and the Precordillera of Argentina, emphasizing high-resolution biostratigraphy that integrates data from graptolites, palynomorphs, and conodonts. Additionally, she is working with colleagues from Brazil on the palynology of the Ordovician/Silurian boundary in the Paraná Basin. Furthermore, her investigations into the Cambrian/Ordovician boundary of the Llanos Basin (Colombia), in partnership with the Colombian Institute of Petroleum, have led to a recent publication focusing on the biostratigraphy and paleobiogeography of a middle and late Cambrian succession, based on acritarchs. She also continues as postdoctoral supervisor of Sonia CAMINA, who is studying

Silurian and Devonian chitinozoans, mainly from Argentina and South America, and will soon extend her research to include Ordovician chitinozoans.

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Ehimar Kristal RUEDA (Argentina)

Kristal is completing her PhD in Geological Sciences. Her research focuses on Lower Ordovician conodonts and graptolites from northwestern Argentina, with an emphasis on taxonomy and biostratigraphy. Recent contributions, conducted in collaboration with Dr. Gladys ORTEGA and Dr. Guillermo ALBANESI (Córdoba, Argentina), provide detailed descriptions of conodont and graptolite faunas from the Cordillera Oriental of Argentina, including the identification of a new conodont species, and offer new insights into the biostratigraphic framework of the region. Additionally, she is currently carrying out studies on aspects of the diversity, phylogeny, and paleoecology of these fossil groups.

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Farid SALEH (Switzerland)

Farid is still a Swiss National Science Foundation Ambizione Fellow at the University of Lausanne. His group works on decay experiments and the interactions between organic matter, bacteria, and sediments, in order to refine our understanding of preservation processes over geological time. Part of his time is devoted to the study of Ordovician biotas, namely the Fezouata and Cabrières biotas. In 2025, Farid coordinated a large volume of 15 research papers on the Cabrières Biota in *Lethaia*. Some of these papers are already out; others are in press.

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Matthew SALTZMAN (USA)

Matthew is working on Ordovician stratigraphy. His former Ohio State PhD student Chris CONWELL published a paper in *Palaeogeography, Palaeoclimatology, Palaeoecology* on Sr isotopes from Baltoscandia. Work also continues towards publishing Chris' Ca isotope data sets from Sweden and Clear Spring, MD.

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Myung-Jun SEO (South Korea)

Myung-Jun is a researcher at Korea University (Seoul, South Korea), currently seeking a PhD opportunity. He continues collaborations with Suk-Joo CHOH and Sehyun CHO on carbonate sedimentology and Ordovician litho-, bio-, and chemostratigraphy, with a focus on quantitative and statistical approaches.

This year, he and his laboratory colleagues published a study on the controls of depositional setting and prior geological history on the Great Ordovician Biodiversification Event (GOBE), supported by skeletal abundance data. This study provides comparisons with contemporaneous carbonate platforms in Laurentia, Baltoscandia, South China, Tarim, and Tibet, and highlights the diachronous nature and regional variability of the GOBE. Ongoing projects include high-resolution $\delta^{13}C$ stratigraphy and examination of hiatus-associated diagenetic overprinting on the $\delta^{13}C$ signatures from the Taebaeksan region of South Korea.

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Thomas SERVAIS (France)

Thomas is more and more involved in regional geology, going back to the roots (of his initial master and PhD studies), by working on the Ordovician of Belgium. These studies are progressing with a number of colleagues, including Bernard MOTTEQUIN (Brussels, Belgium) and Jean-Marc MARION (Namur, Belgium), and several international colleagues, specialists of various fossil groups (Yves CANDELA, Edinburgh, UK; Catherine CRONIER, Lille, France; David HARPER, Durham, UK; Lukas LAIBL, Prague, Czech Republic; LIANG Yan, Nanjing, China; Bertrand LEFEBVRE, Lyon, France; Muriel VIDAL, Brest, France; WANG Wenhui, Changsha, China). A new museum of an Ordovician slate mine will open soon in the eastern part of Belgium, where three geological wander-routes were inaugurated in 2025.

In terms of purely academic work, Thomas continues working on early Palaeozoic acritarchs, and other fossil groups. The year 2025 resulted in a number of publications, based on international collaboration and supervision of students. Two master students (Suphakan THONGSONG and Luis VALDIVIA-COVENAS) worked on acritarchs from the Middle Ordovician of Öland, Sweden, and another student (Virgile CAILLAUD) analyzed the acritarchs of the Lower Ordovician of the Cabrières Biota, southern France. The PhD student Eiver MANZANO finished his work in December 2025, based on the spatial distribution of Palaeozoic acritarchs, including investigations on the latitudinal diversity gradients. Work on the enigmatic acritarch *Corollasphaeridium* (a loricate protist?) continues with new material from China; this study is a collaboration with YAN Kui (Nanjing, China) and with Tom GREEN and Tom HARVEY (Leicester University) and other colleagues.

Projects with Chinese colleagues from Nanjing, Changsha, Wuhan and Taiyuan also continue, with studies of acritarchs from the Yangtze Platform, but also from the Cambrian-Ordovician boundary section (SABS) in Dayangsha and other areas in China, together with ZHANG Yuandong (Nanjing). Two ANR-funded research projects continue, until 2027, the first with Bertrand LEFEBVRE (PI) and coworkers on the spatialization (including the understanding of the latitudinal diversity gradient) of the early Palaeozoic radiation, the second being focused on the research of acritarchs as the ancestors of dinoflagellate cysts.

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Husain SHABBAR (India)

Husain has been continuing his work on the morpho-taxonomy and biostratigraphy of Ordovician marine macroalgae, brachiopods, tentaculitids and cornulitids from the Tethyan Himalaya. His research explores biodiversity patterns along the northern Gondwanan margin and examines possible co-evolutionary relationships between marine macroalgae and invertebrate communities during the Early Palaeozoic. He is also investigating signatures of early terrestrialisation in the Himalayan record using palynological and macrofossil evidence, with the aim of understanding subsequent evolutionary trends. His broader interests include high-resolution Palaeozoic biostratigraphy, Devonian–Permian floras of India and palaeoenvironmental reconstruction based on microfossil assemblages.

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Matthias SINNESAEL (Ireland)

Matthias started a tenure-track Assistant Professor position at Trinity College Dublin (Ireland) in March 2024. Matthias stays interested in better understanding Ordovician (and more generally speaking Palaeozoic) paleoclimate and stratigraphy - especially cyclostratigraphy and astrochronology. He is looking forward to discover Irish geology, in particular the Ordovician outcrops around Portrane, and is open for future collaborations.

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Colin D. SPROAT (Canada)

Colin continues his research into better understanding the evolution of the early atrypide brachiopods with ongoing collaboration with Gudveig BAARLI, Huang BING, and Qiao LI to try to understand the evolution and dispersal of the group over its history. His graduate student, Jessica McLEOD, is hoping to wrap up her work on the Late Ordovician dalmanellid brachiopods of the Mackenzie Mountains in northwestern Canada. His collaboration with Brian PRATT on the Upper Ordovician succession in southern Manitoba (central Canada) continues with a focus on the Tyndall Stone, part of the Red River Formation.

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Sarah STEWART (Scotland, UK)

Sarah has been busy as curator for NMS for the travelling exhibition '*Giants'* from the Royal Belgian Institute of Natural Sciences, about Cenozoic megafauna. She has a publication accepted for the commemorative volume for Euan Clarkson in *Earth and Environmental Science Transactions of The Royal Society of Edinburgh (TRE)*. Curatorial detective work in the NMS collections helped find a neotype for the Carboniferous fish *Cynopodius crenulatus.* Sarah is currently looking at various problematic fossils from the Silurian of Lesmahagow, Scotland.

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Alycia L. STIGALL (USA)

Alycia and her students continue to explore patterns of diversification, biogeography, and paleoecology of Middle through Late Ordovician marine ecosystems, with a focus on Laurentia and articulated brachiopods. New papers were published on body size changes across the GOBE interval in the Simpson Group Oklahoma with Sarah HENNESSEY, phylogenetics and systematics as well as speciation and biogeography of anazygid brachiopods of Laurentia with Mariana VILELA-ANDRADE, Colin SPROAT, and Davey WRIGHT. Her lab is continuing to work with Ian FORSYTHE and Carl BRETT on the Late Ordovician Nashville region, and the first papers from the lab are now in press. These are specifically one of PhD student, Shymah Beegam KUNDLADI, focusing on diversification patterns, which has been accepted for publication in *Lethaia* in 2026, and one from former MS student Noel HERNANDEZ GOMEZ on ecological niche modelling by which will come out in *Palaeogeography Palaeoclimatology Palaeoecology* in 2026. The newest lab member, MS student Natalie MORGAN is preparing to examine community paleoecology across the Middle Ordovician in the Great Basin for her thesis. Separate from her students, Alycia is

collaborating with Charles MARSHALL, Seth FINNEGAN, Francis MACDONALD, and Junxuan FAN on a paper about drivers of the GOBE, and she continues to work with a large group of paleontologists and biologists to explore ecosystem and earth system engineering in deep time. She was also able to join Qi-jian LI and Lin NA with a group of wonderful colleagues in NIGPAS last fall for a workshop focused on strengthening and expanding utility of the GBDB, which will have some exciting long-term implications for the Ordovician community.

In upcoming news, Alycia is very pleased to invite the entire community to join her and her colleagues, especially Colin SUMRALL, at the University of Tennessee in Knoxville, USA for the 13th North American Paleontological Convention in May 2028. They expect to have a first flyer out in Spring 2026.

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Paul STROTHER (USA)

Paul is a palynologist working on terrestrialization and role of cryptospores in the evolutionary transition between charophyte algae and the embryophytes (land plants). Recent publications have provided insight into non-marine Ordovician deposits which contain algal resting cysts (zygospores) of Zygnematacean algae, the group which is considered on the basis of molecular phylogenetics to be sister to the land plants. He is actively working on expanding the recognition of eugenid cysts in lower Paleozoic and Precambrian deposits.

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James R. THOMKA (USA)

James continues his work on Paleozoic echinoderms, trace fossils, and stratigraphy. Among Ordovician projects, progress was made on the sequence stratigraphy and sedimentology of inter-bioherm successions of the North American type Chazyan (Darriwilian–Sandbian of northeastern New York state); this included recognition of the expression of a third-order sequence boundary previously described only from biohermal strata as well as development of a high-resolution magnetic susceptibility profile for a relatively thick and conformable succession. This research also resulted in discovery of interesting ichnofabrics that are seemingly related to small-scale cyclicity that shows potential for refined regional correlation. Work was also done on the role of stalked echinoderms in the construction of bioherms from this stratigraphic interval, with a diverse fauna of attachment structures currently being analyzed and identified. These pelmatozoan attachment structures may have been important for baffling and binding sediment during the initiation of bioherm growth. Outside of the type Chazyan, work continued on the crinoid faunas—consisting of

isolated ossicles dominated by brachial material—recovered from poorly lithified mudrock units (so-called 'butter shales') of the Cincinnati Arch region of eastern midcontinental USA. Some research on Middle-Upper Ordovician sclerobiontic faunas is just beginning and shows promise for exciting results, but is presently very preliminary.

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Petra TONAROVÁ (Czech Republic)

Petra works for the Czech Geological Survey and continues to research microfossils, with a focus on scolecodonts. She cooperates with various colleagues, e.g., Olle HINTS (TalTech University, Tallinn), Juan Carlos GUTIERREZ-MARCO (CSIC-UCM), Marcelina KONDAS (University of Silesia, Poland), Yan LIANG (Nanjing), and others. Recently, she has worked on samples from various regions, such as the Prague Basin, Estonia, and Peru. The studies followed the goals raised by IGCP 735, and the results were presented at the annual IGCP meetings in Wales and Changsha. The talks summarised the research on Ordovician jawed polychaetes in general (Tonarová & Hints, 2025), Ordovician scolecodonts from the Prague Basin (Tonarová *et al*., 2025), and Ordovician-Silurian scolecodonts from the section in Estonia (Moghalu *et al*., 2025). A study on a new assemblage of Ordovician scolecodonts from Peru is in press (Carlorosi *et al*., in press). The last study brought a new view on the emergence of the jawed polychaete families and summarised studies on scolecodonts from South America.

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Ursula TOOM (Estonia)

Ursula continues her studies on bioerosion and trace fossils of Baltica. Joint studies together with colleagues from Estonia, Korea, the Czech Republic, Poland, Finland, Germany, Sweden, the U.K., and the USA on the evolution and taxonomy of the Early Palaeozoic faunas are ongoing. With Luis A. BUATOIS, Olle HINTS and Ogechukwu A. MOGHALU, she continues to work on the trace fossils of Ordovician-Silurian boundary beds. Ursula is responsible for the geological collection at Tallinn University of Technology.

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Blanca A. TORO (Argentina)

Blanca continues her studies on graptolites from the Ordovician-Silurian transition in the Central Andean Basin and the Argentine Precordillera, specifically focused on biostratigraphy and paleobiogeographic affinities. She is currently leading multidisciplinary projects granted by the ANPCyT (Argentine Agency for the Promotion of Science and Technology) and CONICET (Argentine Research Council), which include numerous Argentine colleagues from the Universities of Córdoba, San Juan and Buenos Aires. Blanca is also conducting research on innovative topics for Argentina, related to graptolite reflectance and morphological diversity, within the framework of Nexxys HERRERA SÁNCHEZ's CONICET postdoctoral scholarship and Gerardo LO VALVO's PhD thesis, from which the first results have just been published. The biostratigraphic implications of new records of early Dapingian isograptids from northwestern Argentina, presented at the Córdoba IGCP 735 Conference, were recently published in the special volume of *Lethaia*; and further information based on Floian graptolite-acritarch data was presented at the IGCP 735 Meeting in Changsha. Other cooperative projects dealing with Ordovician graptolites from Bolivia, as well as international cooperation with colleagues Jörg MALETZ and ZHANG Yuandong to continue reviewing Ordovician graptolite collections from Argentina and China, are still in progress.

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Thijs VANDENBROUCKE (Belgium)

Thijs remains interested in reconstructing various features of the Ordovician System, mainly through various ECR projects in our group at UGent. Teaching assistant Nick VAN FAALS is pursuing a PhD project on chitinozoan ecology and is mainly working on Ordovician sections, with a current focus on Anticosti Island and the Anti-Atlas. Himadri HALDAR continues his PhD project and focuses on stable carbon isotope geochemistry in the Ordovician and Silurian. Cristiana ESTEVES is finalising her research project on the integrated chitinozoan biostratigraphy of the Katian of the Midwest USA and will defend her PhD thesis soon. MSc students Kaatje PEIRS and Lena LARDINOIS have finished their theses on Katian shales and phosphorites in Illinois and Oklahoma respectively, and are moving on in their research careers. Bono DE DECKER is a new MSc student working on teratology of Katian chitinozoans from the midcontinent USA. All these efforts by ECRs represent specific aspects of interrelated projects in collaboration with Poul EMSBO (USGS), Patrick McLAUGHLIN (Illinois Geol. Survey), Appy SLUIJS (UUtrecht), Mark WILLIAMS (ULeicester), Jean-François GHIENNE (UStrasbourg/CNRS) and André DESROCHERS (UOttawa). In addition, Mathilde BON has defended her joint PhD between UGent and ULille, co-supervised by Kevin LEPOT, where she investigated the organic geochemistry of, amongst others, Ordovician palynomorphs. Tim DE BACKER has recently defended his PhD (on Silurian and Devonian sections) and will be staying in the lab as a postdoc with a particular focus on Ordovician events. The other members of the lab, including PhD

candidates Iris VANCOPPENOLLE, Joana ROSIN & Synnove SAUGEN are pursuing projects that are not specifically focussed on the Ordovician.

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Marco VECOLI (Saudi Arabia)

Marco is actively involved in many different projects in support of Exploration in Saudi Aramco, which include research on Ordovician palynology. While most of his work remains confidential, as the leader of the Saudi Aramco-CIMP Joint Studies he has been able in the last 15 years or so to promote collaboration between academia and industry, leading to publication of many research papers on Lower Paleozoic palynology of Saudi Arabia and the Middle East, and to organize many sessions to international meetings focusing on this topic. In the past couple of years, Marco has been leading a few projects focusing on the quantitative analysis of Kerogen for organic matter maturity estimates, detailed taxonomic analyses of non-marine Hirnantian palynomorphs, and high-resolution Late Ordovician palynostratigraphy and paleoenvironmental interpretation in Saudi Arabia, demonstrating the high impact of fully integrated palynological workflows on natural resources exploration projects. In April 2025, the Saudi Aramco-CIMP Joint Studies project contributed to the 57th Annual Meeting of the AASP-TMS with a total of six oral presentations, 4 of which on Ordovician palynology, see details in the list of publications.

Recently, Marco has started to experiment the digitalization of palynological slides, aiming to transition to fully digitized palynological workflows (i.e., where the use of optical microscopes, manual species counting, single-specimen photographing, etc. become redundant and things of the past) and to application of Big Data AI-based analytics to palynological data.

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Olev VINN (Estonia)

Olev's research focuses on key ecological and evolutionary dynamics of the Ordovician Period, with particular emphasis on the evolution of symbiosis, predation, bioerosion, and encrustation and their roles in shaping early marine ecosystems. A major component of his work addresses the palaeontology of so-called "problematic" Palaeozoic tubeworms, including cornulitids, tentaculitids, microconchids, *Sphenothallus*, and related groups. Through these studies, he seeks to clarify their systematic affinities, life strategies, and ecological roles, as well as to reconstruct the evolutionary history of tubeworm biomineralization and its implications for early metazoan skeletal evolution. In addition, Olev investigates Ordovician trace fossils from Estonia and North Africa, using ichnological data to better understand benthic behavior, substrate interactions, and environmental conditions in

early Paleozoic seas. Complementing his empirical research, he is also actively engaged in the philosophy of science, where he examines conceptual issues relevant to paleontology and biology. Beyond his research activities, Olev serves as Editor of the *Journal of Paleontology* and as a scientific editor of *Ameghiniana*. In these roles, he actively encourages and welcomes submissions on all aspects of Ordovician paleontology.

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Gustavo VOLDMAN (Argentina)

Gustavo continues his research on the taxonomy and biostratigraphy of Early Paleozoic conodonts and associated faunas from the Argentine Precordillera and the Central Andean Basin, in collaboration with N. Emilio VACCARI, Marcelo CARRERA, and Matías MANGO (CICTERRA), as well as Aldo BANCHIG (UNSJ, Argentina) and Oliver LEHNERT (FAU, Germany). In parallel, he participates in international research projects aimed at refining the chronology of Ordovician events and improving intercontinental correlations between North and South Gondwana. These studies are conducted in collaboration with Ali BAHRAMI (University of Isfahan, Iran), Andrés MUÑOZ NAVIA (UMSA, Bolivia), and Carolina ZABINI (UNICAMP, Brazil).

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Guangxu WANG (China)

In 2025, Guangxu completed a monograph on agetolitid tabulate corals (*Australasian Palaeontological Memoirs*) and a study on the Lhasa terrane (*Gondwana Research*). Following these, a monograph on stauriid rugose corals (*Fossils & Strata*) has just been released this February. His current project focuses on a systematic revision of Late Ordovician heliolitine tabulate corals from eastern Australia, in collaboration with Ian PERCIVAL and Yong-Yi ZHEN at the Geological Survey of NSW.

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Wenhui WANG (China).

In 2025, Wenhui continued her works on the integrated biostratigraphy of Ordovician and early Silurian strata. Among regular scientific works, the most important thing was the organization of the IGCP 735 annual meeting, from 17th to 21st October 2025, at Central South University in Changsha, China. Wenhui was the Chairman of the organization committee. Approximately 70 participants attended, including project members and relevant experts and students from research institutions in Argentina, Belgium, the Czech Republic, Estonia, France, Malaysia, Nigeria, Pakistan, Russia, South Korea, Sweden, Thailand, the United Kingdom, Vietnam, and domestic institutions. The programme featured 35 oral presentations, 21 poster displays, and one workshop. The conference also included a one-day field trip during the meeting and a five-day post-conference field excursion. Three students received the Best Oral Presentation award, and one student received the Best Poster Presentation award.

Wenhui's PhD students, Shijia GAO and Minghao DU, have made remarkable progress in their respective projects on graptolite hydrodynamics and Geodata analysis, showcasing the strength of interdisciplinary methods in palaeontology. They employed CFD simulations to explore the hydrodynamic drivers behind the morphological evolution of Palaeozoic graptolites. In 2025, they not only simulated the locomotory pattern of *Dicellograptus* but also began to use CFD to trace the changes of life strategy from Ordovician dendroids to graptoloids. They aim to quantify the "hydrodynamic fitness" of these organisms and its potential role as a macroevolutionary filter during the Great Ordovician Biodiversification Event (GOBE). Together, they published three peer-reviewed papers.

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Xin WEI (China)

Xin is interested in the macroevolution, taxonomy, palaeoecology and biogeography of Ordovician trilobites, especially two major bioevents, *i.e.* the Great Ordovician Biodiversification Event (GOBE) and the Late Ordovician Mass Extinction (LOME). Xin is currently working on recovery patterns of trilobites after the LOME, together with Profs. Renbin ZHAN, Jiayu RONG and Bing HUANG (NIGPAS). Recently, with collaborators, they collected well-silicified specimens of trilobites from the Koumenzi Fm. (Katian, Upper Ordovician) in Qilian, northeastern Qinghai Province of China (North Qilian Mts), which will be investigated in the near future.

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Charles WELLMAN (UK)

Charles continues his research on the earliest terrestrial vegetation (the earliest land plant flora and the microbiota that existed on the continents before the appearance of land plants). He is currently involved in collaborative work on Ordovician palynomorph assemblages from Oman, Saudi Arabia and South Africa (concentrating on glacial deposits associated with the End Ordovician Gondwanan ice sheet). In January 2025 Charles undertook further fieldwork on the Cape Supergroup of South Africa (in collaboration with Cameron PENN-CLARKE and Claire BROWNING). Dr Kai WANG has joined Charles on a two-year postdoc funded by the China Scholarship Council. His research in Sheffield will include studies of Ordovician cryptospores from China.

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Kui YAN (China)

Kui is still working on the Palaeozoic phytoplankton in China. He focused on acritarch assemblages during the Cambrian-Ordovician and Palaeogeography in the Late Ordovician in 2025.

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Seth A. YOUNG (USA)

Seth is continuing to investigate and reconstruct marine redox conditions on both local and global scales from late Cambrian, Ordovician, and Silurian stratigraphic successions from the Great Basin (Idaho, USA), Appalachian Basin (Virginia/West Virgina, USA), USA Midcontinent (Tennessee), Sweden, Estonia, and Latvia. These various projects in the early-mid Paleozoic are ongoing collaborations with Jeremy OWENS (FSU), Benjamin GILL (VTU), Per AHLBERG (LU), Mats ERIKSSON (LU), Daniel GOLDMAN (UD), Olle HINTS (TUT), Dimitri KALJO (TUT), Emma HAMMERLUND (LU), Stephen LESLIE (JMU), Paula NOBLE (UNR), Sarah PRUSS (SC), and Lidya TARHAN (YU).

Last year, Seth published with his PhD student, Mahdi MAALEKI-MOGHADAM, a middle Silurian multi-basin paleoredox investigation in *Global and Planetary Change* from successions in Arctic Canada and Latvia, respectively. Additionally, he had several students and a postdoc working in his research group present oral and poster presentations at Geological Society of America regional and national conferences. These conference presentations were on Ordovician chemostratigraphic projects from norther Sweden, eastern & southern Baltic areas, as well as shale successions from Idaho, USA. These active projects are reconstructing both local and global marine redox conditions spanning the GOBE interval

using novel proxies (e.g., I/Ca, Tl isotopes, Fe speciation, trace metals) in both Appalachian and Baltic basins. At the moment, Seth has two manuscripts in prep: one documenting regional to global marine redox changes within deep water shale facies of the Baltic paleobasin (Sweden, Latvia) spanning the late Cambrian through latest Ordovician, and the other documenting local to regional marine redox conditions within Middle Ordovician carbonate shelf deposits of northcentral Sweden.

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Renbin ZHAN (China)

In 2025, Renbin spent most of his research time on the preparation of a monograph "*Ordovician Brachiopods of China*" under the support of a project from the Ministry of Science and Technology of China. Besides, together with his colleagues and graduate students, he continued the investigation on the GOBE and LOME in China. Some case studies have been conducted, such as the Late Ordovician shelly fauna from the Qilian Mountains, Northwest China, including trilobites, bivalves, corals, gastropods, stromatoporoids, etc. During late September and late October, Prof. David HARPER was working together with him in China, mostly in Nanjing on the revision of some Late Ordovician atrypids without jugum. They also took part in the annual meeting of the IGCP735 held in Changsha, capital city of Hunan Province, central China. For more than 15 years, Renbin is looking for Ordovician fossil Lagerstätten almost everywhere in China. In 2025, together with his colleagues, he went out to the field to continue expeditions, particularly in the Lower Ordovician of South China and North China, with some new discoveries, but without substantive breakthrough. In fact, about 40 per cent of his working time was being spent on the Elsevier journal *Palaeoworld* because, as its Editor-in-Chief, he processed more than 100 manuscripts during the year, while it had received more than 230 new submissions in 2025.

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Lei ZHANG (China)

Lei's research focuses on key questions from the late Cambrian (e.g., the SPICE event) to the Ordovician. He specializes in inorganic geochemistry—including C, S, N, and O isotopes, trace metals, and related methods—as well as conodont microstructure and compositional analysis. His advisor, Pr. Laishi ZHAO of China University of Geosciences (Wuhan), is an established scholar in conodont evolution and biostratigraphy, and a leading figure in conodont geochemistry in China. Pr. ZHAO has significantly advanced the use of conodonts in addressing broader scientific questions. A notable example of this interdisciplinary

approach is a study Lei undertook in 2025 with collaborator He ZHAO (China University of Geosciences, Wuhan), published in *Nature Communications*. Using well-preserved strata from South China, they applied conodont oxygen isotopes, Hg isotopes, and Hg geochemistry to reconstruct paleotemperature variations and volcanic activity throughout the Ordovician. Their work proposed a refined "three-phase" icehouse climate model and established a clear link between large igneous province volcanism—rather than continental arc volcanism—and long-term Ordovician cooling. Building on this, Lei and colleagues continue to refine conodont-based paleoenvironmental proxies through in situ microanalysis of Ordovician conodont specimens. They have developed an optimized method for extracting original seawater signals from conodont isotopes (O and Sr) and elements (trace and rare earth elements), with findings published in *Earth Science* and forthcoming in *Geochimica et Cosmochimica Acta*.

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Yuandong ZHANG (China)

Yuandong is continuously working on:

A) *Rising of the Palaeozoic Evolutionary Fauna: a case study in South China*. This work is financially supported by an initiative fund from CAS and a major project granted by the National Natural Science Foundation of China (NSFC, *Origination of Palaeozoic Evolutionary Fauna*, 2021-2025), and is related to the IGCP Project 653 "The Onset of the GOBE", and now the undergoing IGCP735 "Rocks and Rise of Ordovician Life". This project brings together some active palaeontologists on specific Ordovician and Cambrian fossil groups, along with some sedimentologists and geochemists, including Thomas SERVAIS, Axel MUNNECKE, Timothy W. LYONS, Yongyi ZHEN and others, to focus on the early occurrence records of graptolites, conodonts, chitinozoans, cephalopods, radiolarians, and the potentially coincident changes of geochemical proxies for redox and oxygenations in South China.

B) *Faunal Turnovers and the Mass Accumulation of Organic Matter in Black Shale of the Ordovician-Silurian Transition.* This study includes two aspects. The first, sponsored by the President's International Fellowship Initiatives (PIFI) program, is on the systematic studies of the Hirnantian Lagerstätte Anji Biota in SE China, in cooperation with Joe BOTTING and Lucy MUIR. The second, sponsored by National Key Research and Development Program of China (2023-2028), in cooperation with Olle HINTS, Blanca TORO, Thomas SERVAIS and a few geochemists from CAS institutions, is designed to address how the biotic replacements during the Ordovician-Silurian transition affected the mass accumulation of black shale, and the other way round.

C) *Early Paleozoic paleobiogeography of the Korean Peninsula and China*. This work has been focused on the bilateral international cooperation between South Korea (led by Dong-Chan LEE) and China (led by Yuandong ZHANG), aiming to explore the geographic relationship of Korean Peninsula with North China and South China during the Early

Palaeozoic from a biogeographic perspective, and was granted by the NSF of China and the NRF of South Korea (2023–2025).

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Yong Yi ZHEN (Australia)

Yong Yi undertook several significant projects in 2025 focused on documenting the geology and biostratigraphy of New South Wales and other regions of Australia. His major Ordovician research activities for the year included a series of papers detailing Early Ordovician conodont faunas from the Canning Basin in Western Australia. In addition, his long-term monographic study of the conodont assemblages from the Horn Valley Siltstone in the Amadeus Basin, central Australia, was finally published this year. He is currently working part-time as he is transitioning toward retirement.

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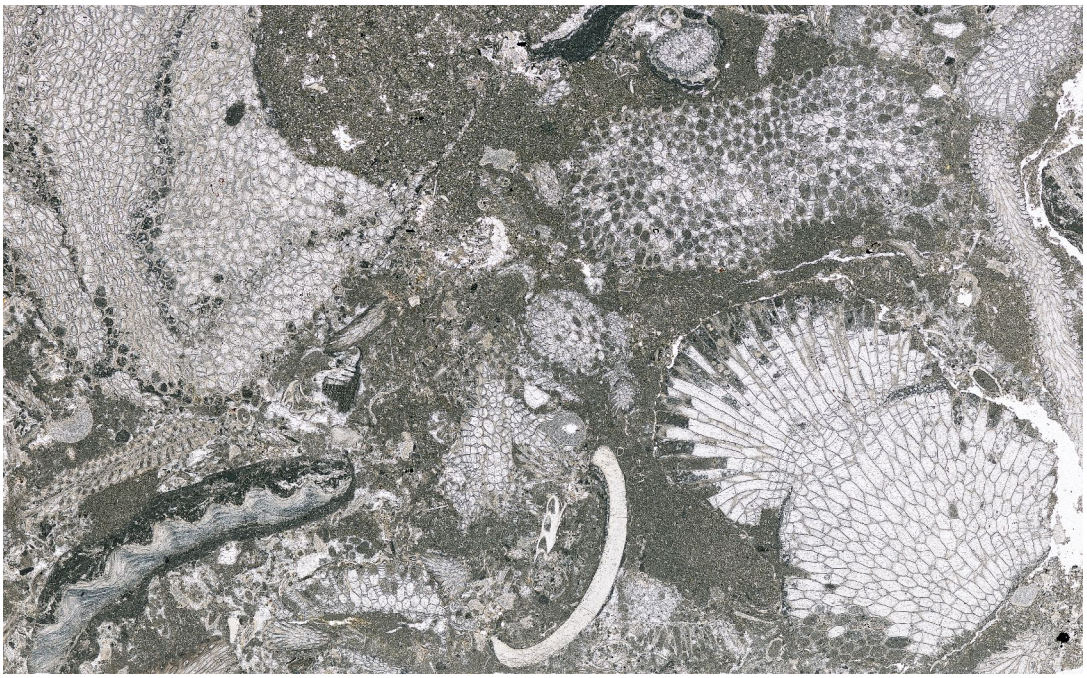

Thin section from the Vasalemma Quarry (Katian), Estonia, containing bryozoans and other fossils (©Andrej Ernst).

RECENT ORDOVICIAN RESEARCH PUBLICATIONS

A

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C

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