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TRIBUTE TO EPHRAIM GERRY AND THE OSTRACODOLOGIST NEWSLETTER
AND THOUGHTS ON THE CYPRIS NEWSLETTER
By Dan L. Danielopol


We ostracodologists are lucky to have had for 40 years a good newsletter named Cypris. It was started in 1983 by Karel Wouters with the cooperative help of two colleagues, Elly Brouwers and Donald Van Nieuwenhuise. Fortunately, the enthusiastic activity of Elly has continued until nowadays and the last issue, named “Pandemic Issue,” reached us in 2022, summing up information for the period 2020-2021. As with previous issues of Cypris we enjoyed its rich content presented on more than two hundred pages with much useful information and nice photos. This year Elly achieved another performance, she re-formatted an older newsletter named The Ostracodologist, which for 20 years (1963 – 1982) was of similar importance for our research activities. The editor of this first ostracodological newsletter was our colleague Ephraim Gerry (Fig. 1) who unfortunately left us too early (see obituary notices of Dick van Harten, Amnon Rosenfeld, and Avi Honigstein, in Cypris Nº 14). Because young colleagues seem unaware of The Ostracodologist, Renate Matzke-Karasz had the idea to reprint as digital version the whole series of issues. The originals were scanned by Alan Lord at Senckenberg Research Institute, further digitized by Renate Matzke-Karasz, and formatted, cleaned up digitally and additionally digitized by Elly Brouwers. The Ostracodologist issues now have a new attractive cover. This latter is an image of the Silurian ostracod Colombosathon ecplecticos Siveter and others, 2003 with preserved soft parts which conveys one of the main activities of the international ostracod research group, that of improving our knowledge of extent ostracods with positive implications for the understanding of fossil taxa. Once the Ostracodologist series is placed on an internet server, please look at them. There are twenty-eight issues of which twenty seven were digitized.
I decided to offer here thoughts about the creative activity of Ephraim Gerry and the importance of his newsletter, which can still nowadays reverberate with useful ideas and impressions. Hence my idiosyncratic notes should stimulate our ostracod researchers to have a look at the issues.

The first impression which struck me is the way Ephraim Gerry conceived the newsletter. This was for 20 years the work of a “one-man editor” who collected information from many sources, mainly through the spontaneous intervention of various colleagues. The technique of newsletter production during the early 1960s was not so elaborate as that used nowadays, for example, for *Cypris*. However, through a superb intuition Gerry used for his newsletter what today we call a Triple Helix of leading interests, this means (1) to offer information on current research activities, (2) to communicate the possibility of exchange of ideas between ostracod community members, and (3) to improve the social aspects of the international community of ostracodologists. Gerry invited people to write about their ostracod research interests, he offered early information on future ostracodological meetings and, *post hoc*, about their results. These ideas as we perceive them today, were continued by the editors of *Cypris*, however with various improvements. This aspect of progressive improvement will be discussed later on using the metaphorical concept of “Otto Neurath’s boat.”

I will start with a primordial question, namely what were the circumstances which led to the first issue of *The Ostracodologist*. In the first issue Gerry stressed that this was an idea which grew during a discussion session on “Problems in systematics” as part of the first Ostracod symposium, having the title *Ostracods as ecological and paleoecological indicators*, held at the Stazione Zoologica di Napoli (10-19.07.1963). Participants in this convention were interested in continuing discussion on the “Species Definition” as well as on the improvement of a coherent system on the “Taxonomy of Ostracoda.” In the discussions, Ephraim Gerry proposed to start a newsletter which could improve access to scientific information normally difficult to obtain. The idea was accepted at the end of the meeting with skepticism whether such a project could be achieved by a single person. However, Ephraim Gerry some months later (September 1963) produced the first issue of a newsletter he named *The Ostracodologist*. This information bulletin was initially intended to be published quarterly, but during the next years it occurred only twice a year and at the end only yearly (the last number, the 28th was released in July 1982).

Considering the scientific content of *The Ostracodologist* one has to note that Gerry made the effort to obtain for the newsletter high quality information. In an evaluation of the success of his newsletter, Gerry (*Lethaia*, 1976, 9: 272) explained that beside publishing bibliographic information on new publications and those difficult to access, he tried to offer also general information on topics of wider interest. This liberal editorial policy for the various issues of *The Ostracodologist* with the moral duty that the newsletter should have the standards of a scientific publication needs to be emphasized. Below are several examples:

- In issue 13 (November 1968) Gerry published the abstract of a communication on ontogeny and phylogeny proposed by Ken McKenzie. The contribution of McKenzie could not be delivered during the Geological Congress in Prague, at an ostracod symposium organized by Vladimir Pokorny. As one should remember, during 21-22 August 1968 the Russian army combined with military support of countries belonging to the so-called “Warsaw pact” occupied Prague and *ipso facto* also the University buildings where the Geological Congress was running. The diagram of the phylogenetic relationships between the main
Recent and fossil ostracod groups proposed by McKenzie merits comparison with our present-day knowledge.

- Also, in *The Ostracodologist* Nº 13 one finds a general discussion during an ostracod meeting held at the University of Hamburg under the leadership of Harbans Puri about how to decide on the validity of ostracod taxa which are poorly documented. One can read on page 4 the following: “There was agreement on the following points of taxonomic procedures…rather than erasing or incorrectly expanding the concept of a described species, a new species should be described”. This is in my opinion, having experience with such situations, a debatable decision. It is a pragmatic solution I used too. The alternative solutions would be either to redescribe and improve their diagnosis, or to leave them with the status of *Nomen Dubium*.

*The Ostracodologist* Nº 15 offers the presentation of the *Stereo-Atlas of Ostracod Shells* launched by Peter C. Sylvester-Bradley. The presentation had as its stimulating title: “Breaking new Ground in Communications.” The argument of Sylvester-Bradley was that stereoscopic illustration of ostracod shells would represent a revolution in micropalaeontology for the way we perceive and communicate our empirical data. The *Stereo-Atlas* was a success and even now after the disappearance of this useful compendium many of us realize that a reactivation of its publication could be enormously helpful especially for ostracods with complicated carapace morphologies; think of ostracods with amphidont hinges or with surface ornamentation of tubercles occurring in various cytheroid groups.

An interesting discussion for which the ostracodologist community never accepted a unique solution is about the informal term for Ostracoda, namely *ostracod*, as used in the UK English system, or *ostracode* as preferred by American specialists. Anders Martinsson published an interesting rebuttal in his “informal note… slightly provocative” in issue 16 of Gerry’s newsletter (1970, p. 8-9), having the title “Pods, cods, and other odds in ostracodology - a symposium postscript”. Martinsson reacted to a graffiti which appeared on the blackboard during one of the sessions of the Pau ostracod meeting (1970) with the following content: “English – ostracod, the rest ostracode”. Martinsson countered with a long demonstration that “this is not a very correct statement and there is a growing footnotes-size literature telling ostracodologists that *ostracod* in English is utterly wrong.” The arguments were never seriously discussed or accepted with one exception, a contribution of Richard H. Benson in *Journal of Paleontology* (1981, vol. 55, pp. 1200-2006) with the title “Odds on Ode in Ostracode, or the Omicron and Omega of Chaney Spelling”. Even if I continue to keep the traditional spelling of *ostracod* in my ostracod publications, I found Martinsson’s and Benson’s rebuttals very refreshing.

One component of the newsletter content was the reports of the colleagues who agreed to produce taxonomic revisions of various ostracod groups. Unfortunately, the goal of such projects was too vast and none of them really succeeded. The lesson one can extract from such enthusiastic intentions is twofold: first, one should restrict revisions to smaller ostracod groups, second, for a successful taxonomic revision it is necessary to have a working group of ostracodologists who can solve taxonomic problems through consensual discussion. As an example, the revision of the subfamily Candoninae proposed to the Hamburg Meeting by the Committee of Recent Ostracoda to be completed by Trajan Petkovski (cf. *The Ostracodologist* Nº 13, 1968) never succeeded.
Nowadays one should start with a new conception of how to define pragmatically new Candoninae species and how to revise ancient taxonomic systems dealing with this group.

An important part of any newsletter is the presentation of the list of publications appearing during the period covered by the issue. During the 1960s Gerry could compile lists with 70 to 140 references. This is certainly rather meagre as compared with the number of references recorded in the last issues of *Cypris* where the number of publications varies between about 200 and 300 items (cf. Table below).

<table>
<thead>
<tr>
<th>Newsletter</th>
<th>Issue</th>
<th>Publications</th>
<th>Percentages of Publications with 1-3 and more Contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The Ostracodologist</em></td>
<td>Year</td>
<td>Total N</td>
<td>1</td>
</tr>
<tr>
<td>1964</td>
<td>140</td>
<td>87.85</td>
<td>9.3</td>
</tr>
<tr>
<td>1965</td>
<td>99</td>
<td>89</td>
<td>10</td>
</tr>
<tr>
<td>1966</td>
<td>88</td>
<td>86</td>
<td>14</td>
</tr>
<tr>
<td>1967</td>
<td>71</td>
<td>81.7</td>
<td>15.5</td>
</tr>
<tr>
<td>1976</td>
<td>45</td>
<td>62.5</td>
<td>23.6</td>
</tr>
<tr>
<td>1977</td>
<td>52</td>
<td>61.2</td>
<td>11.8</td>
</tr>
<tr>
<td>1978</td>
<td>24</td>
<td>62.5</td>
<td>29.2</td>
</tr>
<tr>
<td><em>Cypris</em></td>
<td>Year</td>
<td>Total N</td>
<td>1</td>
</tr>
<tr>
<td>2019</td>
<td>334</td>
<td>11.4</td>
<td>9.9</td>
</tr>
<tr>
<td>2020</td>
<td>221</td>
<td>17.6</td>
<td>15.4</td>
</tr>
<tr>
<td>2021</td>
<td>291</td>
<td>11.3</td>
<td>12.0</td>
</tr>
</tbody>
</table>

The data presented in the table point to another interesting feature, namely the number of publications listed in *The Ostracodologist* were largely contributed by one specialist. The *Cypris* newsletter clearly reflects a switch from the single author style of publishing ostracod data to a “collective” one. The latter term is used with the connotation of pluralist proposed by J.J. Prinz (2012) in “Beyond human nature; how culture and experience shape our lives” and not with the unfortunate meaning used by the communist ideology.

After the issue of *The Ostracodologist* nº 22-23, Gerry in the journal *Lethaia* (1976) published an evaluation of the success of his newsletter. He noted that the number of those interested in contributing and/or wishing to be informed about the newsletter steadily increased. In 1964 he distributed the newsletter containing a few pages to eighty-four correspondents while 12 years later 584 copies were sent all over the world. The two important difficulties with a newsletter were masterfully solved, namely the preparation and the timely distribution of the publication, even if he acted during many years as “one-man editor.” Of important help to the success of this project
was the Israel Institute of Petroleum and Energy which covered the costs of printing and posting the newsletter.

Over time, the number of those who contributed with information to *The Ostracodologist* diminished and Gerry had difficulty to keep regular bi-annual issues, so for the period 1979 – 1980, only annual numbers were published, and as one can notice in the above table the number of publications catalogued decreased drastically. Finally, the last number of the newsletter was delivered with the help of our colleague Greg Sohn, who distributed the publication during the 8th ISO held in July 1982 at Houston, Texas (P. De Deckker, pers. comm. to DLD, 01.06.2023). After this event, the publication of *The Ostracodologist* stopped.

It was during the Houston meeting that an alternative solution to the Gerry newsletter was proposed by Patrick De Deckker - he asked Karel Wouters to start a new newsletter. Karel gave me the following details (pers. comm. to DLD, 22.09.2022) of this important switch in the history of our ostracod newsletter: “In 1982 Patrick De Deckker telephoned me from Houston (during the ISO organized by Rosalie Maddocks in July). He asked me to start a new newsletter, and I agreed. I began to write letters to find national correspondents. This went quite well, and I received many encouraging reactions. It also appeared then that for printing and mailing of the newsletter I could count on help from Elly Brouwers and Donald Van Nieuwenhuise, the two co-editors. After having received the reports of the national correspondents the assembling of the newsletter, which I called “*Cypris*,” started. I sent a typewritten version to Elly Brouwers who together with Donald Van Nieuwenhuise took care of the printing and mailing of the newsletter. The first *Cypris* appeared in 1983 (64 p), the second in 1984 (79 p) and the third in 1985 (74 p.).”

Beginning in 1986, Mervin Kontrovitz and his wife Eileen took over compiling and editing the *Cypris*, which they continued until 1991. At this point, Elly Brouwers and Don Van Nieuwenhuise co-edited the newsletter until 1997. At that point, Elly Brouwers took over the compiling and editing from 1998 to 2011.

*Cypris* kept the major sections of *The Ostracodologist* but improved the presentation in the following way: regional correspondents were co-opted, only one issue per year was produced, photographic imaging was inserted, a section of News dealing with country reports was added. These latter included more details than those in *The Ostracodologist*. Therefore, one could consider that even if the name of the newsletter changed the formal conception and the general aim remained intact. One could say that if we bear in mind the whole package of information in the two newsletters, in reality there was only one successful newsletter with a long-term history where changes were introduced smoothly without brutal reorganization. Such a type of evolution in the sociological literature is metaphorically named “Otto Neurath’s boat” (cf. Carlo Rovelli, 2020, “There are places in the world where rules are less important than kindness”, Penguin Books, UK, p. 4).

Therefore, it is time to present our congratulations for the whole chain of main editors, starting with Ephraim, continuing with Karel, and ending with Elly. To have continuity over 60 years of this effective way of information and communication within our ostracod community is a really fine performance! I hope it will continue in this way during the next period of ostracodology research!
Acknowledgments – I am much indebted to Elly Brouwers, Patrick De Deckker, Avi Honigstein, Alan Lord, Renate Matzke-Karasz, and Karel Wouters. Each of them helped with information, photographic material and stimulating discussion.

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RESEARCH ACTIVITIES

ARGENTINA
Lorena Ramos

Ana Paula Carignano
• I continue work on the Mesozoic ostracods of Argentina, particularly their systematics, paleobiogeography, and paleobiology. I am working on two projects, about the marine and nonmarine ostracods of the Campanian–Danian of the Chubut Province and on the biostratigraphy and palaeoenvironment evolution of the northern Argentinean offshore basins during the Late Cretaceous–Holocene.
• As part of the Ph.D. of F. Harguindeguy, I am participating in the study of Lower Jurassic ostracods of the Mendoza Province, Argentina.
• I participated in the last Reuniones de la Asociación Paleontológica Argentina, where I presented a Miocene microfossil association from Argentina.
• I have presented a preliminary study on the nonmarine ostracods of the Lower Cretaceous of Argentina during the last Congreso Geológico Argentino.

Corina Coviaga
I am an Assistant Researcher at the National Council of Scientific and Technical Research of Argentina (CONICET). During 2022, I continued my research on Recent and Quaternary nonmarine ostracods from Patagonia, Argentina, particularly on taxonomy, distribution, and ecology. These results are used for paleoclimatic reconstructions, allowing to clarify the climate changes occurred in this region during Late Holocene.

Meeting

Gabriela Cusminsky
During 2022 I continue my research, especially in nonmarine ostracods of late Pleistocene–Recent sequences from Argentina (Buenos Aires province and Patagonia). With other researchers such as Ana Carignano, Laura Ferrero, Patricia Pérez, Corina Coviaga, and Florencia Pissano, we continue a micropaleontological group focused on the study of Cretaceous–Recent marine and nonmarine ostracods from different Argentinean sites.

Meeting
Sabina D’Ambrosio
I am a researcher at CONICET and working in palaeolimnological reconstructions. My research focuses on the ecology, taxonomy, and distribution of living and Quaternary nonmarine ostracods. I work on ostracods from different water bodies of arid and semiarid environments (Arid Diagonal). Recently, I have analysed the hydrochemical characteristics of each basin in the area and have used this limnological information to characterize the ostracod assemblages present and use them as modern analogues for understanding Late Quaternary palaeoclimatic changes.

Francisco M. Harguindeguy
I am a PhD student at the Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata. I am working on Lower Jurassic ostracods from Mendoza Province (Neuquén Basin), under the supervision of Drs. Miguel Manceñido, Javier Echevarría and Ana Paula Carignano. My thesis focuses on the systematics and palaeoecology of this ostracofauna, analysing its spatial and temporal distribution, and responses to the Toarcian Oceanic Anoxic Event.

I have participated in the last Reuniones de la Asociación Paleontológica Argentina, where I presented a preliminary study on Jurassic microfossils from Argentina.

Romina Kihn
I continue working on Recent and Quaternary ostracods from the lower basin of the Atuel River. I have analysed the current and fossil lacustrine ostracods from La Pampa Province, as paleoenvironmental indicators during the Holocene. I perform qualitative and quantitative studies based on samples and species recovered. Current ostracod associations with physical-chemical variables are being obtained from the various bodies of water.

Patricia A. Pérez
My scientific activities developed during the last few years focused on the study of the ecology of lacustrine ostracodes (Crustacea) and their use as bioproxies in paleoclimatic reconstructions. The study includes a program of samplings of biodiversity and autoecology of ostracods in lakes, lagoons, wetlands, slopes distributed in a transect from west to east in North Patagonia. The main results achieved include taxonomic contributions, being possible to rectify or ratify the taxonomic and biogeographical position of the different species, comparing them with those from the fossil record of the region. We made determinations of different specific associations of ostracods and their respective ecological requirements by means of multivariate cluster analysis and gradient analysis and some species have been proposed as the most suitable to be used as bioproxies in the Patagonian lake sedimentary sequences.
Maria Florencia Pisano
My most recent paper is “Quaternary environmental evolution of the Argentinean Pampa Deprimida based on mollusc and ostracod analysis.” This work was undertaken with the partnership of Gabriela Cusminsky and Enrique Fucks and has been recently published in *Lethaia*.

Lorena Y. Ramos
I am an Assistant Researcher at the National Council of Scientific and Technical Research of Argentina (CONICET). My work focuses on the study of morphometric variations in ostracod (and chironomids) assemblages from Patagonia, Argentina with paleoenvironmental, ecological and taxonomic implications. The main objective is to detect the key factors that influence their occurrence, abundance, and morphological variations in underexplored areas of Patagonia.

Lara Sabater
- I am a PhD student at the Center for Applied Ecology (CONICET-UNNE) in Corrientes Province, Argentina. My research focuses on recent nonmarine ostracods in the Northeastern region of Argentina, under the supervision of Dr. Alejandra Patricia Perez. My thesis assesses the biodiversity of ostracods in various wetland ecosystems impacted by different human activities. These wetlands range from protected areas within a National Park to urban wetlands affected by urban discharges.
- I have conducted sampling in rice paddies to analyse the composition of ostracods in these artificial wetlands.
- In 2022, I compiled a checklist of recent nonmarine ostracods from Argentina.

María José Salas
I am working with Paleozoic ostracods.

Maria Belen Zamudio
During my postdoc fellowship I have been working with freshwater ostracods, applied to paleoecology and taxonomy, from late Miocene, in the Calchaquí Valley from Salta, Argentina. Supervised by Dr. Claudia Galli (CEGA-CONICET INSUGE0, Universidad Nacional de Salta).

Meeting
AUSTRALIA

Mark Warne

Patrick De Deckker
I have no ostracod activity to report for 2022/2023. All is well. Just turned seventy-five. A milestone but all is well. Not in a wheelchair yet!

Mark Warne

• My ostracod research currently focusses on marine ostracod dispersal and biogeography/palaeobiogeography during the Cenozoic.
• I am continuing work on the systematics of southeast Australian Palaeozoic Ostracoda with Tamara Camilleri, West Australian Mesozoic Ostracoda with Michelle Guzel and the Cenozoic Ostracoda of southeastern Australia with Abbey MacDonald (postgraduate student; Deakin University).
• Joshua Chapman (Honours student; Deakin University) recently completed a thesis on the late Miocene marine Ostracoda of the onshore Otway Basin, southeastern Australia.
• I am revising some of systematics of modern southeast Australian coastal marine Ostracoda, work that includes some DNA studies.

AUSTRIA

Dan L. Danielopol

Streaming presentations to scientific meetings

The ISO-19 – University of Lyon, Claude Bernard, Lyon. July 2022: Streaming-talks:

• Dan L. Danielopol, Tadeusz Namiotko, David J. Horne, and Koen Martens: The cytheroidean spinneret seta, an evolutionary novelty in ostracod phylogeny.
• Dan L. Danielopol, Werner Piller, Cristina Cabral Martin Gross, Alan Lord, Tadeusz Namiotko, and Werner Piller. Sieve type pore canals (StPC), a valid topic within “The future of Ostracodology Agenda.”


Dan L. Danielopol, Werner E. Piller, and Martin Gross. *Cytheridella* species group (Ostracoda, Timiriaseviinae); first steps towards a thorough taxonomic revision.

The new https address for downloading files from the Institute of Earth Sciences, Graz. The university had a hacker attack, and they changed the way to get access to their informatics system. Namiotko tried to download our *Morphomatica*, a program for Geometric Morphometrics and it was impossible me as well. This morning I arrived to find how to do it, and I could prepare the path of access. Similar issues with a videoclip which is a companion file to one of our publication.

The package of information dealing with “Methods in Ostracodology,” including the computer-programme “Morphomatica” and the additional tutorial information as well as the summaries of two workshops in Ostracodology, Graz, 2008 and 20011 are available under https://iewarchiv.unigraz.at/ (go to Palstrat, choose Methods in Ostracodology).


**Wolfgang Mette**
- I am currently working on some papers on Middle and early Late Triassic deep marine ostracods.
- Another continuing research subject is the ostracod record in the Rhaetian and across the Triassic/Jurassic boundary linked with geochemical research.
- At present I am preparing a project on the Carnian Pluvial Event including ostracod analysis, palynology and geochemistry.

**BELGIUM**

**Claude Meisch**

Cypris 2020-2021 Research group of **Koen Martens and Isa Schön**

*Scientific collaborators*
- Jeroen Venderickx: general technical support RBNS “Freshwater Biology.”

*PhD and post graduate students on ostracod-related topics:*
- Sourou Joseph Hotekpo: “Nonmarine Ostracoda (Crustacea) from Bénin.” Taxonomic training with GTI grant (http://www.taxonomy.be/). PhD
- Lore Van Craenenbroeck: “Diversity and evolutionary history of lacustrine invertebrates in Antarctic lakes.” PhD
Other collaborators:
- Dr Merlijn Jocque (external collaborator): “Ostracoda in phytothelmata.”

International visitors in 2022
- Dr Janet Higuti (Univ. of Maringa, Brazil): nonmarine Ostracoda from Brazil and New Caledonia.
- Vitor Ferreira (Univ. of Maringa, Brazil): revision of the genus Cypretta (Ostracoda).
- Jonathan da Rosa (Univ. of Maringa, Brazil): diapause in freshwater Ostracoda.
- Beatriz Bosqué Contieri (Univ. of Maringa, Brazil): macro-invertebrates of Parana and New Caledonia.
- Sourou Joseph Hotelpo (Université d’Abomey-Calavi, Bénin, Africa): subterranean canodonts from wells in Benin.
- Prof Tadeusz Namiotko and Dr Adriana Kilikowska (Univ. Gdansk, Poland): genetic species in Heterocypris salina.
- Prof Tadeusz Namiotko (Univ. Gdansk, Poland): Nonmarine ostracods from southern Africa.
- Dr Mehmet Yavuzatmaca (Bolu Abant İzzet Baysal University, Bolu, Turkey): morphology of circumtropical Stenocypris (Ostracoda) species.
- Warren Caneos (Mindanao State University, Marawi, Philippines): nonmarine Ostracoda from the ancient lake Languano.

Research topics and international collaborations in 2022
- Together with Janet Higuti and her students (Vitor Ferreira, Jonathan da Rosa, Nadiny de Almeida Martins, Eliezer de Oliveira Conceição and Ramiro de Campos, Nupelia, Maringa, Brazil), Koen is studying the ostracod communities from four Brazilian flood plains, both ecologically and taxonomically.
- We have started phylogenetic and phylogeographic research on European and North American Heterocypris incongruens, H. salina and Cypridopsis vidua, including testing for cryptic species. Our work on H. incongruens and H. salina is in collaboration with Valentina Pieri (Parma, Italy), Tadek Namiotko and Adriana Kilikowska (Gdansk, Poland).
- The Musée national d’Histoires naturelles (Paris, France) organizes a series of expeditions to document the aquatic biodiversity of New Caledonia. Koen and Janet Higuti have taken part in three of these expeditions (2016, 2017, 2018) to collect nonmarine ostracods and other aquatic invertebrates and are presently describing this fauna. Isa is presently analyzing a species cluster with molecular techniques.
- Together with Janet Higuti, Koen assisted Beatriz Bosqué Contieri in analyzing macro-invertebrate communities from streams in Parana (Brazil) and New Caledonia in relation to land use.
- Sourou Joseph Hotekpo (Benin) visited the lab with several GTI grants to identify ostracods from more than two hundred wells in Benin (Africa). This yielded a rich ostracod fauna, which is a mix of subterranean canodonts and surface cypridinids.
- Koen continued to collaborate with Analia Diaz (La Plata, Argentina) to describe Argentinian nonmarine ostracods.
- Isa is a Whitman fellow in the Marine Biological Laboratory (Woods Hole, USA) and Koen joined the 2022 study visit to MBL. They studied the following topics there: (1) Isa continued
her investigations on Cardinium endosymbionts in nonmarine ostracods using FISH (with Scott Chimileski). (2) She continued to study the effect of transposable elements on ostracod evolution (with Irina Arkhipova). (3) Isa assembled and annotated de novo genomes of three nonmarine ostracod species (in collaboration with Tanja Schwander from Lausanne University, Switzerland), and optimized the application of long read Oxford Nanopore Technology to nonmarine ostracods. (4) Together with Heather Bruce in the MBL Patel-lab, Koen and Isa investigate the ontogenetic origin of ostracod valves. (5) With Michael Shribak, Koen applied the polychromatic polarization microscope technology to illustrate soft parts of ostracods.

- Isa started a new project to investigate the importance of transposable elements for adaptations in Darwinula stevensoni to investigate lateral gene transfer and microbiomes (UNTANGLE project; in collaboration with Irina Arkhipova from MBL, USA).
- Koen continued to update the ostracod species lists of the world (with Claude Meisch and Robin Smith), also for the FADA database (Freshwater Animal Diversity Assessment).
- Isa used marine amphipods and ostracods as model species to reconstruct mitochondrial genomes and population histories of the Southern Ocean (RECTO project).
- PhD student Lore Van Craenenbroeck started investigating lacustrine sediments in Sub-Antarctic and Antarctic regions with molecular and classic methods (HabitAnt project), in collaboration with Elie Verleye (Ghent University).

Some non-ostracod related activities:

- Koen is editor-in-chief of Hydrobiologia (https://www.editorialmanager.com/hydr/).
- Isa is board member of the Royal Belgian Zoological Society.
- Koen is guest professor at the University of Ghent (Belgium) and at the Postgraduate (PEA) program of the University of Maringa (Brazil). Isa is guest professor at the University of Hasselt (Belgium).
- Isa is team leader of the Freshwater Biology team and scientific liaison for polar research activities at the RBINS.
- Koen was Head of Research of the RBINS in 2022.

National and International research projects in 2022:

- COPE (Coordinator and PI : Isa). (2019-2025), Belspo - Conservation management of polar ecosystems: using genomic approaches to study connectivity across spatial and functional scales.
- HabitANT (PI : Isa). (2021-2025), Belspo - Past and future habitability in Antarctic lakes: succession, colonization, extinction, and survival in glacial refugia.
- TANGO (PI : Isa). (2021-2025), Belspo - Estimating tipping points in habitability of Antarctic benthic ecosystems under global future climate change scenarios.
- ZEROIMPACT (PI : Isa). (2021-2023), European Fisheries Fonds - Automatic monitoring of biodiversity in the North Sea with eDNA.
- S4GES (PI : Isa). (2021-2024), JPIO – Science for good environmental status
- RECTO (Coordinator & PI: Isa). (2016-2022), Belspo - Refugia and Ecosystem Tolerance in
the Southern Ocean.
- **UNTANGLE** (Coordinator and PI: Isa). (2022-2026), Belspo - Understanding the role of transposons as novel forces in genomic landscapes.

**Robert Speijer**
I have not been involved in ostracod research for some years now, so there is nothing to report this time. There is still some unfinished work though, which I hope will get renewed attention in the coming years.

**BRAZIL**
Simone Nunes Brandão

**Cristianini Trescastro Bergue**
- I am working on deep-sea ostracods from the South and southeast Brazilian continental margin.
- I am involved with the study of mixohaline Permian (Passa Dois Group) and recent ostracods and foraminifers from the Tramandai-Armazém Lagoon.
- Our research group at Centro de Estudos Costeiros, Limnológicos e Marinhos–Ceclimar/UFRGS is studying microfossils from Quaternary beach rocks of Southern Brazil. Preliminary results of this research have been published in *Revista Brasileira de Paleontologia*. [https://sbpbrasil.org/publications/index.php/rbp/article/view/345/134](https://sbpbrasil.org/publications/index.php/rbp/article/view/345/134)
- Scientific collaboration in several projects include the colleagues Enelise Katia Piovesan (UFPE), Felipe Caron (UFRGS), João Carlos Coimbra (UFRGS), Marie-Béatrice Forel (MNHN) and Matias do Nascimento Ritter (UFRGS).

**João Carlos Coimbra**
- In 2022, I continued studies on recent and fossil ostracods, especially from Brazil, but also from the Miocene of Chile.
- I participated in studies based on other groups of microfossils, notably foraminifers.
- In collaboration with Nathália Carvalho da Luz, we published the first part of the taxonomic study on marine ostracods from the Vitória-Trindade Chain, including living and dead assemblages recorded at the top of seamounts and around Trindade Island. A second taxonomic work was published in 2023, while a third (on quantitative fidelity) is expected to be published in 2024.

Camila Souza Cruz began her doctoral thesis in 2021 under the joint supervision of myself and Dr. Mathias N. Ritter. The title of her thesis is "Patterns of predation in Chilean marine benthic ostracods of the early Miocene: ecological and evolutionary forcings."
Nathalia Carvalho da Luz

- I am currently developing research activities at the Museu Emílio Goeldi as a fellow researcher in the Institutional Training Program, under the supervision of Dra. Maria Inês Feijó Ramos. I have been working with Quaternary marine ostracodes from Brazil, especially from the Amazon continental margin and oceanic islands.
- Together with Dr. João Carlos Coimbra, a manuscript on ostracode ecology from the Vitória-Trindade Chain (South Atlantic) is in the process of publication.
- Together with Dra. Ana Paula Linhares (MPEG), I am developing a project addressing the potential of modern nonmarine ostracods as bioindicators in urban basins in the Amazon region.

Undergraduate student

- Luana Thayna Scerni Pessoa, scientific initiation project completed with modern marine ostracods from the equatorial Amazon margin.

Ana Paula Linhares Pereira

Scientific activities:

- I am currently a curatorship assistant in the Paleontology Collection at the Paraense Emílio Goeldi Museum, Brazil.
- I have been collaborating mainly with the taxonomic, paleoenvironmental, and biostratigraphic studies of ostracods and palynology of Neogene deposits from the Western Amazon (Brazil).
- Analysis and use of ostracods and other biomarkers as indicators of the quality of water resources, through the monitoring of the structure of communities and paleobiological analyses in Amazon aquatic environments under the influence of anthropic activities.

Supervision 2022-2023:

- Student Maurício de Souza Brito (master’s degree). The research is about the analysis of population dynamics and spatial distribution of ostracod populations on the island of Cotijuba (Brazilian Amazon).
- Student Leonardo Rocha Santos (master’s degree). The research is about the use of bioindicators (e.g., diatoms and ostracods) in lotic systems in the Brazilian Amazon (Belém-Pará).
- Student Marcos Ramos Furtado (Graduate). The research is about the evaluation of the potential of ostracods as indicators of the quality of water resources in the environmental protection area of the metropolitan region of Belém, Pará (Brazilian Amazon).

Julia da Silva Pereira

I am a taxonomist working with recent freshwater Ostracoda. I am finishing my PhD thesis studying a freshwater ostracode genus in humid Brazilian forest regions, especially the Brazilian Atlantic Forest, a biome severely threatened. Until the beginning of the study, two species of the genus were known in Brazil. Now, there are fifteen, seven of these collected in fragmented and
vulnerable areas of Atlantic Forest. This is an example of a biome extremely impacted and we did not have the slightest idea of the diversity for this ostracode genus. With these limitations, the question is raised: how to proceed to other types of study (such as climate change) if we do not know the diversity? Janet Higuti’s PhD student Eliezer dedicated an entire thesis on "Impacts of climate change on freshwater ostracods". In one of his chapters, he performed an ecological modelling (including future scenarios predictions) to evaluate the climate change impact on the ostracode genus I am studying in my PhD. This modelling was possible because we had worked on knowing which are the species, what are their distributional ranges, essentially: because we had done some taxonomic work.

Another interesting example is a study I am finishing with a Strandesia species in collaboration with a PhD colleague working with ecotoxicology. It is a study to determine the impact, on these animals, of acute and chronic expositions to several toxic components and the possibility to use them as bioindicators. But to do this ecological work, we need a description for this species because this information matters when we are dealing with ecotoxicology.

PEOPLES REPUBLIC OF CHINA

Junjun Song
- I am interested in palaeoecology and palaeobiogeography of Paleozoic Ostracods.
- During 2022, I continued my research on the Silurian, Devonian and Carboniferous ostracods in South China, Tibet, and Northwest China.
- I published three papers and established one new species, Bairdiacypris xainzaensis Song, 2022 (Song and others, 2022), which occurred in the Upper Devonian Chaguoluoma Formation, Tibet, China.
- I was invited to write a science book of ostracods for Chinese pupils, which is expected to be published before 2024.

Yaqiong Wang (王亚琼)
I am working mainly in the following topics and projects:
- My long-term project focuses on the taxonomy, biostratigraphy, paleogeography, and biodiversity of non-marine Cretaceous ostracods from China, Mongolia, and South Korea, in collaboration with Dr. Byung-do Choi (Daegu National Science Museum) and Dr. Benjamin Sames (the University of Vienna).
- The Quaternary marine ostracod fauna from the East China Sea and its application in sea-level reconstructions, with PhD student Baoyan Jia and Prof. Baochun Zhou.

Students
- Zichen Ge (Chengdu University of Technology) is working on the taxonomy and biostratigraphy of the Cretaceous nonmarine ostracod fauna from the Sichuan Basin.
• Baoyan Jia concluded his thesis on "Mid-Holocene sea-level fluctuation in the Fujian coastal area: Evidence from the ostracod records of the core NDQK 5".

Moriaki Yasuhara
• Yasuhara continues his research on paleoecology and biodiversity.
• Yasuhara currently works with three postdocs, Pedro Julião Jimenez, He Wang, and Natalia Albarran-Melzer, 5 PhD and 1 Mphil students, Kyawt “Kk” Aye, Jiamian Hugo Hu, Yichi Zhang, Jialu Huang, Jingwen Zhang, Lalita Weerachai.
• He is recently interested in latitudinal diversity gradient in a greenhouse world, invasive species via Suez Canal, temperature and oxygen impact on diversity.

Dayou Zhai
I am currently working on living ostracods in Yunnan Province, southwest China, as well as some Holocene and living material from Inner Mongolia, northeast China.

CROATIA

Valentina Hajek Tadesse
Research activities
• Work on nonmarine and marine Miocene ostracods from Croatia, focusing on climate and environmental variability during the Miocene climatic optimum.
• Holocene ostracods from Adriatic.
• Ostracods from deep caves in Croatia.
• Active in two scientific projects.

Meetings
• EOM, Lyon–oral and poster presentation
• Environmental, Structural, and Stratigraphical Evolution of the Western Carpathians- oral and poster presentation.

ESTONIA
Tonu Meidla

Tonu Meidla
• Tõnu Meidla is working on several aspects of Ordovician and Silurian ostracods, including higher systematics, paleocommunities, paleobiogeography, and biostratigraphy.
• Work on collections from Estonia, Latvia, Lithuania, and Canada (together with V. Perrier, Z. Taha, M. Williams) is in progress.
• Work on a small Devonian collection is scheduled.

Kadri Sohar
Is studying Holocene ostracods and involved in Quaternary environmental studies and in the inventory of protected ostracod species in Estonia.

FRANCE

Marie-Béatrice Forel

Sylvie Crasquin
I continue to be the head of the Centre of research in Palaeontology, Paris. My only contribution to ostracodology was the co-supervision of an Iranian PhD, Soheil Hemmati. In the thesis, ostracods from the boundary between Middle and Late Permian in Iran are described. The defence is planned on January 10th, 2014.

Marie-Béatrice Forel

My research focuses on Triassic marine ostracods to understand the mechanisms underlying the construction of their taxonomic diversity through time and space. I recently began using 3D tomography to investigate poorly studied characters of Bairdiidae, aiming at clarifying their clarification. I am now operating a major change in my research topic and focus on the diversity of ostracods in deep-sea extreme environments (cold seeps, hydrothermal vents, organic falls) during the Mesozoic and Cenozoic.

I am curator of micropaleontology collections at the National Museum of Natural History, where we store, for instance, the Terquem specimens. In 2024, I will be responsible for paleontology collections.

Elvis Guillam
I defended my PhD at Sorbonne University (Paris, France) in last April. I am currently teaching palaeontology and geology at Sorbonne Université. My research focuses on the diversity variations
related to the two main extinction events of the late Devonian: The Kellwasser event (close to the Frasnian-Famennian boundary) and the Hangenberg event (close to the Devonian-Carboniferous boundary), with a particular interest on the Hangenberg event which still poorly studied nowadays.

I am working on the palaeobiogeographic distribution of ostracods during the late Devonian and early Carboniferous.

Since my defense, I started to work on two new projects with different collaborators. I am working with Tamara Hambardzumyan, Vahram Serobyan and Arayik Grigoryan (Institute of Geological Sciences, Yerevan, Armenia), Vachik Hairapetian (Islamic Azad University, Isfahan, Iran) and Taniel Danelian (University of Lille, France) on the diversity variations among marine ostracods at the Frasnian-Famennian and Devonian-Carboniferous transitions from Armenia.

I am working with Marie-Béatrice Forel (Muséum national d'Histoire naturelle, Paris, France) on the exceptional preservation of soft parts of ostracods from the Carboniferous of Uruguay.

**Vincent Perrier**

- I am a lecturer in geology and palaeontology at the University of Lyon (France) and chair of the International Research Group on Ostracoda (IRGO).
- My research focuses on the different colonization events of the water column and mainly that of myodocope ostracodes (Collaborations with Mark Williams, David Siveter from the University of Leicester, UK; Juan Carlos Gutierrez-Marco from Instituto de Geociencias (CSIC-UCM), Madrid, Spain; Helga Groos-Uffenorde from the Geowissenschaftliches Museum, Göttingen, Germany). Ostracods were early zooplankton colonists, making the ecological shift from the benthos during the Silurian, and leaving behind an unparalleled fossil record of their environmental distribution, and crucially of their soft anatomy (Herefordshire Lagerstätte).
- I recently started to study Silurian myodocopes from Spain.
- In addition, I am actively working on exceptionally preserved arthropods from the Montceau-les-Mines Carboniferous Lagerstätte.

**Joao Queiroz**

**Research/industrial activities**

After 15 years working exclusively with nonmarine ostracods I have been dating with Tertiary transitional ostracods (for a CCS project) and a little with marine ostracods. I must confess that I have been catapulted to the Foraminifera and Radiolaria biostratigraphy on 90 percent of my time working for TotalEnergies.

**Past meetings**

I presented a talk on the Strati2023 in Lille (“Was the Brazilian Romualdo Formation (Aptian–lower Albian) ever marine?”) on a study authored by Lucas Antonietto.

I am collaborating on a pre-sal ostracod biostratigraphy article, in press, Buratti and Dupond to be released by *Cretaceous Research*. 
GERMANY

Paula Echeverria-Galindo

- I am engaged in extensive research on ostracods from Tibetan lakes, working in close collaboration with esteemed colleagues including Mauricio Bonilla and Liseth Pérez from IGeo, Germany, as well as Peter Frenzel from Jena, Germany, and Ivana Karanovic from Seoul, South Korea. Our collaborative efforts are primarily focused on unraveling the taxonomy and conducting molecular analyses of ostracods.
- I closely collaborate with Sergio Cohuo and Laura Macario-Gonzalez (Mexico), who are conducting research in neotropical lakes. In their work, ostracods serve as both modern and paleobiological indicators, shedding light on ecological and environmental changes over time.
- I am actively involved in the International Continental Scientific Drilling Program (ICDP) in two significant projects: LIBRE (Lake Izabal, Guatemala) and NICABRIDGE (Lake Nicaragua). In these endeavors, ostracods, in conjunction with other micropaleontological organisms such as testate amoebas and chironomids, play a pivotal role as paleoenvironmental indicators.

Mauricio Bonilla Flores

I am a Ph.D. student from the Institute of Geosystems and Bioindication at the Technische Universität Braunschweig, Germany. My research topic is part of the Geo-ecosystems in Transition on the Tibetan Plateau project (Trans-Tip), where I focus on taxonomy, population ecology, life cycles (stages of development) and laboratory culture of nonmarine ostracods. Basically, the current knowledge of freshwater ostracods is the main basis for understanding the conditions and evolution of an environment in the past.

The titles of my manuscripts in preparation are:
- Taxonomy, ontogeny, and ecology of *Tonnacypris stewarti* (Daday, 1908) comb. nov. (Ostracoda: Cyprididae) from Nam Co, Tibetan Plateau.
- *Heterocypris exodonta* sp. nov. (Ostracoda), a high altitude asexual microcrustacean from Nam Co, Tibetan Plateau.

Matthias Franz

I completed a paper on the research well Pfullingen-Breitenbach, which deals with the Bajocian ostracod fauna. A second paper on the Bleichtal drilling contains a chapter on the ostracod fauna of the Aalenian.
Peter Frenzel
Our working group in Jena investigates Quaternary and Recent Ostracoda. In 2022, there were three PhD students active in our group:

- Ella Quante studies applications of freshwater ostracods to geoarchaeological research questions. She published a review paper on this topic in 2022 (see publications). An actualistic analysis of Recent ostracods from a lake in northern Germany is also part of her program.
- Olga Schmitz (Gildeeva) continued her research on ostracods and foraminifers as indicators of anthropogenic impacts at the eastern coast of South Africa.
- Thomas Daniel, who works as a geoscience consultant now, continued with his PhD thesis on the ostracods and other proxies from the Middle Pleistocene hominin site Bilzingsleben in northern Thuringia.
- Anna Pint works in our group as a PostDoc, mainly on the palaeoecology of the Lower Permian nonmarine lagerstätte Bromacker in Thuringia.

Helga Groos-Uffenorde
Volunteering at the Geoscience Museum GZG University.

Arzu Javadova
Past and current research activities:
Exploration and production of oil and gas fields and prospects, including micropaleontology, seismic and sequence stratigraphy, reservoir sedimentology.

Future activities: Ostracoda study of South Caspian Basin, remote sensing method of exploration.

Meetings
- EAGE meeting in Madrid, Spain.
- GEOBERLIN-2023 (150th PGLA (BGR) Anniversary 175th DGGV Anniversary), Germany.
- International Field Exploration and Development Conference 2023, Wuhan, China.

Current research focus
Modern distribution of ostracod fauna, anthropological impact, sedimentology, environmental assessment, sequence, and seismic study of the South Caspian marine part of the basin. The research team included:

- Maria Zenina, P.P. Shirshov Institute of Oceanology, Russian Academy of Science
- Lala Khalilova Azerbaijan Oil Academy
- Kurosh Ettihad, Ferdowsi University of Mashhad (and Iranian National Oil Company)
- Elsa Gliozzi, University of Roma, Italy
- Bernhard Seubert, Indonesia
- Tatiana Tsaregorodtseva, Moscow State University
- Tamara Yanina, Moscow State University
- Alina Berdnikova, Moscow State University
It is a self-initiated research project for joint publication purposes. Each researcher covers their expenses for field trips, collection of samples, and analysis.

**Publication list from professional activities**

1989. Central Research Laboratory of State Oil Company. Author, research reports on “Paleontological and Paleogeographical research of Nakhichevani, Oil rocks and Oguz (offshore) fields on the base of borehole data,” Confidential database of SOCAR. **Summary:** Part of production company research report where the microfaunistic description and biostratigraphic correlation of offshore some well data were given. Based on the authors' biostratigraphy study, first-time offshore Quaternary stratigraphy subdivided into detailed horizons based on Ostracoda assemblages.

1995. Coauthor, research report of SOCAR and AIOC consortium Engineering geology work of sea bottom, in Guneshly-Chirag and Azeri fields. **Summary:** Paleontological and stratigraphical parts of study area were analyzed incorporating complex geological, geochemical, and geophysical materials.


1997. Geology Institute of AS, Coauthor of scientific report on “Correlation of borehole sections of Productive and “Red” series in the Azerbaijan and Turkmenistan” Sectors of the Caspian Sea. **Summary:** The report covers complex geological and geophysical data, correlation of “Pliocene Productive and Red series” deposits widespread in Turkmenistan and Azerbaijan sectors of offshore Caspian Basin, incorporated with the micro and macrofauna analysis.

**Alan Lord**

- Toarcian-Aalenian (Jurassic) ostracods of Boca da Mata, Portugal (with M.C. Cabral).
- Toarcian-Aalenian (Jurassic) ostracods of Robins Wood Hill, UK (with M.C. Cabral).
- Bathonian (Jurassic) ostracods from an echinoderm lagerstätte, Cotswolds, UK (with T. Ewin, G. Miller, and S. Stukins).
- The genus *Eucytherura* (with D.J. Horne).
- Pleistocene-Holocene environmental change and ostracods, Skagerrak area.

**Renate Matzke-Karasz**

- In collaboration with He Wang, Dave Horne, Jürgen Velten and Radovan Pipik, Renate continued the work on ostracods in Cretaceous Burmese amber.
- Together with Christoph Mayr (Erlangen, Germany) and Chintan Purohit (LMU), she continued work on the new reference section of the last glacial period in southern Germany, the Nesseltalgraben, as well as a second Bavarian MIS3 site, Bobingen.
• Together with Christoph Mayr (Erlangen, Germany), Chintan Purohit (LMU) and Melanie Kaliwoda (LMU), she continued the study of mummified ostracod sperm.
• She contributed to the 2-volume book on the stone age in Bavaria (in German, WBG Theiss).
• Together with Marie-Béatrice Forel (Paris), she studied the precious fossil sample of *Palaeocypris edwardsii*, which was first described in 1876 by Charles Brongniart and had been considered lost for a lengthy period of time.
• Together with Peter Frenzel, she prepared a biography of our late colleague Roland Fuhrmann (to be published in *Mauritiana*).
• Renate continued to work for IRGO and SF*IRGO, including keeping the webpages up to date and organizing and taking part in board meetings.
• Together with Peter Frenzel, Renate organized the seventh edition of the European School on Ostracoda (ESO) in Vienna, Austria.
• Together with Peter Frenzel, she kept on monitoring possible paths to secure a future for the KDO.
• Together with Robin Smith, Renate continued acting as honorary subject editor for ostracod-related manuscripts submitted to the journal *Zootaxa*, the world’s foremost journal in taxonomy. As always, sincere thanks go to all reviewers, who invested their valuable time in writing detailed reviews, thus making the publication of ostracod papers within *Zootaxa* possible. Manuscript submissions are of course very much appreciated.

**Liseth Pérez**

• I continue being involved in ICDP-projects and initiatives PISDP (Lake Petén Itzá, Guatemala), LIBRE (Lake Izabal, Guatemala), MEXIDRILL (Lake Chalco, Mexico City), and NICABRIDGE (Lake Nicaragua), where I use ostracods as paleoenvironmental indicators.
• I collaborate with Sergio Cohuo and Laura Macario-Gonzalez (Mexico), and Mauricio Bonilla and Paula Echeverría-Galindo (IGeo, Germany) on research that focuses on the ostracode fauna of Tibetan lakes.

**Burkhard Scharf**

• In 2022, I took part in the ISO19 and the excursion to the Camargue. During the excursion, I took samples. A publication on the ostracods, in particular on the rice fields in the Camargue, is nearing completion.
• I continued the revision of the genus *Psychrodromus*. In 2022, I successfully collected males of *Psychrodromus fontinalis* in northern Macedonia, which I need for the revision of the genus *Psychrodromus*. The son of Dr. Trajan Petkovski was my guide. Unfortunately, the museums can no longer lend me material because I am retired and no longer belong to an institute.
• The work on the ostracods of the Algerian Sahara, carried out by PhD student Aimen Menail from the University of Annaba in Algeria, was prepared to such an extent that it was published in early 2023.
• In the autumn of 2017, a core was taken in a bomb crater on the roof of Bunker Valentin Bremen, Germany. The investigation of the ostracods of the core is finished. I have prepared a manuscript that will probably be published in 2023.
Antje Schwalb
The regional research focus of my team is Tibet, Central Asia, Central America, and Central Europe:

- As speaker of the International Research Training Group “Geo-ecosystems in transition on the Tibetan Plateau” (TransTiP, funded by DFG) I have been focusing, with Dr. Nicole Börner (scientific coordinator), Dr. Paula Echeverría Galindo and Mauricio Bonilla Flores (doctoral researcher), on the taxonomy, morphological variability, ecology, and paleoecology of ostracodes. Together with Dr. Katharina Dulias we will set up a genetic library using metabarcoding on ostracodes and trace the evolution of endemic lineages on the Tibetan Plateau.
- Climate and Environmental Variability during the late Middle Pleistocene at the Paleolithic Sites of Schöningen, northern Germany, with Dr. Kim Krahn and Sonja Rigterink (doctoral researcher).
- Member of the ICDP-projects and initiatives MEXIDRILL (Lake Chalco, Mexico City) and NICABRIDGE (Lake Nicaragua) with Dr. Liseth Pérez, CHADRILL (Lake Chad), and the Lake Victoria Drilling Project (LVDP).

Henning Uffenorde
- Due to Covid 19 restrictions, research of Henning Uffenorde together with Gudrun Radtke (Federal Geological Survey Hesse) was fairly restricted. Nevertheless, he could take part in sessions of the ISO 19 Lyon symposium via the excellent streaming service provided by Vincent Perrier.
- Two manuscripts by Uffenorde and Radtke on: “New Ostracoda from the Middle Pechelbronn-Formation of Hesse (Early Oligocene, Mainz Basin)” and on “Cardobairdia (Ostracoda) in the European and North-Eastern Atlantic basins: A review of its Tertiary occurrences” are not yet published.
- Henning is working as a volunteer at the Geoscience Center of the University of Goettingen, Germany.

ICELAND
Steffen Mischke

Steffen Mischke
- Two BSc students (Steinunn Margrét Bogadóttir and Sara Hlín Geirsdóttir) worked with me on a middle Pleistocene, Acheulian archaeological site in the upper Jordan River valley. In addition, a third BSc student (Hafrún Birta Haflíðadóttir) works currently with me on ostracod specimens from surface sediment samples collected in a fjord near Reykjavík (Hvalfjörður).
- Steffen’s PhD student Ahmed Hamdi Moghazi continues his analyses of ostracods and sediments from early Pleistocene sediment sections in the Nihewan Basin in China where
ancient tools up to 1.6 Ma old had been recovered. The investigated sediment sections represent important climate archives, and they are also used to assess the environmental setting in the basin during times of hominid activity.

- Steffen works now mostly on ostracods from the early Pleistocene archaeological site 'Ubeidiya in the Near East and from several middle Pleistocene sites in Morocco.
- In cooperation with the University of Leipzig (Christoph Zielhofer), he collected sediment cores from Lake Tislit in the High Atlas in Morocco during the summer of 2023 which will be used for a multi-proxy study including ostracod analysis.

ITALY
Ilaria Mazzini

ROMA Tre University (Italy)

Giuseppe Aiello and Diana Barra
We are presently working on the following topics:

- Quaternary ostracod and benthic foraminiferal assemblages from various successions of central and southern Italy (Latium, Campania, Apulia).
- Neogene marine ostracod assemblages of the northwestern Morocco (with Roberta Parisi).
- Pliocene marine ostracod assemblages from the southwestern Spain (with Andrea Infante, Ilaria Mazzini, Francisco Ruiz Munoz and Roberta Parisi).
- Recent ostracod assemblages in circalittoral Tyrrhenian waters (with Ilaria Mazzini and Roberta Parisi).
- Neogene ostracod and benthic foraminiferal assemblages from the Campania Region (with Andrea Infante and Roberta Parisi).
- Quaternary ostracod and benthic foraminiferal assemblages from archaeological sites of the Campania Region (with Andrea Infante).
- Marine and marginal ostracod and benthic foraminiferal assemblages of the coastal areas of the Campania Region (with Roberta Parisi).

Simone Da Prato
- I am using ostracods as a tool for paleoenvironmental and stratigraphical reconstructions and continues to work on Neogene and Quaternary ostracods of Italy.
- I work on recent and subfossil ostracods of coastal marine and brackish environments (Ionian Sea and Ligurian Sea).

Elsa Gliozzi
She is leading the Roma Tre ostracodologist group is involved in several research projects about taxonomy, stratigraphy and palaeoecology of Neogene and Quaternary marine, brackish and freshwater ostracods of the Mediterranean and Paratethys area.
The group is currently working on:
• The taxonomical revision of the Pannonian species established by Mehés in 1907 and 1908 based on new sampling of the type locality of Darufalva (Austria) and Peremarton (Hungary) (Elsa Gliozzi, Costanza Faranda).
• The taxonomical revision of Livental’s species on new topotypic material collected from the Azerbaijan section of Babazanan (Elsa Gliozzi, Costanza Faranda in collaboration with Arzu Javadova).
• The study of the ostracods of several cores offshore the southern Caspian Basin (Elsa Gliozzi and Costanza Faranda in collaboration with Maria Zenina and Arzu Javadova).
• The study of the living ostracod assemblages in the Bracciano Lake (Latium, Italy) together with Ilaria Mazzini and Giampaolo Rossetti.

Ilaria Mazzini
I am a researcher at the National Research Council of Italy, working on Quaternary Ostracoda as tools to understand paleoenvironmental changes linked to natural and anthropic drivers in the Mediterranean area, the Arabian Peninsula and Africa.

During the last years, my main research topics have been:
• The taxonomy of the ostracod associations from two IODP Exp. 381 cores from the Corinth Gulf, together with Tom Cronin and Roberta Parisi. In such settings, where lake-marine transitions were fast and frequent, ostracods are excellent markers of paleoenvironmental changes.
• The paleoenvironmental reconstruction of landscape dynamics in two Italian coastal plain areas (Maremma in Tuscany and Capitanata in Apulia) where former coastal lagoons completely disappeared or are very restricted.
• The taxonomy of the ostracods from the Shungura formation (Omo Valley, Ethiopia), within the Omo Group Research Expedition project, a transdisciplinary research mission aiming to unveil the responses of vertebrates (including humans) to different environmental factors.
• Freshwater ostracods from subterranean habitats.

Roberta Parisi
I am a post doc at CNR, about the taxonomy of the ostracods retrieved from the M0080 and M0078 retrieved during IODP Exp381. My main research interests are:
• Neogene ostracod assemblages from sediment cores sampled in the Corinth Gulf during IODP Exp. 381 (with Ilaria Mazzini and Tom Cronin).
• Neogene marine ostracod assemblages of the northwestern Morocco (with Giuseppe Aiello and Diana Barra).
• Pliocene marine ostracod assemblages from the southwestern Spain (with Giuseppe Aiello, Diana Barra, Andrea Infante, Ilaria Mazzini and Francisco Ruiz Munoz).
• Recent ostracod assemblages in circalittoral Tyrrhenian waters (with Giuseppe Aiello, Diana Barra and Ilaria Mazzini).
• Neogene ostracod and benthic foraminiferal assemblages from the Campania Region (with Andrea Infante, Giuseppe Aiello, and Diana Barra).
• Marine and marginal ostracod and benthic foraminiferal assemblages of the coastal areas of the Campania Region (with Giuseppe Aiello and Diana Barra).
Giampaolo Rossetti

- I am associate professor at the Department of Chemistry, Life Sciences and Environmental Sustainability, University of Parma. My main research interests include ecology, distribution, and taxonomy of freshwater invertebrates, with special regard to ostracods, from a broad range of habitat (high altitude lakes, temporary pools, springs, groundwater, etc.).
- I am involved in the LifeWatch infrastructure for biodiversity and ecosystem research.
- I am the supervisor of Master and PhD students for projects on ecology and taxonomy of nonmarine ostracods and other freshwater invertebrates.

Ongoing projects

- Ostracods from subterranean habitats.
- Ostracods from perifluvial areas of the Po River.
- Ostracod assemblages from Bracciano lake, Central Italy.
- Cognitive abilities in freshwater ostracods.

Veronica Rossi

I am associate professor at the University of Bologna, and I am working on:

- Late Quaternary palaeoenvironmental-depositional evolution of Mediterranean delta-coastal plains (e.g., Po Plain, Arno Plain), using ostracods as facies proxy.
- Ostracods as proxy of (palaeo)environmental changes in the shelf segment (Adriatic Sea).
- Human/environment interactions along coastal areas, hosting ancient harbors and/or archaeological sites.

Gianguido Salvi

I am a researcher at the University of Trieste.

I am the leader of the research project “Antarctic Ice Sheets’ dynamics: new data from provenance and paleontological analysis of IODP374 and DSDP Leg 28 cores in the Ross Sea” to focus on:

- The quali/quantitative study of the ostracods associations to reconstruct the ice shelf front oscillation phases and the connected paleo-environmental/climatic changes.
- The possible application of Krithe’s Mg/Ca paleothermometry on the Southern Ocean to reconstruct the paleotemperature.

I am working on ostracod assemblages in several alpine lakes (Bordaglia, Balma, Avostanis and Dimon lakes), in agreement with the Department of Life Sciences of University of Trieste, and Regional Environmental Agency (ARPA-FVG) to correlate recent and past ostracods, testate amoebae, diatoms and chironomids assemblages considering recent anthropization activities.

Francesco Sciuto

Associate professor of Stratigraphy and Sedimentology at University of Catania.
My research activity focuses on Triassic, Tertiary and Quaternary stratigraphic succession in southern Italy and Tunisia.

**JAPAN**

**Toshiaki Irizuki**
I am working on:
- Centennial- to millennial-scale dynamics of Quaternary brackish and marine ostracodes.
- Anthropogenic pollution and ostracodes in brackish lakes and enclosed bays.
- Ostracodes in Holocene tsunami deposits.
- Taxonomy of Neogene marine ostracodes in eastern Asia.

**Hirokazu Ozawa**
Current research:
- Ecology, life cycle, taxonomy, and biogeography of modern cytheroidean ostracods in the Northwest Pacific and Japan Sea coasts, for example, the Sagami and Tokyo Bays in central Japan (with Drs. Takahiro Kamiya, Yuriko Nakao, and Shizuko Nakai together with college students in their laboratory).
- Taxonomy, palaeobiogeography (for example, migration, extinction, survival, origin, and speciation) and palaeoecology of cytheroidean ostracods in Late Cenozoic at the Japan Sea and Northwest Pacific, with the history of palaeoenvironmental changes in Late Cenozoic at the Japanese coasts (with Drs. Takahiro Kamiya and Gengo Tanaka).
- Ecology, life cycle, taxonomy, and biogeography of modern freshwater ostracods in rice fields of central Japan and in pet shops in Japan (with Drs. Robin James Smith, Yuriko Nakao, and Shizuko Nakai together with college students in their laboratory).

**Akira Tsukagoshi**
Together with students, several research results were achieved:
- Functional morphological aspects of furca were clarified.
- The microdistribution of ostracodes from springs was clarified.
- New knowledge of the interstitial species of the genus *Terrestricythere* was obtained.
- A morphological and genetic approach is carried to three interstitial species of an unknown genus.

**Katsura Yamada**
Research activities:
- Holocene climate and its relationships to the Asian monsoon.
- Paleoceanographic changes in East Asia since the Miocene.
- Paleoenvironmental changes in Turkey during the Holocene.
Techniques and methods: shell chemistry, oxygen and carbon isotopes, assemblage analysis

SOUTH KOREA

Byung-Do Choi
I am currently a Senior Researcher at Daegu National Science Museum, Daegu Metropolitan City, South Korea.

I continue my work with a focus on nonmarine ostracods from the Cretaceous strata of East Asia (China, Korea, and Mongolia) (in collaboration with Dr. Yaqiong Wang, NIGPAS).

LUXEMBOURG

Claude Meisch

I continued to work on:
- The taxonomy and distribution of the freshwater Ostracoda, mainly of Europe, but also worldwide.
- With Burkhard Scharf (Bremen), as leading author, on the taxonomic revision of the species of the cypridid genus *Psychrodromus*.
- The update of the ostracod species lists of the world (with Robin Smith and Koen Martens).
- Fresh water ostracod samples from southern Germany and southern France, provided by Dr Reinhard Gerecke (University of Tübingen), and Prof. Alain Thiéry (Avignon Université), respectively.

In July 2022 I took part in the International Symposium on the Ostracoda in Lyon (ISO19), including the post-symposium field trip in the Rhône and Camargue areas organized by Marie-Béatrice Forel, Vincent Perrier, and Bertrand Lefebvre. We extensively collected fossil samples from Miocene deposits, as well as extant ostracods from backwaters of the Rhône river and from freshwater ponds and rice fields of the Camargue. The latter samples contain three species of ostracods new to France. The participants plan to publish their findings from Camargue in 2024.

Non-ostracod related activities
Claude is editor-in-chief of the *Bulletin de la Société des naturalistes luxembourgeois*.
MEXICO

Alejandra Garcia-Madrigal
- I have worked on intertidal ostracods from Iceland.

MOROCCO

Abdelhamid Rossi
- I am working on ostracods as environmental bioindicators. I am still interested in Cretaceous ostracods.
- I have a new PhD Student: Baaboua Ahmed, who works on current ostracods from the Moroccan Atlantic coast as bioindicators of pollution.

NEW ZEALAND

Stephen Eagar
I am retired but consult on occasions as required. See bibliography for an abstract in 2022.

POLAND

Tadeusz Namiotko
My research focuses on ecology, integrative taxonomy, ecotoxicology, and distribution of living and Quaternary nonmarine ostracods. I am working on:
- Drivers controlling biodiversity of nonmarine ostracods from southern Africa across environmental and spatial gradients (with A. Szwarc, K. Martens, and I. Schön).
- Phylogeny of European Candoninae (with A. Wysocka, M. Kijowska, and others).
• Biodiversity of groundwater European ostracods (with S. Iepure, A. Montanari, T. Radja, F. Lefebvre and others).
• Bacterial endosymbionts in nonmarine ostracods (with M. Mioduchowska, A. Kilikowska, A. Kaczmarczyk-Ziemb and others).
• Taxonomy of the genus Cytherissa (Cytherideidae) (with D.L. Danielopol, A. Baltanas, M. Gross, D.J. Horne, M. Stoica and others).
• Toxicity and bioaccumulation of zinc and copper in freshwater ostracods (with A. Iglikowska and others).

Ewa Olempska
I have been retired for several years. I have one publication in 2022 and two publications in 2023, see bibliography.

PORTUGAL

Maria Cristina Cabral
• Upper Toarcian-Aalenian (Jurassic) ostracods of Boca da Mata, Lusitanian Basin, Portugal (with Alan Lord, Germany).
• Toarcian-Aalenian (Jurassic) ostracods of Robins Wood Hill, UK (with Alan Lord, Germany).
• Late Holocene ostracods from southern Portuguese continental shelf off western Algarve (with M. João Martins, Portugal).
• Late Holocene ostracods from SW Mozambique, taxonomy (with M. João Martins, Portugal).
• Informal collaboration (ostracods taxonomy and data interpretation) in the supervision of a Master thesis entitled: Characterization of Foraminifera and Ostracoda assemblages in the Almargem and Martinhal high-energy deposits: tsunami versus storm (in Portuguese).

Maria João Fernandes Martins
• Ostracods from the Algarve continental shelf, S Portugal, Late Holocene. Collaboration with Maria Cristina Cabral (and Teresa Drago, Instituto Português do Mar, PT).
• Ostracods from SW Mozambique (Inhambane region), Late Holocene. Collaboration with Maria Cristina Cabral (and Ana Gomes, ICArEHB/Univ Algarve).

Advising/Mentoring
• Judite Nhanombe, ICArEHB, University of Algarve, PT. Archaeology MCs program, UAlg, ‘Using ostracod valve morphology as an indicator of ecological stress.’ Supervisors: M.J.F. Martins and Ricardo Godinho (ICArEHB/Univ Algarve)

Meetings
Geological Society of America, USA

Eastern Africa Association for Palaeoanthropology and Palaeontology (EAAPP), Arusha, Tanzania

Congress of the PanAfrican Archaeological Association of Prehistory and Related Studies, Tanzania

RUSSIA

Lyudmila M. Melnikova

Abstract:
Materials from two sections (Klyasino and Zhabino) of the Gryazno Formation (Upper Ordovician, Sandbian Stage, Idavere Regional Stage (CIII)) in a typical locality in the west of the Leningrad Region were studied. The taxonomic composition of ostracods represented by forty-eight species was analyzed. It is revealed that the quantitatively dominant species are Klyasinella bella (over seven hundred specimens), Sidaravicienea nida (about five hundred specimens), Tetrada (T.) memorabilis (about two hundred specimens), Tetradta (Neotsitrella) perplana (150 specimens) and Sigmooopsis rostrata (one hundred specimens). Analyses of the stratigraphic distribution of ostracods of the Gryazno complex show the commonality of many of its species with species from the same age Late Ordovician deposits of other territories of the Baltic region. In addition, three species - Tetradta (Neotsitrella) perplana, Sidaravicienea nida, Carinobolbina carinata estona-are known in the sediments of the Polometian Horizon of the Moscow synecline. It is shown that some species of the mudskii complex have more ancient origins.

Julia N. Savelieva

Abstract:
The results of the paleoecological analysis on ostracods of the upper part of Sultanovskaya Formation (Boissieri zone) in the section near v. Alekseevka are presented. Five ostracod
assemblages reflecting changing conditions in the paleobasin are defined. It was established that the sedimentation in the Late Berriasian time occurred under conditions of a warm normally salty with a calm hydrodynamic regime of the basin, mainly in oxygen waters.

Dmitry Sobolev  
Ostracods: Devonian, Carboniferous, Pechora-Urals region.

Natalja I. Stepanova  
Ostracods: Silurian, Marine, Siberian platform.

Ekaterina Mikhailovna Tesakova  
Ostracods: Jurassic, Marine, Russian Plate, Germany, Poland

SERBIA  
Tamara Karan Žnidaršič

Jovo Pokrajac  
- I am continuing to work on my doctoral thesis, focused primarily on diversity and distribution of recent freshwater ostracods in Serbia and other parts of the Balkan peninsula.  
- In 2022 I was collecting samples from localities in Serbia, mostly in mountainous regions of Eastern and Western Serbia.  
- In April 2022 I attended the 7th European School on Ostracoda in Vienna, and in June 2022.  
- I presented ostracods at two conferences: at the 18th Congress of Serbian Geologists in Divčibare and the 6th Congress of Ecologists of the Republic of North Macedonia with International Participation, Ohrid, North Macedonia.  
- I plan to participate on the regional and European conferences to be held next year, namely 10th International Workshop on the Neogene of Central and South-Eastern Europe to be held on May 27th to 31st, 2024 in Podčetrtek, Slovenia and 10th European Ostracodologist’s Meeting in Catania, in September 2024.

Ljupko Rundić  
- I continued work on the Miocene marine, marine-brackish and freshwater basins of Serbia and Bosnia and Herzegovina (with colleagues from Natural History Museum of Vienna, Geological Survey of Austria, Geological Survey of Serbia and Natural History Museum of Denmark, Zoological Museum and Karlsruher Institut für Technologie (KIT). Middle Miocene flooding along the southern margin of Pannonian basin and relationships between the Lower-Middle Miocene units were important goals (ostracods included (for example, Rundić, 2022). Paleogeographic reconstruction and dating of the Serbian Lake System (SLS) during early to
middle Miocene based on litho- and biostratigraphic interpretation and radiometric dating was continue topic during last years (Bradić-Milinović and others, 2022; Zeković and others, 2022).

- A joint study with colleagues from Faculty of Biology, University of Belgrade (T. Karan-Žnidaršič and J. Pokrajac, PhD student) concerning the role and significance of ostracods as indicators of (paleo)ecological and (paleo)climate change has been open (Pokrajac et al., 2022).
- Our team is planning participation on the regional and European conferences, namely 10th International Workshop on the Neogene of Central and South-Eastern Europe to be held on May 27th to 31st, 2024 in Podčetrtek, Slovenia and 10th European Ostracodologist’s Meeting in Catania, in September 2024.

Tamara Karan Žnidaršič
- My work is focused on the morphology, distribution, and taxonomy of the genus *Heterocypris*, Eucypridinae and Cyprinotinae and other Cyprididae as well. Work on diversity and ecology of Ostracoda in the region is continued through field research in a team that is focused on aquatic invertebrates.
- I am mentoring Jovo Pokrajac who is working on his PhD thesis on ostracod ecology.
- Our team of colleagues from University of Belgrade – Faculty of Biology and Faculty of Mining and Geology is continuing cooperation on ostracod research in the Pannonian basin and Balkan Peninsula.
- We are planning participation on the regional and European conferences, namely 10th International Workshop on the Neogene of Central and South-Eastern Europe to be held on May 27th to 31st, 2024 in Podčetrtek, Slovenia and 10th European Ostracodologist’s Meeting in Catania, in September 2024.

SLOVENIA

Natasa Mori
I am involved in Biodiversa+ Darco project (https://www.biodiversa.eu/2023/04/19/darco/) and responsible for building European Ostracoda database inhabiting groundwaters

SPAIN

Francesc Mesquita-Joanes

Marta Marchegiano
I am currently a postdoc researcher at the University of Granada (Granada, Spain) thanks to the Grant “Excelencia de la Junta de Andalucía.”

My research is focused on the use of both marine and freshwater ostracods as paleoclimatic and paleoenvironmental indicators since the Eocene.

Lately, I have worked on a novel paleothermometer that involves the use of clumped isotope technique on freshwater ostracod shells. The application of this thermometer on lacustrine sediments provides seasonal temperature and hydrological variations.

In the last years I have actively collaborated with Prof. Elsa Gliozzi (University of Roma Tre, Italy), Dr. Ilaria Mazzini (CNR, Roma, Italy), Prof. Koen Martens (Royal Belgian Institute of Natural science and University of Ghent, Belgium) and with Prof. David Horne (Emeritus Professor at Queen Mary University of London, UK).

Ongoing projects:
• Last 200,000 years of Lake Padul (Spain).
• Last 50’000 years of Lake Trasimeno (central Italy).
• Holocene record in Lake Butrint (Albania).
• Lake Izabal (Guatemala, ICDP record).
• Lake Fucino (Italy, ICDP record).
• Lake Victoria (Tanzania, ICDP record).
• Lake Turkana (Kenya, ICDP record).

Francesc Mesquita-Joanes
• Supervising Maria Bisquert-Ribes PhD thesis on exotic microcrustaceans, now in her last year. We described a new genus and species of Cyclocyprididae and reported on the native and exotic ostracod fauna of the Albufera Natural Park, resulting in two publications, the latter in collaboration with D. Horne.
• An analysis comparing the microcrustacean fauna of rice fields and more natural wetland habitats of València is ongoing.
• I continue collaborating with Juan Rueda on Ostracoda from Spain and República Dominicana, where we found a new Elpidium species.
• With Sukonthip Savatenalinton on ecology and taxonomy of Thai ostracods.
• With F. Palero on integrative taxonomy of freshwater Ostracoda using molecular techniques.
• In this line, genomic analysis of Cyprideis torosa is almost finished, with further collaboration from A. Mestre, I. Schön, and K. Martens.
• Also progressing on the description of some Leucocythere species together with J.A. Aguilar and K. Martens.
• A study on the Holocene ostracod paleolimnology of the city of Barcelona, with S. Riera, Alejandra Rodríguez, and Ana Pena is almost finished.
• A collaboration with C. Meisch and G. Rossetti on Mediterranean nonmarine ostracods is in press.
Several studies on ostracod respiration are in progress, including hypoxia stress and physiological responses to temperature and salinity, with the participation of A. Mestre, J. Cruz, F. Palero, and various undergraduate and master students.

Francisco Ruiz-Munoz
Research interests: tsunamis, environments, heavy metal pollution, sedimentology, Ostracoda, and sediments.

THAILAND
Sukonthip Savatenalinton

Anisong Chitnarin
- I have published articles on taxonomy of Paleozoic and Mesozoic ostracods from Thailand including marine Permian and Middle Triassic ostracods from central Thailand (2008-2021) and nonmarine Late Triassic and Early Jurassic ostracods from northeastern Thailand (2018, 2022).
- Collaboration with Dr. Marie-Béatrice Forel (Paris)--we just published articles on marine Triassic ostracods from central and northern Thailand (2023). With Thai micropaleontology research team, we published articles on ostracods, foraminifers, pollens from Upper Holocene clay in central Thailand (2023).
- Future projects on Paleozoic ostracods in western and southern Thailand are ongoing.
- We organized the 4th Asian Ostracod Meeting (4th AOM) in Thailand (November 2022)

Students:
- Mr. Anucha Promduang (master’s degree) Early Devonian ostracods.
- Ms. Lalita Weerachai (master’s degree) Holocene ostracods.

Sukonthip Savatenalinton
See references 2022 and new taxa sections.

TUNISIA

Rim Temani
Biostratigrapher, Geological Survey (National Office of Mines)-Tunisia
I am working as a chef engineer biostratigrapher in the geological survey of the National Office of Mines in Tunisia.

My current research focuses on Messinian, Pliocene, and Pleistocene ostracods with a special emphasis on stratigraphy, paleoenvironmental reconstruction and climatic interpretation in Tunisia and the surrounding area.

Meetings attended 2022
19th International Symposium on Ostracoda, Lyon from July 18th-22nd 2022.

TURKEY
Okan Külköylüoğlu
See papers in 2022-2023 bibliography.

Atike Nazik
I am studying ostracods from on Quaternary ostracods in Black Sea, Aegean Sea and Mediterranean regions with colleagues from Turkey, and on Devonian Ostracods from NW Anatolia and Taurides in Turkey. Recently, I am studying on Devonian ostracods from Mongolia and going on the Devonian ostracods of shallow-water section from Iran together with Dr. Peter Köningshof (Senckenberg-Research Institute and Natural History Museum).

Projects
I finished on ostracods in “Investigation of the distribution of Demirköy İğneada (Kırklareli) floodplain forests during the Holocene with the environmental condition.”

Oya Özuluğ
A thesis is being conducted with my MSc student Boshra Alibrahim on the Ostracoda fauna and physico-chemical properties of Danamandra lake (Istanbul).

Ümit Şafak
See papers in 2022-2023 bibliography.

Alaettin Tuncer
• I am preparing articles on the Miocene-Pleistocene nonmarine ostracods from the coal-bearing succession of the Yalvaç and Ilgın basins (SW Central Anatolia, Turkey).
• Together with the above mentioned investigations, I am studying sub-recent ostracod fauna of the Kızılırmak Delta Lakes (Bafra, Northern Anatolia) and Holocene ostracod fauna of Lake Mogan and Eymir (Ankara, Central Anatolia).
• I am studying the determination of the relationship between shell structure of nonmarine Ostracoda (Crustacea) with water quality, sediment type and abiotic factors.
• I am studying Neogene-Quaternary nonmarine ostracods of Dinar-Baklan Basin (SW Anatolia, Turkey) and the Late Cretaceous marine ostracods of Central Anatolia.

Meetings
I attended the following meetings in 2022:
• 23rd Paleontology-Stratigraphy Workshop with International Participation.
• ISO19: 19th International Symposium on Ostracoda.
• Pre-IAL IPA, Paleolimnology: ECR virtual meeting.
• 74th Geological Congress of Turkey with international participation.
• A workshop on Salda and Burdur Lakes with international participation.

Mehmet Yavuzatmaca
• I continue to work on the taxonomy, ecology, and distribution of nonmarine ostracods in a variety of aquatic habitats within and outside of Turkey.
• I visited the ostracod laboratory of Royal Belgian Institute of Natural Sciences (RBINS) for three weeks (from 15 May to 5 June) in 2022.

Emine Seker Zor
In 2020 I completed my PhD dissertation entitled 'Ostracods analysis of the Devonian sequences from Eastern Taurides (Sarız / Kayseri and Feke / Adana): Paleobiodiversity, paleoecology and paleogeography'.

In 2013, the name of my MSc thesis was 'The biostratigraphy and paleogeographic features of late Devonian ostracods in Istanbul (Northwest Turkey)'. Both my PhD dissertation and MSc thesis were under the supervision of Prof. Atike Nazik.

I have been studying Paleozoic ostracods since 2007.

UKRAINE

Natalia I. Dykan
Working on the research project "Revision of systematics and phylogeny of Quaternary and Recent marine podocopid and halocyprid Ostracoda (Arthropoda, Crustacea)"; systematic study
(monographic description, taxonomic revision) and phylogeny of the fossil and Recent marine, and brackish water ostracods of South Africa.

Meetings
- Participation in the International Symposium on Ostracods "Back to life" (Lyon, France, 2022); "The principles of determining taxonomic features in the fossil ostracod”, N. Dykan (the author’s innovative theoretical developments in the taxonomy of fossil and recent ostracods).
- Jahrestagung der Paläontologischen Gesellschaft vom (Institut für Geowissenschaften, Friedrich-Schiller-Universität Jena, Germany, September 2023).
- International Scientific Conference and XLI Session of the Ukrainian Paleontological Society of the NAS of Ukraine “Organic World of The Precambrian and Phanerozoic: theoretical and applied aspects of research” (IGS of the NAS of Ukraine, Kyiv, Ukraine, October 2023).


Vladimir A. Kovalenko
Ostracods: Cenozoic, Ukraine
During last years, I have been working on the topic of determination of stratigraphical borders for geological maps of the new generation. These borders were determined on the basis of ostracode fossils. Now the work is on borders from Pontian, Meotis, Sarmatian (Miocene) Regional Stages of South Ukraine.

Conferences:
- Коваленко В.А., Зубанєва Л.П. Критерії розпізнавання границь стратиграфічних підрозділів сарматського регіояруса Південної України за остракодами.
- Коваленко В.А., Зубанєва Л.П. Критерії розпізнавання границь стратиграфічних підрозділів меотичного регіояруса Південної України за остракодами.
- Коваленко В.А., Зубанєва Л.П. Критерії розпізнавання границь стратиграфічних підрозділів понтичного регіояруса Південної України за остракодами.
- Проблеми теоретичної і прикладної мінералогії, геології, металогенії, гірничодобувних регіонів. Матеріали XIII Міжнародної науково-практичної конференції. 94-101 с.

Vitaly Sinegubka
Ostracods: Upper Cretaceous, marine, Ukraine
During 2022-2023, I continued research on Ostracoda fossils from Cenomanian deposits of west Ukraine and Turonian deposits from south Ukraine. The samples were from two outcrops. The main aim was to describe fossils and the investigation of the paleoecology of Ostracoda.
- I am working on ostracode morphofunctional analysis.
• I will describe adaptation processes.
• I pay special attention to the search for juvenile forms and description of ontogenesis.

Conferences
• 11th International Cretaceous Symposium, Warsaw 2022. (Poster) General characteristics of Cenomanian-Turonian Fossil Ostracods in Ukraine.
• Organic world of the Precambrian and Phanerozoic: theoretical and applied aspects of research. XLI Session of the Ukrainian Paleontological Society of the NAS of Ukraine. The evolutionary trend of the development of ostracods of the genus Cythereis at the border between the Cenomanian and the Turonian.

Olena Uzun
• I work at the Institute of Marine Biology of the National Academy of Sciences of Ukraine (Odesa, Ukraine). My research focuses on the ecology and biodiversity of extant marine ostracods as a component of meiofaunal assemblages (benthic organisms with a body size up to 1 mm). I am conducting my research in the northwestern part of the Black Sea. In 2022, the results of a study on the diversity of ostracods on different types of substrates in the rocky coastal marine protected area of Snake Island were published (DOI: 10.15407/zoo2022.03.171).
• Since March 2022, I am a visiting the German Centre for Marine Biodiversity Research (DZMB), Senckenberg am Meer (Wilhelmshaven, Germany), where together with colleagues we started a study on the diversity of meiobenthic ostracods from the southern part of the North Sea using morphological identifications and genetic variability (~680 bp fragment of the COI gene).

UNITED KINGDOM

John Athersuch
• I started a new company - BioChron Ltd - in 2020. I work on geohazard projects worldwide and geoarchaeological projects (mostly in UK) using ostracods and foraminifera for stratigraphic resolution and palaeoenvironmental interpretations.
• Minor contributions as co-author to several archaeological papers.

Michael Ayress
Little news from me regarding research as it has been a hectic few years with offshore biostratigraphy, routine work, and mentoring. I maintain interest in ostracods and hope to produce something soon regarding Early Cretaceous nonmarine ostracods off Brazil.
Ray Bate
I retired in 1989 so no new activity to report.

Ian Boomer
- Investigating relationship between ostracod assemblages and water chemistry in UK wetlands overlying salt geology.
- Using ostracods and foraminifers from Museum specimens of large marine vertebrates to help provide age and location data for those specimens.

Jonathan Holmes
My research continues to be concerned with the reconstruction and understanding of late Pleistocene and Holocene environments, human–climate interactions and data–model comparisons. It falls into three major themes, all of which include ostracods to some degree:

- Climate variability in low-latitude regions (Northern Neotropics, North and West Africa, Western China and Central Asia).
- Rapid climate change events across Europe.
- Methodological developments in the application of carbonate nonmarine microfossils and microfossil geochemistry to palaeoclimate reconstruction.

At the time of writing (December 2023) I am completing/revising papers on:
- Ostracod assemblages from the past 1800 years from Jamaican lake sediments.
- Stable-isotope records from European lakes and abrupt Holocene climate change.

Dave Horne
- In retirement (since 2020) I continue my research as an Emeritus Professor of Queen Mary University of London and a Scientific associate of The Natural History Museum in London.
- Accompanied by Alan Lord (Senckenberg Forschungsinstitut Frankfurt, Germany) and Citizen Scientist Andrew Snelling (Aldeburgh, UK) in the field I continue to study British Pleistocene nonmarine ostracods and use them to reconstruct palaeotemperature ranges, with a particular focus on the MIS11 lacustrine fauna at Marks Tey in SE England, involving numerous and
enjoyable fieldwork days at the site; this collaboration has included a contribution to a multi-
author paper on East Anglian (UK) mid-late Pleistocene fluvial archives (Allen and others, 2022).

- A major focus of my research is collaboration with Alison J. Smith (Kent State University, Ohio, USA) and Robin J. Smith (Lake Biwa Museum, Japan) to prepare datasets of living non-
marine ostracod distribution for upload to the Neotoma Paleoecology Database (neotomadb.org). This involves taxonomic harmonisation, where possible, of North American, European, and East Asian datasets, my contribution being derived from the NODE database (Non-marine Ostracod Distribution in Europe). We are aiming for these datasets to be publicly accessible via Neotoma some time in 2024 (see Huang and others, 2022).

- At the Natural History Museum in London, Giles Miller (Micropalaeontology Curator) and I hosted a visit by Maria Bisquert-Ribes (University of Valencia, Spain) to study nonmarine ostracod collections in support of her work on exotic (and potentially invasive) species in rice fields (Bisquert-Ribes and others, 2023).

- I have contributed to publications by Chinese colleagues (Wang, H., and others, 2022; Wang, Q, and others, 2022) including a paper on the spectacular mid-Cretaceous amber preserved ostracods from Myanmar (Wang, H., and others, 2022).

- In a publication featuring beautiful new illustrations of Brazilian Early Cretaceous “pre-salt” non-marine ostracods originally described by Wicher, Krömmelbein, and Krömmelbein and Weber, my wife Sarah and I contributed English translations of the original German diagnoses (Bate and others, 2022).

- Collaboration with my former PhD student Michaela Radl (now based in Vienna, Austria) together with Cristina Cabral and Francisco Fatela (University of Lisbon, Portugal) culminated in a publication on saltmarsh ostracods of European Atlantic and North Sea coasts (Horne and others, 2022).

- I contributed to a publication by my former PhD student Lucy Roberts (now a lecturer at University College London) reconstructing storm-surge salinity events with ostracod shell chemistry (Roberts and others, 2022).

- Collaboration with Dan Danielopol (Graz, Austria), Alan Lord (Frankfurt, Germany) Cristina Cabral (Lisbon, Portugal) and Tadeusz Namiotko (Gdansk, Poland) on taxonomic revisions has culminated in publications on Fabaeformiscandona (balatonica and levanderi) and Candoniella (Danielopol and others, 2022), Microceratina (Danielopol and others, 2023) and Eucytherura submitted (Horne and Lord in review).

- In March 2022 I attended (online) a Geological Society of London meeting on Ecological Uniformitarianism and became interested in this subject. I was unable to go in person to the ISO in Lyon in July 2022, but I attended online and gave a presentation on “Niche stability or lability in Cytherissa lacustris? A test case for ecological uniformitarianism in Ostracoda,” and in November 2023 I presented a talk at the Annual Conference of The Micropalaeontological Society in Southampton (UK) entitled: “Niche stability vs niche lability of Quaternary nonmarine ostracods: implications for palaeoenvironmental reconstruction and conservation biology.” (see abstracts). Developing these ideas further, I will be a speaker at an online conference hosted by the Palaeontological Association, 2–3 July 2024: Ecological uniformitarianism – help or hindrance to palaeoecology, palaeoclimatology and conservation biology? Details of the meeting can be found at: https://www.palass.org/meetings-events/ecological-uniformitarianism
**Michael Keen**
- I am now retired and am taking the opportunity to write up some of the ostracod material that has accumulated over the years.
- I attended the ISO meeting in Lyon in July 2022 where I gave a presentation on Early Eocene *Echinocythereis* species from England, Belgium, and northern France. I have subsequently been writing this as a paper and visited the Natural History Museum in London to deposit the material. Thanks to a lot of help from Giles Miller at the museum I was able to examine *Echinocythereis* material from the Dennis Curry collection, which Giles helpfully photographed for me.
- I have completed a collaboration with Andy Racey on the late Ypresian of Oman, where I have described the ostracods. This was a study which I completed in 1997! Fortunately (or with a lot of luck) I still had all the material, photographs, etc., at hand! - but not the text which was stored on 3.5 inch floppy discs no longer accessible to me. Again, luckily, Andy had the text on a master copy.
- I finally retired from Glasgow University at the end of the covid pandemic, so longer have a university email address.

**David Siveter**
My research during 2021-23 focused on three topics:
- Silurian myodocope ostracod faunas from Europe and elsewhere (collaborators: Vincent Perrier, Lyon University, and Mark Williams, Leicester University).
- Silurian beyrichiacean ostracods from Britain.
- Research on exceptionally preserved ostracods, other arthropods and invertebrates from the Silurian Herefordshire, UK, Lagerstätte (together with Derek Siveter, Oxford; Derek Briggs, Yale; and Mark Sutton, Imperial College, London).

**UNITED STATES**

**Anne Cohen**

**Thomas Cronin**
- Hosting Ilaria Mazzini and post doc Roberta Pasini for work on IODP 381 Gulf of Corinth sea level reconstruction [see Mazzini and others, 2023 *Quat. Sci Reviews*].
• Collaborating with Dr. H.-H. M Huang and Curtis Deutsch of Princeton on climate, temperature, oxygen impacts on *Krithe* body size in Arctic Ocean and North Atlantic [IODP 397].

• Curating faunal slides from 60 years of USGS ostracode research by Hazel, Cronin, Brouwers [and the late Bill Briggs, UC Boulder] for eventual accession to U.S. Museum Natural History.

**Brandon Curry**

I am in the throes of retirement... not quite there, but definitely starting to pack my bags.

I have been helping Andrew Anderson and Alison Smith with programming issues involving NEOTOMA, the cloud-based repository for anything paleo (Williams and others, 2020). Alison Smith may have revealed all this, but we have uploaded all of Denis Delorme’s Canadian ostracode and environmental/chemical data to NEOTOMA... this in addition to Rick Forester and Alison Smith-led NANODe (consisting of sites largely from the lower forty-eight states). The combined database (NACODE) has about 7,500 sites in North America sans Mexico. Basically, this means the data presented in Curry and others (2012) is now available for general consumption. Andrew Anderson and I worked on a paper, now in review, regarding the hydroclimate of the last glacial maximum using analogs from NACODE. Andrew wrote programs in python to harness NACODE. Our new results say things were warmer and wetter than previously estimated from either pollen, insects, terrestrial gastropods, and... yes... ostracodes, but an earlier iteration that included only Canadian data. I am prodding Andrew to write his program in a more formal venue, although I am sure he would be happy to share what he has done if you are interested. Like some European databases (I am looking at you, Paco), NACODE includes water chemistry data. The next giant step will be to integrate other proxies with ostracodes, hopefully from the same record, to really harness the potential or shortcomings of analogs.

I am co-advising a PhD student Aidan Burdick at Northwestern University. His faculty advisor is Yarrow Axford, and his concentration is using ostracode autecology and shell isotope chemistry to reconstruct hydrochemical and climatic signals during the Younger Dryas and early Holocene. His pre-thesis project may involve a deeper dive into the post settlement ostracode record from Crystal Lake, McHenry County, Illinois.

The recently accepted paper in *GSA Bulletin* is all about geolacustrine records, but sadly ostracodes do not play a role.

Possibly of interest to folks is that I will be working with Craig Lundstrom (Geology, UIUC) using his laser ablation ICP-MS system to rapidly obtain trace element data from ostracode valves. This is not new, I realize, but we will be trying this with thin-shelled freshwater ostracodes. Fingers crossed that double sticky tape will hold things in place while the laser beam burrows through the valves. The process may be so “messy” that any partitioning of elements which was brilliantly described by Patrick De Deckker, will be obviated by near total consumption of the shell (by a really fat lazy laser beam). If this makes it sound like I do not know what I am doing, I am guilty as charged. The more interesting story from the record I am interested in is Sr/Ca. Mg/Ca values may help us figure out if we have made a reasonable “hit” with the laser beam.
Laura Gemery
My research at the U.S. Geological Survey continues to be focused on the reconstruction and understanding of Holocene Arctic paleoceanography using ostracode and foraminifera faunal assemblages and shell geochemistry.

I am involved in a new project with Dave Horne and Thomas Cronin and colleagues, “Assessing Arctic Ocean acidification in a warming climate with ostracodes”: The increasing uptake of CO₂ by the Arctic Ocean leads to ocean acidification and may cause ecosystem and socio-economic stress within and beyond the Arctic region. Ocean acidification in the Arctic is commonly attributed to the rise in atmospheric CO₂. Arctic warming is changing the advection and delivery of terrestrial organic carbon from rivers and collapsing permafrost to the sea, which may exacerbate ocean acidification by additional supply of CO₂ from mineralized terrestrial carbon. In this project, we investigate Arctic Ocean acidification from proxies in sediment cores during past climate change, such as the last deglaciation or past glacial-interglacial cycles. We will study modern and past changes in ocean pH and CO₂ using observational datasets and shell density measurements of ostracodes via micro-CT. Through this work, we aim to expand our understanding of the natural variability of the Arctic Ocean carbonate system during past and modern changes.

At the time of writing (September 2023) I am completing papers with colleagues:

Jack Holden
New email is omakjackholden@gmail.com
Gene Hunt
I am in the final year of being chair of my department, and I am looking forward to getting back into research on the evolution of the ostracode fauna of the US Coastal Plain, focusing on the Cretaceous and Paleogene.

Meeting
2022 International Symposium on Ostracoda, in Lyon.

Rosalie F. Maddocks
I continue to work on the taxonomy of *Bairdoppilata* and other Bairdiidae in the Caribbean and Gulf of Mexico.

T. Markham Puckett
I have just had a paper accepted by the *Journal of African Earth Sciences* entitled “Optimized Event Stratigraphy of Cenomanian-Turonian Ostracods of North Africa and the Middle East.” I worked with a Ph.D. student from Algeria, Garmia Bekhouche, on this project, who visited USM for four months. We used the software packages CONMAN and CONOP (Constrained Optimism) and coded all published and unpublished stratigraphic occurrences of ostracods from the Cenomanian and Turonian of Morocco, Algeria, Tunisia, Egypt, and the Southern Levant, analyzing them separately and unitedly. We subdivided the stratigraphic sections based on correlated sequence boundaries and non-taxonomic events, which integrated the sequence stratigraphy with the biostratigraphic ranges of the ostracods. The composite range chart was then used to calculate diversity through time.

Abstract:
During the Cenomanian and Turonian, high eustatic sea levels combined with subsidence of North Africa resulted in widespread marine inundation and the evolution of an indigenous benthic fauna, including many endemic ostracod taxa. This is the first study to combine all information on the ranges of Cenomanian and Turonian ostracods and associated planktonic foraminifera across North Africa and the Middle East into a single event-stratigraphic composite scale. Information includes the ranges of the taxa in measured sections and wells in published articles and in unpublished theses and dissertations. Nine events are tracked across the region and are used to subdivide sections and wells into subsections whose boundaries separate older sections below from younger sections above. Pseudosections were coded to represent the older and younger surfaces of the events that are separated by a very thin interval. The subsections provide a geologic framework of ordered packages of sections and associated biologic events. In this methodology, the sequence stratigraphy is an integral part of the biostratigraphic analysis. This study includes 121 sections and wells that were subdivided into 218 sections and subsections, including the nine pseudosections, the first and last occurrences of 189 taxa, and eighteen unpaired events, which resulted in a total of 396 events. This information was coded into software that uses a heuristic
algorithm to optimize the sequence of events. The resulting composite was used to correlate
the sections and subsections, produce ranges charts, and calculate diversity of ostracods. Computer
runs were made for each of the four study areas (Morocco and western Algeria, eastern Algeria
and Tunisia, Egypt, and the Southern Levant) separately and unitedly. Run separately, diversity
peaks reflect biases of the local available information, but the combined results show steady rates
of evolution and extinction that produced a peak in diversity of sixty-six species in the late
Cenomanian. There are no mass extinction events. The continued faunal turnover also indicates
that there is no community stasis in the Cenomanian-Turonian ostracods of the region.

I am using CONOP, and the methods described in the JAES article to date the marine Upper
Cretaceous deposits (Santonian-Maastrichtian) of the northern Gulf Coast.

Gene Hunt and I published a paper as a special issue of *Micropaleontology* that described a new
subfamily (Anticytherideinae), four new genera (*Asculdoracythereis*, *Frodocythereis*,
*Laevipellacythereis*, and *Tumulocythereis*) and eleven new species. The reference is: Puckett, Terry
Markham, and Hunt, Gene, 2022, New taxa of marine ostracods (Anticytherideinae, n. subfam.)
from the Upper Cretaceous (Campanian and Maastrichtian) of Mississippi, Alabama, and

Abstract:
This contribution describes new species, genera, and a subfamily (Anticytherideinae) of ostracods
from the Upper Cretaceous (mid-late Campanian-Maastrichtian) marine deposits of the eastern
flank of the Mississippi Embayment. New taxa assigned to the subfamily include *Anticythereis
dorsennus* and *A. slipperi*; the new genus *Asculdoracythereis*, which includes the new species *As.
asculda*, *As. invicta*, and *As. pseudoalabamensis*; the new genus *Frodocythereis*, which includes
the new species *F. frodoi*; the new genus *Laevipellacythereis*, which includes the new species *L.
colossus* and *L. laevipellis*; and the new genus *Tumulocythereis*, which includes the new species *T.
incompta*, *T. tiberti*, and *T. tumulus*. Previously described species assigned to the genus
*Anticythereis* are re-evaluated, some of which are assigned to one of the new genera.
Synapomorphic characters of the new subfamily include a combination of pronounced external
post-ocular sulcus with corresponding pair of internal, rimmed inverted platforms and a distinctive
“yin-yang” adductor muscle scar pattern. The taxa display remarkably rapid evolution. The earliest
species (*Anticythereis* sp. 1) occurs in the planktonic foraminiferal *Radotruncana calcarata*
Taxon Range Zone of mid- to late Campanian age and by the end of the Maastrichtian there are more than
twenty species. Most species have localized occurrences, including several that occur at a single
outcrop. Although species are found on the eastern flank of the Mississippi Embayment and the
Atlantic Coastal Plain, none have been observed on the western flank of the Mississippi
Embayment. Species have been assigned to the genus *Anticythereis* from other continents (South
America, Europe, and Africa), but those taxa lack distinctive features of the Anticytherideinae,
which is endemic to North America. The group became extinct at the Cretaceous-Paleogene
boundary.

I gave a talk at the Northeastern/Southeastern Geological Society of America meeting entitled
“Stratigraphic framework of the marine Upper Cretaceous Deposits of the Eastern Flank of the
Mississippi Embayment.” This study used the stratigraphic occurrences of ostracods combined
with lithostratigraphic correlations to determine the age of the Coon Creek Formation (Campanian

I am working with an undergraduate student on the faunal recovery from the K/Pg extinction event based on a section in western Alabama.

An incoming graduate student, Denali John, is beginning work on her thesis topic of dating mosasaur beds in Texas using ostracods. Our initial plan is to combine all biostratigraphic information on early Late Cretaceous ostracods in the region using CONOP.

**Alison Smith**

- During 2022-23, My research activities continue to focus on the Neotoma database (www.neotomadb.org), working with Dave Horne and Robin Smith on modern distributions of nonmarine taxa in western Europe and Japan and areas of eastern Asia.
- I continue to work on an ICDP planning project on the Pliocene Lakes of western North America. The workshop report was published this year in Scientific Drilling, and we are planning geophysical surveys of western sites in summer of 2024.
- I have been working on a Pleistocene record in White Sands National Park, along with Dave Horne, Jonathan Holmes, and Ian Boomer, and wrapped up a Florida Keys biogeography project with Larry Hribar (Director of Research, Florida Keys Mosquito Control District)-the first of the publications is a natural history note on this project and is in press with Florida Scientist (Hribar and others, in press), and reports on nonmarine Ostracoda collected in the Keys and in the mainland of Florida.

**Anna Stepanova**

I have been working on developing educational software FossilSketch to teach undergraduate micropaleontology (Ostracoda and Foraminifera). Deployment of software in the classroom resulted in a measurable increase in student scores and positive attitudes (Stepanova and others, 2023)

In the next stage of this project, we plan to develop a collaborative interface for instructors to be able to upload their materials and collaborate through FossilSketch.

**Donald Van Nieuwenhuise**

I am doing little with ostracodes at present. I am teaching Applied Biostratigraphy and Petroleum Geology at the University of Houston. Earlier this year I resurrected the draft of Cypris 2001-2002, numbers 19-20. This draft was edited and formatted and is on TMS webpage with all of the other archival issues. 2001-2002 was co-edited by me and Rosalie Maddocks.

**Carlos Andrés Alvarez Zarikian**
Primary activity:
Implemented Iberian Margin Paleoclimate Expedition 397 of the International Ocean Discovery Program (11 October–11 December 2022).

I continue conducting research on deep sea ostracods. Primary ongoing projects include:

- Ostracod response to changes in ocean circulation and the oxygen minimum zone in the northern Indian Ocean associated with intensification of the South Asian Monsoon (IODP sites U1467, U1471 in the Inner Sea of the Maldives. Collaborators: Montserrat Alonso-Garcia (University of Salamanca and Instituto Português do Mar e da Atmosfera (IPMA), Moriaki Yasuhara (University of Hong Kong), Huai-Hsuan M. Huang (Princeton University), among others.

- Taxonomic description of new ostracod species from the Maldives. Collaborators: Simone Brandão (Universidade Federal Rural de Pernambuco, Brazil), Jasmin Stimpfle (Alfred Wegener Institute, Germany) and others.

- Dynamics of the Mediterranean Outflow Water (MOW) in the Gulf of Cadiz since the Last Glacial Maximum (IODP Site U1390). Collaborators: Emmanuelle Ducassou, Paul Moal-Darrigade and Pierre Carbonel (University of Bordeaux).

- Late Miocene to Pliocene (IODP Site U1541) and late Pleistocene (IODP Site U1542) deep sea Ostracoda from the South Pacific Ocean sector of the Southern Ocean and their relationship to regional water masses (Lower Circumpolar Deep Water (LCDW), Antarctic Intermediate Water (AAIW) and Circumpolar Deep Water (CDW)) and the regional oxygen minimum zone. IODP Sites U1541 in the central South Pacific (3604 mbsl) and U1542 (1101 mbsl) along the Chilean margin. Main collaborator: Raj Singh (Indian Institute of Technology Bhubaneswar).

- Middle to late Pleistocene biotic response to variability Mediterranean Outflow Water and deep bottom water ventilation on the Iberian Margin (IODP Sites U1587 and U1588). Collaborators: Huai-Hsuan M. Huang (Princeton University), Marion Peral (University of Bordeaux).

Meetings
19th International Symposium on Ostracoda; Lyon, France; July 18-25, 2022

Meeting presentations
Mediterranean Outflow Water Variability in the Gulf of Cadiz – Ostracod evidence from IODP Site U1390. 19th International Symposium on Ostracoda; Lyon, France; July 18-25, 2022

Abstract:
We studied the ostracod assemblages from IODP Site U1390 in the central middle slope of the Gulf of Cadiz to reconstruct past changes in Mediterranean Outflow Water (MOW) since the Last Glacial Maximum (LGM) and through the Holocene. The site lies at ~1000 m of water depth on the sheeted drifts of a contourite depositional system and offers particularly high sedimentation rates that allows for high resolution paleoceanographic studies. Therefore, it is ideal for reconstructing MOW variability across this transition. In this study, we combine the analysis of ostracod assemblages and environmental indicator species records with grain-size and benthic foraminifer δ18O and δ13C data to evaluate MOW dynamics, bottom water oxygenation and nutrient availability. A copious ostracod assemblage shows changes in composition that correspond to well-known events of this period such as the LGM, the Younger Dryas, Heinrich
stadial, and the Bölling-Allerød, and it is markedly reduced during the deposition of Sapropel 1 in the Mediterranean. Species such as *Krithe keyi* and *Rectobuntonia miranda* are interpreted to be indicative of presence of MOW at the bottom of the Gulf of Cadiz during the Holocene. We will also show and discuss the Site U1390 ostracod assemblage results in relation to those from Cores MD99-2337 (598m) and CADKS24 (1,316m) to reconstruct the vertical shifts of the MOW and paleoenvironmental conditions in the region.


**Abstract:**

We present a middle through late Pleistocene record of ostracods from the northern Indian Ocean derived from sediment cores taken at IODP Site U1467. The site lies at 487 m water depth in the Inner Sea of the Maldives, an ideal place for studying the effects of the South Asian Monsoon (SAM) system on primary productivity, intermediate depth ocean circulation, and the regional oxygen minimum zone (OMZ). The Inner Sea acts as a natural sediment trap that has undergone continuous sedimentation for millions of years with minor terrestrial influence. Our record spans from Marine Isotope Stage (MIS) 35 to the present, covering the mid-Pleistocene transition (1.2–0.6 Ma) and the Mid-Brunhes Event (~0.48 Ma) the time when ice age cycles transitioned from occurring every 40,000 years to 100,000 years. The ostracod data is interpreted alongside the existing datasets from the same site of sedimentological (grain-size) and XRF-elemental analyses, and new organic biomarker data from Site U1467. These datasets support the paleoenvironmental interpretation of the ostracod assemblages. Ostracods are abundant and diverse, displaying a prominent change in faunal composition at the MBE related to the increase in the amplitude of glacial-interglacial cycles, which deeply affected the monsoon system and thereby the past oceanographic conditions of the Maldives Inner Sea. Furthermore, ostracods exhibit distinctly different assemblages across glacial-interglacial cycles, particularly after the MBE, and these changes are interpreted to correspond to variability of the OMZ. Glacial periods are characterized by ostracod indicators of well-oxygenated bottom water due to the intensification of the winter monsoon and the contraction of the OMZ. The presence of deep-water genera *Henryhowella, Agrenocythere* and *Bradleya* during glacials suggests a cold, well oxygenated southern sourced water mass (i.e., Antarctic Intermediate Water and/or Subantarctic Mode water) bathed the Maldives Inner Sea during glacial periods. In contrast, interglacial stages are characterized by ostracod genera (such as *Argilloecia, Parakrithe, Paracypris*, and *Loxoconcha*) and biomarker data that reflect low-oxygen conditions and sluggish bottom water circulation pointing to an expansion of the regional OMZ.
MEETINGS

10th European Ostracodologists’ Meeting
September 2024, Catania University, Italy

Dear Ostraconers,

I am sending this email on behalf of the organizing committee of the 10th EOM that will take place September 16-20, 2024, in Catania, Sicily. We would like to involve not only the European countries but all the circum-Mediterranean countries, Sicily being in the center of the Mediterranean.

We would like to ask the regional representatives of the countries listed below to gather their community and to propose to the organizing committee one member to be included in the scientific committee of the congress:
Albania, Andorra, Armenia, Austria, Azerbaijan, Bosnia-Herzegovina, Belgio, Bulgaria, Croatia, Cipro, Danimarca, Estonia, Finlandia, Francia, Georgia, Germania, Grecia, Islanda, Irlanda, Italia, Lettonia, Liechtenstein, Lituania, Lussemburgo, ex Republica Yugoslava di Macedonia, Malta, Moldova, Monaco, Montenegro, Norvegia, Paesi Bassi, Polonia, Portogallo, Regno Unito, Romania, Repubblica Ceca, Russia, San Marino, Serbia, Slovacchia, Slovenia, Spagna, Svezia, Svizzera, Turchia, Ukraina, Ungheria, Marocco, Algeria, Tunisia, Libia, Egitto, Israel, Giordania, Libano, Siria.

The role of the scientific committee in 10th EOM will be mainly to review and select abstract presentations, support the organizing committee to finalize the scientific program schedule. Please let us know your answer by March 01, 2023.

The organizing committee:  F. Sciuto, E. Gliozzi, I. Mazzini, G.P. Rossetti, G. Salvi

The 1st Circular can be downloaded here:
G2JNhcsaTEAMUrcyG4OlWwnOt2op6rQ_WBYpYEHoCbLfxtIq1k73YTHEs%24&data=05%7C01%7C9f698db5491a436f962d08dce9d20b68%7C84df9e7fe9f640af6b4350aaaaa
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wMDAiLCJQIjoiV2luMzllLCJBTiI6Mn0%3D%7C000%7C%7C%7C%7C&data=HA6v4iuTmaFHTyz6J7hP6G8ujke4uWhsdXyjBA%2BHV30%3D&reserved=0
All information can also be found on Facebook and Twitter:
We are setting up a website and will launch it in the next days. What you need to do now is to save the dates (16-20 September 2023) and fill in (until the end of November) the Pre-Registration Form, it will take you less than half a minute:

https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Furldefense.com%2Fv3%2F___https%3A%2F%2Ftwitter.com%2FOstracodEom10__%3B!!LkSTlj0I!GoHEKnw4K7uJOgUgrQBVM9EWNUN0DpIG2JNhcsaTEAMUrcyG4OIWwnOt2op6rQ_WBYpYEHoCblxfltq1kjyeYVks%24&data=05%7C01%7C%7C9f698db5491a436f962d08dbc9d20b68%7C84df9e7fe9f640a4b988a3b8f4%7C638325676190939771%7CUnknown%7CTWFpbGZsb3d8eyJWljiomC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=mHbcBGa3E07c0EVLK5m4gpiFKONNiS0jXzP67uofELQ%3D&reserved=0

We are looking forward to seeing you all next year in Catania!

**Cristianini Trescastro Bergue**

The **third meeting of Brazilian Ostracodologists** (3rd ROB) was held on 03 to 06 October 2023 in Recife.

**Ilaria Mazzini, Rome**

IRGO secretary 2017-2022

**The 19th International Symposium on Ostracoda (19th ISO)**
The 19th International Symposium on Ostracoda was organized by Marie-Béatrice Forel, Vincent Perrier and Sylvie Crasquin at the University Claude Bernard, Lyon (France) from July 18th to 22nd 2022. The organizers chose as theme of the symposium “Back to life” as a wish after years of pandemic. In fact, the best fitting theme would have been “Against all odds” because the organizers had to deal with a global pandemic, a war, one of the worst heat waves of the 21st century and several air traffic strikes. To cope with all these issues, they decided to offer the free attendance online. Thus, the symposium gathered together research scientists from all continents, from disciplines ranging from biology to geology, and with expertise on all geological periods from the Cambrian to the present. The 19th ISO has been the first hybrid conference in the history of ostracodology!

On Monday, the scientific sessions started at the Amphitheatre Dépéret, Building Charles Darwin. Prof. Emanuela Mattioli welcomed all of us as micropalaeontologist and former Head of the Geology Department of the University Lyon 1, followed by the Chair of IRGO, Moriaki Yasuhara, and the organizer of the conference and vice Chair of IRGO, Vincent Perrier. On Monday, twenty-three of the fifty-one oral presentations were presented in the session “Origin and evolution of ostracods: Crustacean and ostracod evolution, origin and taxonomy of fossil ostracods.” The presentations were both live and recorded in advance by the ostracodologists attending online. The lunch at the University “staff restaurant” was a nice surprise: well organized, fast, and delicious!

The icebreaker party that followed the first day of talks was a reunion of good friends, finally gathering in person in a relaxed atmosphere full of expectations for the forthcoming days.

On Tuesday, the last five talks of the first session started the morning, followed by twenty one presentations within the sessions “Pleistocene non-marine Ostracoda,” “Ostracod biogeography and biodiversity: studies on the geographical and temporal distribution of fossil and Recent ostracods” and “Ecology and biology of Recent ostracods: new advances in the ecology and biology of Recent marine and freshwater ostracods.” During coffee breaks we had the opportunity to visit the poster session and check the forty-seven posters while enjoying pastries, coffee, and fresh juices. There was also the opportunity to buy ostracod treasures at the O-bazaar in support of IRGO: magnets, key holders, crocheted ostracods together with literature brought by many colleagues.

On Wednesday, the Mid-Symposium excursion took place. We sampled one paleo meander of the Rhône River under the lead of the charming Emeritus Professor Pierre Marmonier. His enthusiasm was so contagious that we found many living ostracods, more than expected. We had our packed lunch in the medieval walled village of Pérouges, one of the most beautiful villages of France. The ostracodologist “invasion” of the village lasted about one hour because we had to end our trip at the Hameau Duboeuf. It is Europe’s first wine theme park that hosts a collection of objects related to the history of winemaking but also interesting videos and a spectacular dynamic cinema simulator of a flight over the landscape of the Beaujolais and Mâconnais regions. The wine tasting ended a wonderful mid symposium fieldtrip.

Thursday saw all the participants back to the Amphitheatre Dépéret for the last day of scientific presentations. Twenty-five talks within the sessions “Ecology and biology of Recent ostracods: new advances in the ecology and biology of Recent marine and freshwater ostracods,” “Ostracods
in the Anthropocene: Ostracods as proxies for environmental monitoring and paleoenvironmental reconstruction” and “Methods in ostracodology: new or advanced methods for the study of ostracods.” The day ended with the social dinner at Bocuse brasserie le Nord, the first of Bocuse brasseries opened in 1994, for a tasting of the traditional dishes and wines of Lyon. It was also Vincent’s birthday, so we had double reasons to celebrate!

Although the symposium itself, with the oral and poster presentations, ended on Thursday, the activities continued on Friday with two workshops: “Towards a standardized protocol in sampling and processing ostracods from soft bottom habitats,” organized by Peter Frenzel and Anna Pint and “The future of Ostracodology” organized by Marie-Béatrice Forel, Cristianini Trecastro Bergue and Moriaki Yasuhara. Such workshops are ideal for boosting new collaborations, projects, and ideas!

After lunch, the IRGO business meeting took place. The IRGO committee considers the “Order of the Amphidont Hinge” as a recognition of research contributions characterized by both excellence and influence. The recipient of the first Order of the Amphidont Hinge was Professor David John Siveter. Vincent Perrier gave a laudation to David Siveter, highlighting his amazing research on Paleozoic ostracods all over the world and the celebrating his career. The second Order of the Amphidont Hinge was awarded to Professor Dan Danielopol. Angel Baltanas gave a laudation to Dan Danielopol (recorded video), celebrating his long career and commitment in advancing the knowledge about limnology, groundwater ecology and ostracodology, including morphometry. The best poster award for a young researcher supported by IRGO (€ 100) was awarded to Kai Pfennings (Marine Research Department, Senckenberg am Meer, Germany) on 3D traits in ostracod shells. The Sylvester-Bradley Award for the best oral presentation supported by TMS (€ 200) was awarded to Mauricio Bonilla-Flores (Technische Universität Braunschweig, Germany) for his talk on Tonnacypris.

Finally, the awardees of the three SF*IRGO travel grants (€ 1000 each) were asked on stage for recognition:
Maria Bisquert Ribes (University of Valencia, Spain)
Valentini Navrozidou (Aristotle University of Thessaloniki, Greece)
Maria Tsoni (University of Patras, Greece).

The new IRGO officers were elected, and the new board officially installed (Chair Vincent Perrier; Vice-Chair Danpeng Xi; Secretary Mark Warne; Treasurer Renate Matzke-Karasz; Communication officer Simone Brandao; Past chair Moriaki Yasuhara) and the location of the ISO20 has been voted for. In four years,’ time, we will meet in Bejing (China), invited by our colleagues Danpeng Xi and Moriaki Yasuhara.

The 3-day long post-symposium field trip was devoted to the sampling of living ostracods in Rhone River and in the wetlands of the Tour du Valat and the Mas du Sonnailler (rice fields) in the National Park of the Camargue.

Many thanks to Marie-Béatrice Forel, Vincent Perrier and their team for organizing such a successful symposium against all odds, moderating discussions, and coping with audio/video issues never losing your kindness and the smile on your face!
Summary of past meetings information
The XXI INQUA Congress took place in Rome (Italy) at the Sapienza University Campus, July 14-20, 2023, on the 70th anniversary of the IV INQUA Congress. The congress was inaugurated by the President of the Italian Republic and the Minister of University and Research in a formal ceremony held in the auditorium of the Sapienza University, thus recognizing the social importance of Quaternary studies to "unravel the recent geological past to understand the present natural process and shape a long-lasting sustainable future" (this was the banner displayed at the congress entrance). The fourteen parallel sessions (for a total of 142 sessions) were well-attended by about 3,000 researchers. Among these, many ostracod researchers attended the congress, and fifty-nine presentations were dealing with ostracod research highlighting the importance it has within Quaternary sciences.

Before the Congress, the ESO school took place at Sapienza University with about twenty attendees from all over the world.

TMS Annual Conference November 2023
David J. Horne (Queen Mary University of London / The Natural History Museum)
Niche stability vs niche lability of Quaternary non-marine ostracods: implications for palaeoenvironmental reconstruction and conservation biology.
Proxy-based palaeoclimatic reconstructions of early hominin occupations of Britain assume ecological stability of proxy taxa over the past 0.8 million years. This ecological uniformitarian approach, routinely applied to proxies including beetles, chironomids, plant macrofossils and non-marine ostracods, should be considered critically. In conservation biology, studies of invasive species indicate ecological lability (niche shifting) in a range of organisms including ostracods, not only facilitating invasions but also enabling native taxa to mitigate impacts of invasive competition. Linking these conservation and palaeoecological aspects is the question of how to determine whether a species is native or invasive, to which the fossil record may hold answers. The Holarctic lacustrine species Cytherissa lacustris (Sars, 1863) is a test case for ecological stability in Quaternary Ostracoda. Originating in the Pliocene, it achieved a Holarctic distribution in the Pleistocene. Although regarded as a cold (or at least cool) palaeoclimate indicator, its Nearctic and Palaearctic populations have slightly different climatic niches suggesting a degree of ecological lability. Selected examples of potentially invasive nonmarine ostracods in Europe raise interesting questions about anthropogenic vs “natural” range changes. Another Holarctic species, Ilyocypris salebrosa Stepanaitys, 1960, was thought to be extinct in NW Europe despite Pleistocene (MIS9) interglacial fossil records but is now known to inhabit southern European areas with slightly warmer summers. If found living in Britain in future, would it be regarded as an invasive or a sentinel of global warming? The European rarity of Potamocypris humilis (Sars, 1924) might suggest it to be an invasive introduced from southern Africa where it was first
described, but the hypothesis that its occurrences (linked by migration routes of the Arctic Tern) are “natural” is supported by a British Pleistocene (MIS11) fossil record.

David Horne
I would like to draw attention to a 2-day online conference on Ecological Uniformitarianism that will be hosted by the Palaeontological Association in July 2024 and may be of interest. Details can be found at:


Note that the online registration fee is not expensive!

Dan L. Danielopol
The 14th Romanian Symposium on Palaeontology (14-15 September 2023) held at the University of Bucharest (Organizers Mihaela Melinte-Dobrinescu, Iuliana Lazar, Marius Stoica Zoltán Csiki-Sava), provided opportunities to present aspects of ostracodology. The abstract book of the 2023-Romanian Symposium is available in pdf format on the webpage of the Romanian Society of Paleontology (https://geo-paleontologica.org/en/abstract-book/publications/).

Abstracts of the following contributions deal with ostracod information:

- Antoniade, C.–Microfossil assemblages of the Pliocene deposits from Southern Dobrogea, p. 19.
- Danielopol, D.L.–“Species-talk” perception, a way to reduce taxonomic uncertainties, p. 45.
- Mužek, K., Mandic, O., Hajek Tadesse, V., Harzhauser, M., Kovačić, M., Kurečić, T. and Pezelj, Đ.–Eastward migration of the late Neogene ostracods and mollusks from the southern Pannonian Basin (Slavonian mountains, NE Croatia), p. 86.
- Stoica, M., Lazarev, S. and Vasilyan, D.–Late-middle Miocene microfauna from the Karagiya section, Kazakhstan (Caspian Basin, Eastern Paratethys), p. 112.

**Yaqiong Wang (王亚琼)**

We are delighted to announce the 5th Asian Ostracod Meeting (AOM 5), scheduled to take place in Busan, South Korea, from August 25 to 28, 2024. The theme for this meeting is "Ostracoda in Geology." In addition to recognizing the crucial role of ostracods in geology, it is worth noting that AOM 5 is a session of the 37th International Geological Congress (IGC 2024), from August 25 to 31, 2024, in Busan. Further details are available at the following link: http://www.igc2024korea.org/2024/english/11_more/03_more.asp

We extend a warm welcome to scientists working on ostracods from not only Asia but also around the world. AOM 5 will cover a wide range of ostracod research topics, including taxonomy, ecology, shell geochemistry, paleontology, biostratigraphy, paleoclimatology, paleoceanography, and more.

**Sukhonthip Savatenalinton, Anisong Chitnarin**

Dr. Sukhonthip Savatenalinton (Maha Sarakham University, MSU) and Dr. Anisong Chitnarin (Suranaree University of Technology) were co-hosts for the 4th AOM. It was a session at the Sixth International Palaeontological Congress (IPC6) held in Thailand during 7-11 November 2022. Dr. Moriaki Yasuhara (University of Hong Kong) kindly accepted as a keynote speaker. However, due to some difficulties after the COVID pandemic and travel policy of some countries, there were nine oral presentations and two posters presented at the session.

We also organized a workshop entitled "Ostracods in research (biology and paleontology) and application on sedimentary deposit" on the 9th November 2022 which aimed at demonstrating the major traits of ostracod biology and evolution as well as study methods to non-ostracodologist participants of IPC6 and Thai academics who were interested in ostracod research. We introduced the fauna and scope of current and future ostracod research and encouraged new researchers and promoted collaborations. There were 33 participants (15 foreigners and 18 Thais) who attended our workshop. [https://web.facebook.com/media/set/?set=a.10218115853047722&type=3](https://web.facebook.com/media/set/?set=a.10218115853047722&type=3)

**Jonathan Holmes**

I was chair of the ostracod group of The Micropalaeontological Society (TMS) until November 2023, when my tenure ended. We continued to host regular virtual group meetings on zoom with attendees from many countries across the world. We also held a (very welcome) face-to-face meeting in London in early 2023. If you are interested in participating in TMS Ostracod group
meetings (either as a presenter or just to come along and listen) and not on the mailing list, please contact the TSM ostracod group (contact details are at https://www.tmsoc.org/groups/ostracod/) and we’ll be pleased to add your name.

Byung-Do Choi

5th Asian Ostracod Meeting
“Ostracoda in Geology”
- FIRST CIRCULAR -

BUSAN, SOUTH KOREA
25 – 28 August 2024

General information
We are pleased to invite you to attend the 5th Asian Ostracod Meeting (5th AOM) that will be held in Busan, South Korea at the BEXCO from 25 – 28 August 2024. Early Bird registration is due by 26th April 2024, and regular registration is 27th April to 26th July 2024.

Registration
Our 5th AOM is a special session of the scientific program (Theme NO. 11 ‘Paleontology and Paleoanthropology’-Session 3) of ‘International Geological Congress 2024’ (IGC 2024). Please check theme number and session title when you submit your abstracts / registration.
Registration for the 5th AOM should be done using the online registration system of IGC 2024 website (www.igc2024korea.org).

Organizing Committee
Byung-Do Choi (Daegu National Science Museum)
Xiangzhong Li (Yunnan University)
Yuanyuan Hong (The University of Hong Kong)
Yaqiong Wang (Nanjing Institute of Geology and Palaeontology, CAS)
REQUESTS

**Joao Coimbra**
I remain interested in works on organisms that feed on marine ostracods for any time period.

**Steffen Mischke**
Steffen is one of the three Editors-in-chief of the *Journal of Paleolimnology*, together with Margarita Caballero Miranda and Guangjie Chen. The journal is a major forum for the publication of research with respect to lake sediments and sedimentary rocks of all ages. Please, consider the publication of your ostracod (and other lake) records in the *Journal of Paleolimnology*.

**Joao Queiroz**
I always follow what is shared on Ostracon, by the way, I never erased any of the messages and I think I have everything since I entered the group about 20 years ago!
SPECIAL PUBLICATIONS

**Cristianini Trescastro Bergue**
Celebrating the 50th anniversary of the publication of “The Bradleya problem”, by R.H. Benson (1972), *Micropaleontology* published May 2022, a special volume dedicated to deep-sea ostracods, including seven papers.

**Dan L. Danielopol**
The publication of a volume dealing with long abstracts presented at a palaeontological meeting in Bucharest, September 2023 (organized interalia by Marius Stoica) and where information on ostracods and on the research on the Neogene Eastern Paratethys exist.
ABSTRACTS


Abstract:
How robust is the uniformitarian principle: “the present is the key to the past”? *Cytherissa lacustris* is a Holarctic, non-marine ostracod species regarded as an inhabitant of deep, cold lacustrine waters today and a cold-climate indicator fossil in the Pleistocene. A non-swimming, infaunal, benthonic species preferring silty substrates, it tolerates low dissolved oxygen levels but is vulnerable to seasonal anoxia due to its two-year life cycle. An ecological uniformitarian approach to palaeoenvironmental reconstruction assumes niche stability in *Cytherissa lacustris*, i.e., that its Pleistocene to Recent environmental preferences remained the same. However, living populations are also found in shallow lake margins and it occurs in fossil assemblages interpreted as oligohaline as well as freshwater, fluvial as well as lacustrine. Does this signify ecological lability, and if so, what are the implications for palaeoclimate reconstructions dependent on assumptions of ecological stability? Could such differences be explained in terms of ecologically differentiated clonal lineages (cryptic diversity) in parthenogenetic populations of this species? Is ecological lability reflected in geochemical variability (trace elements and isotopes) of the carapace? Preliminary studies of living *Cytherissa lacustris* records from North American, European, and Asian datasets, combined with Pleistocene fossil data, may suggest answers to some of these questions.


Abstract:
The results of micropaleontological analysis of the boundary interval of the lower–middle Callovian in the TETs-5 section (Saratov) are presented. The taxonomic composition and distribution of foraminifera and ostracods in the section are studied. The ranges of the biostratigraphic units inferred from microfauna and their correlation with the ammonite scale are refined. Two foraminiferal zones of the East European Platform are established: *Haplophragmoides infracalloviensis–Guttulina tatarensis* and *Lenticulina cultratiformis–Lenticulina pseudocrassa*. The volume of the *Lenticulina cultratiformis–Lenticulina pseudocrassa* Zone ranges from the upper part of the lower Callovian (the upper part of the Koenigi Zone and the Calloviense Zone) to the middle Callovian. Two biostratigraphic units by ostracods are established: (1) the *Acantocythere milanovskyi–Procytheridea cinicinnusa* Zone corresponding to the Subpatruus Zone of the lower Callovian, to the lower part of the *Ch. saratovensis* biohorizon, and (2) Beds with *Praeschuleridea wartae–Pleurocythere kurskensis* corresponding to the terminal part of the Subpatruus Zone (the upper part of the *Ch. saratovensis* biohorizon), the Koenigi and Calloviense zones of the lower Callovian, and the lower part of the Jason Zone of the middle Callovian. The images of typical taxa are provided.

Abstract:
The stratigraphically important ostracod genera *Plumhoffia* Brand, 1990 (family Cytheruridae) and *Aaleniella* Plumhoff, 1963 (family Eucytheridae) from the Upper Bajocian and Lower Bathonian of the Volga Region (Sokur Section, Saratov Region) and central Russia (Obval Borehole, Penza Region) are revised, and updated and expanded descriptions are provided. Four species are described. A neotype is designated for *Plumhoffia tricostata* (Khabarova, 1955); three others: *Aaleniella franzi*, *A. volganica*, and *A.? ovoidea* are described as new. Their distribution along the Sokur reference section of the Upper Bajocian (*Michalskii* ammonite Zone)–Lower Bathonian (*Besnosovi* ammonite Zone) of the Volga Region allows development of detailed ostracod-based biostratigraphy and correlation of the sections studied with synchronous deposits of Western Europe.


Abstract:
This paper contains refined and extended descriptions of two ostracod genera of the family Cytheruridae: *Pseudohutsonia* Wienholz, 1967 and *Procytherura* Whatley, 1970, based on material from the Upper Bajocian (*Michalskii* ammonite Zone) and Lower Bathonian (*Besnosovi* ammonite Zone) of the Russian Plate from the Sokur composite Section (Saratov Region) and from the Obval Borehole (Penza Region). The genus *Pseudohutsonia* is revised and the evolution of two parallel lineages in the Middle Jurassic is proposed. Five stratigraphically significant ostracod species are described. For *Pseudohutsonia clivosa* (Khabarova, 1955), a neotype is designated herein; four others, *Procytherura iyae*, *Acrocythere sokurensis*, *Nanacythere octum*, and *Trachycythere peculiaris*, are described as new. For four taxa identified in open nomenclature (*Nanacythere* sp. 1, *N. sp. 2*, *Ljubimovella* sp. 1 and Gen. et sp. 8), information on the material and distribution in the studied sections is given, which will facilitate their use for stratigraphy and correlation in the future.


Abstract:
A new species *Camptocythere (Anabarocycythe) triangula* Tesakova, sp. nov. is described from the Upper Bajocian (*Michalskii* ammonite Zone) and the Lower Bathonian (*Besnosovi* ammonite Zone) of the Russian Plate (Sokur Borehole, Saratov Region). This species is presumed to be the ancestor of *C. (A.) muricata* Gerke et Lev, sp. nov. from the upper Bathonian–Callovian of northern Siberia, Timan-Pechora Province, and the Barents Sea shelf, the first description of which is also published in this paper. The publication of the original description by O.M. Lev, expanded and supplemented by the author of this study, confers availability and validity of this species from the
date of the present publication, and eliminated shortcomings in the stratigraphic literature, where until now C. (A.) muricata was a nomen nudum. The possible phylogenetic relationship between these species allows them to be considered indices of the corresponding lineage zones in the scale of evolution of the subgenus C. (Anabarocythere) Nikitenko. The species Procysytheridae? bajociensis (Khabarova, 1955) is re-studied from the same deposits of the Sokur Borehole and the Lower Bathonian of the Obval Borehole (Penza Region). P. concinna Permjakova, 1974 and P. ljubimovae Permjakova, 1974 from the synchronous deposits in Ukraine were synonymized with this species after its revision. A neotype is designated for P.? bajociensis and an expanded and supplemented redesription is provided. The monospecific assemblages (or with the dominance of this taxon) with P.? bajociensis, are restricted to the Late Bajocian–Early Bathonian of the Russian Plate and Western Kazakhstan and suggest an extremely shallow coastal setting, possibly with unstable salinity.


Abstract:
An extended and updated redesription of the stratigraphically important species Glyptocythere aspera (Khabarova, 1955) from the Upper Bajocian–Lower Bathonian of the Russian Plate (RP), Western Kazakhstan and Uzbekistan was made as a result of a revision, and a neotype was designated. The species G. bathonica from the Lower Bathonian of the RP and Western Kazakhstan was described as new. The lineage G. tuberodentina Brand et Malz in Brand et Fahrion (bj2, Parkinsoni ammonite Zone) → G. aspera (bj2-bt1, Michalskii ammonite Zone and lower part of the Besnosovi ammonite Zone) → G. bathonica sp. nov. (bt1, upper part of the Besnosovi Zone) has been reconstructed on the RP, which developed by paedomorphosis, with the advancing evolution of males. Species characters (shell outline, linear parameters, hinge, and sculpture) evolved in females and males at different rates, in males with retardation, which led to the convergence of the shells of both sexes in G. bathonica sp. nov. That is, the lineage evolved with a weakening of sexual dimorphism. The species G. tuberodentina appeared and developed in northern Germany in the Late Bajocian (Parkinsoni Phase) and at the same time migrated across the Polish Sea to the seas of RP. The north German G. tuberodentina taxon-range Zone (b2, Parkinsoni Zone, the upper part of the Truellei Subzone and the Bomfordi Subzone) was traced for the first time in Poland and the Dnieper–Donets Depression (DDD). In the DDD, its range was reduced due to the recognition of a new ostracod lineage-zone in the Michalskii Zone. Based on the reconstructed lineage, the following new ostracod lineage-zones were established: G. tuberodentina Zone (b2, Parkinsoni Zone) for the DDD, G. aspera Zone (bj2-bt1, the zones Michalskii and Besnosovi with the O. mojarowski and O. sciticum biohorizons) for the DDD, Central Russia, the Volga Region, and Western Kazakhstan, and G. bathonica Zone (bt1, Besnosovi Zone, O. issae–A. excentricum biohorizons) for Central Russia, the Volga Region, and Western Kazakhstan.


Abstract:
The ostracod genera *Camptocythere* Triebel and *Procytherura* Whatley from the Lower and Middle Callovian of TETs-5 reference Section (Saratov Region) and Middle Callovian–Lower Oxfordian of Mikhailovtseement reference Section (Ryazan Region) have been studied. The genus *Camptocythere* is revised; genus *Aparchitocythere* Swain and Peterson is considered as a separate genus (rather than a subgenus of *Camptocythere*), whereas the genus *Palaeoloxoconcha* Dreyer is for the first time included as a subgenus. New species are described: *C. (Camptocythere) quinta* Tesakova, sp. nov., *C. (Palaeoloxoconcha) caudata* Tesakova, sp. nov. (with the subspecies *C. (P.) caudata caudata* Tesakova, subsp. nov. and *C. (P.) caudata nuda* Tesakova, subsp. nov.), *C. (P.) ryazanica* Tesakova, sp. nov. and *Procytherura ippolitovi* Tesakova, sp. nov. Within the East European Platform (EEP), two ostracod concurrent-range zones have been recognized. The *A. milanovskyi–P. cinicinnusa* Concurrent-range Zone is recognized in the Lower Callovian (*Subpatruus* ammonite Zone, *Subpatruus–Saratovensis* biohorizons) of Ukraine, Kursk Region, and Volga Region. The *Pr. wartae–Pl. kurskensis* Concurrent-range Zone is recognized in the Lower Callovian (*Subpatruus* ammonite Zone, *Saratovensis* Biohorizon)–Middle Callovian (*Jason Zone*) of Ukraine, Belarus, Central Chernozemye, Kursk Region, and Middle Volga Region. Based on the evolution of the subgenus *C. (Palaeoloxoconcha)*, new lineage zones are proposed. The *C. (P.) bathonica* Lineage Zone is recognized in northwestern Europe in the Upper Bajocian–Bathonian. The *C. (P.) caudata* Lineage Zone is recognized on the EEP (Belarus, Kursk, and Saratov regions) in the Lower Callovian (*Subpatruus Zone, Saratovensis* Biohorizon)–lower part of the Middle Callovian (*Jason Zone*). The *C. (P.) ryazanica* Lineage Zone is recognized in the Ryazan Region in the upper part of the Middle Callovian (*Coronatum Zone*)–Lower Oxfordian (*Martaie Zone*).
The results of the paleoecological analysis on ostracods of the upper part of Sultanovskaya Formation (Boissieri zone) in the section near v. Alekseevka are presented. Five ostracod assemblages reflecting changing conditions in the paleobasin are defined. It was established that the sedimentation in the Late Berriasian time occurred under conditions of a warm normally salty with a calm hydrodynamic regime of the basin, mainly in oxygen waters.

Abstract:
New data on the lithological structure of the stratotype section (Outcrop 14) of the Ust-Yarega Formation of the Frasnian Stage in the Southern Timan are presented. Sedimentary cyclites are identified and relative sea level curves are reconstructed. Local erosion has been identified inside the sediments of the Ust-Yarega Formation, as well as a sharply transgressive unit, which are a good regional reference level and a reflection of the Genundewa event. The boundary of the Timan and the Ust-Yarega formations is located at the base of a unit of the fine-grained sandstones and siltstones, the lower part of which is represented by the oil-bearing bed I.

Abstract:
New data on ostracods and conodonts and their stratigraphic distribution in the Ustyarega Formation of a stratotype area (Lower Frasnian, Southern Timan) are presented. The most stratigraphically significant taxa are representatives of the ostracod families Cavellinidae - *Cavellina devoniana*, *Cavellina uchtaensis*, *Cavellina batalinae*, *Cavellina chvorostanensis*, and Nodellidae - *Nodella faceta*, *Nodella* ex gr. *hamata*. The stratigraphic position of the studied section relative to the transgressive-regressive sedimentation succession is discussed. Its comparison with the cyclites of North America showed that the potential level of the lower boundary of the Frasnian Stage, respectively, the Upper Devonian, recorded near the base of the Ustyarega Formation, i.e., within the Upper Timan Sublevel. Above the boundary assumed by us, the first appearance of the ostracod *Nodella* ex gr. *hamata* and *Cavellina batalinae* is fixed.

Summary: The southwest part of the south Caspian offshore is poorly studied. Data from numerous offshore shallow engineering and deep exploration wells have provided useful information on the geology of the Tertiary-Quaternary sediments. The log, seismic data, and biostratigraphy confirmed that Tertiary sediments consist of fluvial-deltaic-lacustrine sediments deposited in the isolated South Caspian Basin, particularly in the study area, by several river systems. The Quaternary is characterized by brackish water sediments. The “short” series of marine sediments of the deep and shallow facies of open sea bays, delta, and marine shallow waters are typical for the southwest part of the Caspian. Pliocene and Quaternary sediments unconformably overlie older formations, until the Mesozoic sediments are located at a relatively shallow depth. In the Lankaran-
Talysh Deniz, the Miocene sequences below the middle part of the Pliocene Pereryva Formation are pinching out against the basin margin. The thickness of these series increases stepwise across the main structures giving evidence of a rift-system developing at the beginning of major subsidence in the South Caspian during the early Tertiary. No hydrocarbon discovery except little oil and gas shows are found in the southwest Caspian due to several geological reasons such as a reservoir and vertical and lateral migration problems.


**Summary:** Studies on fauna and stratigraphy of Quaternary deposits in the South Caspian basin and surrounding area are essential for understanding the Quaternary history of the Caspian Sea. The Quaternary is characterized by frequent and abrupt fluctuations in climate, sea level, topography, fauna, flora, and other natural components of the landscape. Data collected from numerous offshore boreholes drilled in the South Caspian basin provide useful information on the ostracod fauna, stratigraphy, and lithofacies characteristics of Quaternary deposits in this basin. 599 core samples from 68 exploration and shallow engineering boreholes over forty offshore structures have been studied. The analysis included twenty exploration and engineering drilling wells from the Turkmenia shelf, twenty-five from the Apsheron archipelago, and twenty-three from the Baku archipelago. Limited core materials were taken from eleven boreholes, which allowed us to determine the stratigraphic boundary between Apsheronian and Akchagylian deposits. Multiple boreholes sections and their micro and macrofaunal content allowed the identification of 125 species of ostracods in the south Caspian basin. Biostratigraphic studies included complex analysis of the offshore drilled borehole’s lithostratigraphy sections, logs, seismic and outcrop data. The stratigraphy of Quaternary deposits of the South Caspian is divided into five suprahorizons and ten horizons by using seven index ostracod species. The index species were identified according to their successive range within zonal complexes (biozones). All subdivisions mentioned above played regional roles.


**Summary:** As a result of frequency-resonance processing of the photographic image and satellite images of the Dashly volcano, it was established that the volcanic complex is filled with sedimentary rocks of the 7th group (limestones), and its root is located at a depth of 470 km. In the volcano, on the surface of 57 km, there are conditions for the synthesis of oil, condensate, and gas. The responses from hydrocarbons were recorded by instrumental measurements from the surface. By scanning a cross-section up to 5 km in the survey area three intervals that are promising for the search of gas deposits were identified. Instrumental measurements confirmed the fact of gas and phosphorus migration into the atmosphere. In the southwestern part of the Caspian Sea, reconnaissance studies within six areas of the mud volcanic complexes located from the surface recorded responses at the frequencies of oil, condensate, and gas. Within the volcanic structures filled with sedimentary rocks of 1-6 groups, responses from amber were also recorded. In the contours of four out of six surveyed areas, the facts of migration of gas and phosphorus into the atmosphere were established. Volcanic complexes of limestones with roots at depths of 470 km and 723 km were revealed at three sites, volcanoes of 1-6 groups of sedimentary rocks at three more. In one of the sites, a salt volcano with a root at a depth of 470 km was identified. The
materials of the conducted reconnaissance work can (and should) be considered as additional evidence (arguments) in favor of the volcanic model of the formation of structural elements and the external appearance of the Earth's surface, as well as deposits of ore and combustible minerals. They also indicate the feasibility of using mobile direct-prospecting methods of frequency-resonance processing of satellite images and photographs for studying the deep structure in the areas of mud volcano locations and searching for accumulations of hydrocarbons (including in the deep horizons of the cross-section), as well as hydrogen.


**Summary:** Results of a survey using direct-prospecting technology of satellite images and photo image frequency-resonance processing within drilling areas of the TD-1XB and KHZ-1 prospecting wells in the southwestern region of the Caspian Sea are presented. Results of instrumental measurements show that structural uplifts, discovered by seismic studies, within which wells were drilled, were formed by volcanic complexes with roots at depths of 470 and 723 km, filled with dolomites and marls. Within the limits of volcanoes of this type on the border of 57 km, conditions did not exist for synthesis of hydrocarbons. This allows for the probability of discovering industrial oil and gas deposits within the lankaran-talysh and khazar structural uplifts is close to zero. It is impractical to drill additional exploration wells within these structures. Materials of investigation indicate the advisability of using direct-prospecting methods at the stages of selecting sites for laying prospecting and exploratory wells.


**Summary:** Results of mobile direct-prospecting technology of frequency-resonance processing and interpretation of satellite images and photographs at sites of hydrogen production drilling wells, as well as in areas of hydrogen degassing are presented. Experimental studies were carried out to study features of deep structure of the hydrogen degassing areas. Mobile and low-cost technology developed includes modified methods of satellite images and photo-images frequency-resonance processing and decoding, vertical electric-resonance scanning of a cross-section, and a method of integrated assessment of oil and gas potential of large prospecting blocks and license areas. Separate methods of direct-prospecting technology are based on principles of “substance” paradigm of geophysical research, the essence of which is searching for a specific substance- oil, gas, gas condensate. Instrumental measurements indicate that in regions of basalt volcanoes located with roots at different depths, signals at hydrogen frequencies are nearly always recorded. when scanning the cross-section, responses from hydrogen are recorded from the upper edges of basaltic volcanoes to their roots. It is assumed that basaltic volcanoes are a channel through which hydrogen migrates to upper horizons of the cross-section and further into the atmosphere. Within many basaltic volcanoes at a depth of 68 km, deep (living) water is synthesized. Hydrogen-rich water is curative and can be used for health purposes. Surveyed zones of longevity on earth are located within basalt
volcanoes, in which water synthesized at a depth of 68 km migrates to the surface and used for water supply. Hydrogen deposits can be formed by basaltic volcanoes in adjacent sealed reservoirs. Within some areas, responses at hydrogen frequencies from limestones, dolomites, and marls were recorded at shallow depths. Hydrogen deposits formed near basalt volcanoes in different types of reservoirs can be discovered and localized during areal exploration using proven methods. Direct-prospecting technology can be used to study reservoirs in crystalline rocks (including basalt). Detailed studies and well drilling in promising areas can be planned for hydrogen and living water at the same time. Our investigation indicates the advisability of using direct-prospecting methods of frequency-resonance processing of satellite images to detect zones of hydrogen accumulation in areas of basalt volcano location, as well as in areas of hydrogen degassing. The use of mobile and low-cost technology will significantly speed up the exploration process for hydrogen, as well as reduce financial costs for its implementation.


Summary: Reconnaissance studies within the Shakal and Halabja exploration blocks in Kurdistan are presented. Experimental studies used mobile direct-prospecting technology, including methods of frequency-resonance processing and decoding of satellite images and photo images, vertical electric resonance scanning of the cross-section, and a method of integral assessment of the oil and gas potential of large prospecting blocks and license areas. At the local survey site within the Shakal block, responses from oil, condensate, phosphorus, and limestone were recorded. The lower boundary of limestones was established at 4676 m by scanning the cross-section from 2770 m, step 1 cm, the responses of oil from limestones were obtained from the intervals: 1) 2771-2794 m, 2) 2795.3-2815.45 m, 3) 2834.40-2854 m. During processing of the image of Halabja block image, signals were recorded at frequencies of oil, condensate, phosphorus gas, bacteria, sodium chloride, and dolomite. At 57 km hydrocarbon synthesis boundary, responses from oil, condensate, and gas were recorded. When scanning the cross-section from 480 m to 4 km, step 50 cm, responses from oil were obtained from two intervals: 1) 1140-1200 m, and 2) 3310-3340 m. Within the local fragment of the block by scanning up to 5 km with a step of 1 m, responses of oil from salt were recorded from the intervals: 1) 295-350 m, 2) 1190-1260 m, 3) 2015-2320 m). Response intervals within the 1st and 3rd horizons are refined by scanning with a step of 5 cm. Results of experimental studies show that practical application of direct-prospecting methods and technologies will accelerate and optimize the exploration process for oil and gas.


Summary: The constantly growing global demand for energy carriers and the problem of large amounts of non-recoverable oil after primary and secondary oil production are the driving force behind the development of enhanced oil recovery methods. Conventional MUN processes has various methods including microbiological, for increasing oil. We present an overview and mechanisms of the MMD for oil extraction from the experience of MicroPro companies in different
regions and conditions, which can also be used in Russia. Our laboratory experiments with bacteria adapted to the subsurface conditions of temperature, pressure, and salinity using carbonate rocks of the field have shown a successful increase in oil recovery. Based on laboratory work, an application of adapted species of Clostridium was carried out. After treatment with these bacteria, the share of produced water decreased from 80 to 60% and the average oil production increased from 50 tons per day to 150 tons per day. These average statistics are based on the application of our method in various fields of Europe, particularly Germany. Our method of microbiological enhancement of oil recovery from fractured porous carbonate formations through the use of molasses and bacteria has been successfully applied in Tatarstan in a pilot project. As a result of the screening program, we selected bacteria of the genus Clostridium, which were able to grow in the Bashkir layers of the Romashkino deposit (Tatarstan, Russia) with a temperature of 20°C and poor mineralized formation water (30 g salt / l). In laboratory experiments in which we simulated reservoir conditions, the improvement in oil recovery was determined during the tests for absorption and flooding. Oil recovery with a viscosity of about 65 cP from cores of reservoir beds occurred after normal water flooding from 15 to 17% and improved to 29–33% OOIP by application of the microbiological method. We strive to make the main process of fermentation in the tank using special biotechnology.

Javadova, A. 2021. The study of ostracods of Quaternary deposits in the south Caspian offshore part of the basin. 92nd Annual Meeting of the Paläontologische Gesellschaft, Proceedings, p. 36. Summary: The beginning of the south Caspian basin Quaternary, Apsheronian age, had fundamental changes, such as orogeny, troughs, and bounding faults. As a result, flow of the oil and gas migration process was intensified. Numerous mud volcanoes were buried in deposits of Apsheronian age. These volcanoes are associated with oil and gas fields in the South Caspian basin. Pliocene-Quaternary was the main period of HC migration into the traps. This is based on analysis of palaeotectonic activities, which suggests that most oil and gas traps were formed late (Akchagyl-Quaternary). 620 oil and gas fields have been discovered in the Miocene to Quaternary sedimentary sequences. Study of the Quaternary in the south Caspian basin is crucial in oil and gas exploration. In industry, subdivision of Quaternary sediments is used when mapping the seabed and conducting surveys for hydrotechnical constructions (laying pipelines, setting up floating rigs, gravitational offshore stationary platforms, offshore stationary facilities).

Summary: Analysis of borehole data, seismic data, and biostratigraphy confirm that the Tertiary consists of fluvial–deltaic–lacustrine sediments deposited in the isolated south Caspian Basin, particularly the study area by several river systems. The study area has several characteristics typical of landlocked marine environments: low salinity and low HD conditions, causing stratification of the water column. High primary productivity of the water mass generated conditions of dissolved oxygen supersaturation and deficits (of phosphorus and probably oxygen at night). At the sediment level, heterogeneity of substrate and low benthic fauna content is typical of confined habitats, in which environmental conditions are difficult for higher organisms. Micro-pollutant concentration in water and sediment is common to confined habitats and related to inflow from catchment area. It is related to the fine fraction of sediment and may be masked by the presence of shell debris which “dilute” muds and thereby the micro-pollutants and organic matter,
usually settled on fine sediment fractions. All observations made in the study, substantial primary production, a paucity of benthos, are consistent with those made by different authors describing the Caspian Sea. The study area has high quantities of contaminants and low capabilities for dispersing potential intake but has a distinct resistance to the influence of future impediments.
The 8th European School on Ostracoda (ESO 8) took place in Rome at Sapienza University 9-13 July 2023. We used the opportunity to link the short course introducing ostracods with XXI INQUA. Ilaria Mazzini hosted the course and helped to make it a useful and pleasant experience for the participants. This time, fifteen scholars coming from eight countries joined the course. Most are PhD students from European universities, but we had guests from North Africa, Israel, and Canada. Lectures and hands-on training were held by the ‘veterans’ of ESO, Renate Matzke-Karasz, Steffen Mischke, Marie-Béatrice Forel, Anton Waltschew, Björn Holstein, and me.

Anna Pint and Ella Quante presented applications of ostracods in geoarchaeology. Kreativika sponsored micropalaeontological slides and The Micropalaeontological Society a travel grant as during the last years. The half-a-day field sampling in between ancient ruins followed the traces of the 17th ISO in 2013. The next ESO will travel again. We will organize it in Patras, Greece, from 18-22 March 2024, with support from George Iliopoulos and Penelope Papadopoulou of the Palaeontological Department at University of Patras.

Participants of ESO 8 in a lecture room of Appia Antica Regional Park in Rome (photo Ilaria Mazzini)
**European School on Ostracoda**

The next course of the European School on Ostracoda (ESO9) will take place from 18-22 March 2024 at the University of Petras in Greece. Our course offers a well-founded introduction to working with Eastern Codes, both in geosciences and in life sciences, and is aimed primarily at doctoral students and master’s students. More information will be at the web address [www.support-irgo.net/eso/](http://www.support-irgo.net/eso/)

Registrations are already possible via the following email address: eso@uni-jena.de

**Laura Gemery**

This is the link to the latest Arctic Ostracode Database:


[https://www.ncdc.noaa.gov/paleo/study/32312](https://www.ncdc.noaa.gov/paleo/study/32312)

**Dan L. Danielopol, Cristina Cabral, David Horne, Tadeusz Namiotko, and Alan Lord**

Dear Colleagues,

We are happy to inform you of the recent issue of our publication “Reconciling diagnostic traits in living and fossil taxa: The taxonomy and evolution of the genus Microceratina (Crustacea, Ostracoda, Cytheruridae)” published in *Zootaxa* (online edition), 5244 (4): 301–340.

**Abstract:**

The original diagnosis of the genus *Microceratina* Swanson is re-examined with the aim of elucidating the evolutionary history of this living and fossil genus. The different systematic placements of this genus in one of three alternative suprageneric taxa, family Bythocytheridae Sars, family Cytheruridae G.W. Müller (subfamily Eucytherurinae Puri, emend. Maddocks and Steineck) and/or family Loxoconchidae Sars are reviewed. We provide details of a special type of tiny pores, named Loophole Sieve-type Pore Canals, and show how their morphology and position on the valve differ from the typical Sieve-type Pore Canals present in other superfamily Cytheroidea groups, especially members of the Loxoconchidae. A comparative analysis of the valve ornamentation, especially the structure of the anterior peripheral area, and posterior margin morphology, between selected taxa of the three subfamilies of the Cytheruridae (Cytherurinae, Cytheropterinae, Eucytherurinae) demonstrates that *Microceratina* species belong to a special phylogenetic lineage of Eucytherurinae, which differs from another lineage represented by the
genus *Xylocythere* Maddocks and Steineck. This proposal is strengthened by examination of the limb traits of *Microceratina martensi* Namiotko and others, currently the only living species of the genus for which both valves and limbs are described; the description is extended herein. Key diagnostic traits of the genus *Microceratina* are presented, a new Early Jurassic age species is described, and two new combinations are proposed. The homeomorphic valve shapes of *M. andreui* sp. nov., *M. amfibola* and *?S. rectum* (Loxoconchidae) support the value of the approach adopted herein: analysis of subtle morphological details with high-resolution microscopy.

**Tatsuhiko Yamaguchi**

I would like to introduce an exhibition of oil-painting pictures, which is entitled "Ostracoda, letters from the earth". The exhibition shows eight pictures, which were painted by Dr. Michiko Dvan Yajima.

The pictures show aquatic arthropods such as *Daphnia* and skeleton shrimps. The arthropods' outlines are drawn sharply in dark brown on the orange background. The overlapped oil-paints represent transparent bodies of the arthropods that are living. In the aquariums of the pictures, *Daphnia* and skeleton shrimps are dancing.

The exhibition is held in a private gallery in Tokyo until 6th March 2023. Here is the link of the gallery and the exhibition (in Japanese).

https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Furldefense.com%2Fv3%2F__https%3A%2F%2Fwww.m-et-d-galerie.net__%3B!!LkSTlj0I!AhQipOzgvgx26Nkvg3dycaVQRafAzlSgcKU0vI4NQdO9LHY0sWxAMfl1GYl6Y77p_S5ePhWJXRDBszJppRHNp5SorktCK62T%24&data=05%7C01%7C7C%7Cb8055e9cf20748ac33fe08db17b6c080%7C84df9e7fe9f640af4b35aaaaaaaaaaaa%7C1%7C0%7C638129845918360930%7CUnknown%7CTWFpbGZsb3d8eyJWIjoMC4wLjAwMDAiLCJrIjoiV2luMzlilLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C7%7C%7C&data=xdTudm4wZ0CwLozcXw7uypvY29qxHolK9YbvRn52LM%3D&reserved=0

In the link, you will see her picture of *Daphnia*.

"Ostracoda: Letters from the earth"
Place: M et D Galiere
Address: 1 Chome-13-20 Sangenjaya, Setagaya-ku, Tokyo 154-0024
Painter's talk: 4:00 pm on Saturday, 26th February and Saturday, 4th March.

**Simone Brandao**

I will teach a 2 week course on ostracods in Bocas del Toro Station, from the Smithsonian, in Panama. Further information is below.

The Smithsonian is hosting an Ostracod course at Bocas del Toro from July 15 to July 26, 2024. This course promises to be an enriching experience for individuals interested in the field, providing valuable insights and expertise in the study of Ostracods.

For your convenience, the details and application guidelines for the course can be found on the Smithsonian's official website at the following link: https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstriresearch.si.edu%2Ftaxonomy-training%2Fcourse%2Fostracoda-taxonomy-and-biology%2F__%3B!!LkSTlj0I!CVVEhvuztOoWVIZHzed0NV4XqWiequPzE5Kq8kUpK_FLh3FcVungV-1BqfkTiupTF2vaj0xiXXYr49rdX7LorBbB3uOjKww%24&data=05%7C02%7C%7Ca7c6ad1006f042cc177608dbfdef235%7C84df9e7f9e640af435aahaaaaaaaaaa%7C1%7C0%7C638380737262012587%7CUnknown%7CTWFpbGZsb3d8eyJWljoMC4wLjAwMDAiiLCJQIjoiV2luMzliLCJBTiI6Ik1haWwiLCJXVC16Mn0%3D%7C7C%7C7C&sdata=W2LYz52ju6FZMniCPswYP9Kj1yitv7cpl25CfS1S%2BFQ%3D&reserved=0

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John Lavelle Observations

January 8, 2023

Hope some of you all find some interest in this.
January 11, 2023
Changes keep coming.

January 27, 2023
Here are two updates. I am always surprised at the lack of research going on. We have three major research places in my area of Ohio, the Ohio Department of Natural Resources, Cleveland Museum of Natural History, and the Ohio State University and none of them disgracefully actually study what is going on in this time of vast environmental change. It costs nothing to investigate, yet they do nothing. The same can be said for one of the groups I have grown to love, the ostracod community. Numerous notes on whether subspecies should be given names but not a word on what they are finding in the areas that are experiencing tremendous climate change. Most of the time reading their posts it is like the age old question of how many angels can be found on the head of a pin. Imagine the asteroid plunging to earth as it did during the Cretaceous period and destroying the environment and if humans had been around, they would be huddled around fossils of an earlier age. Or the various institutions of research with the ability to research in their backyard here in Ohio that totally ignore the vast changes.
Unrelated to the waters, it is fascinating to see one of the north's harvestings of maple syrup, the photo came from hiking in the first area above. Acres of trees tapped to harvest the precious elixirs.

March 28, 2023
Some of the below have been identified but could help with those not yet identified. Also help on many of the other critters would be appreciated.

April 5, 2023
I am interested in whether *Brandystrandesia* and *Candona* are later winter and early spring inhabitants of temporary pools in the temperate climates south of the equator (Argentine and Chile). Below page with the *Brads* and *Candona* most common here up north.
May 5, 2023
An amateur out of his depth.

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May 13, 2023
Quick question

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May 23, 2023

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October 26, 2023

Have not posted to ya’ll in a spell. I have been stymied by why I cannot find any information on the *Candona* ostracods in the glaciated region or at least the temperate region of the southern hemisphere. Are these critters found only in the north? And why? They were kicking around when the great continent Pangea was around so movement should have been possible. And if anyone wants to tackle an even more vexing quandary: Why does the *Candona* appear in the autumn and disappear in the late spring. What is the evolutionary advantage? They have months to carry on basically without predators in temporary pools, yet they end their life cycle in late spring and disappear to the next fall. Is their enter life cycle a product of the recent glacial periods? Simple answers would be appreciated for this simple mind.

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November 9, 2023

Yesterday’s sample totally befuddled me. The little *Bradleystransia tincta* are the only anchor to rationality. This temporary pool has refilled and the little *B. tincta* are scurrying around to grow over winter. But the *Cypria* and *Cypridopsis vidua* appear to be mature, how did they manage this trick? And my beloved *Candona* has a crazy mix of being mature and immature. Over and over again I ask myself do I not find little *Candona* in newly refilled pools like I do *B. tincta*. But the question also is how do *Cypria* and *Cypridopsis vidua* seem to pop out fully grown in a newly formed pool. Like so many vexing problems, like getting my hot water heater going again which the solution actually did come at about three in the morning, I hope to suddenly awake in the middle of the night and say forsooth there is the answer. Burkhard Scharf, hopefully you can lend your insight which would be greatly appreciated.

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December 3, 2023

One of those times when even after years of mucking around the old man can still be dumbfounded. I would never have expected to find such a collection of *Candona* in this little temporary creek.
Below are all the photos from one sample in no particular order. All of the critters are a surprise. This is the only time I have found gastrotrichs in flowing waters and the rotifers are an interesting collection, but it is the Candona that are just damn beautiful.

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December 4, 2023

Below one summer date and one more recent one. Anyone interested in rotifers should find the critters found in a calcium environment interesting for the colors they take, I love the ostracods here because they show a wild pattern of distribution depending on the environment.

https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsites.google.com%2Fview%2Fkelleys-island-quarry-ottawa-c%2Fhome%3B!!LkSTlj0l!BkrOVQUWO17ROy-zW52222PMejtW5xTiKs2 KExZSDTcGaXfvvB4JGGY_5C0FovP7kGuy62pnlU1HJhDQSuP7S7MmY%24&data=05%7C01%7C7C14ffcc8eecdf54a4833a908dbf517f12b%7C84df7e7fe9f640af4b435aaaaaaa%7C1%7C%7C638373255402801219%7CUn%7C7CTWFpbGZsb3d8eyjWLioiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVC16Mn0%3D%7C3000%7C7C%7C&sdata=AskJGr6ZRH5Oi75UCozXoJimJhir2yBuVWS8RxwRiLM%3D&reserved=0

https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsites.google.com%2Fview%2Fcolumbireservationpond6102023%2Fhome%3B!!LkSTlj0l!BkrOVQUWO17ROy-zW52222PMejtW5xTiKs2 KExZSDTcGaXfvvB4JGGY_5C0FovP7kGuy62pnlU1HJhDQSuNxEsegQ%24&data=05%7C01%7C7C14ffcc8eecdf54a4833a908dbf517f12b%7C84df7e7fe9f640af4b435aaaaaaa%7C1%7C%7C638373255402801219%7CUn%7C7CTWFpbGZsb3d8eyjWLioiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVC16Mn0%3D%7C3000%7C7C%7C&sdata=OQyX1j7kJ%2BrR%2Bh6hJL%2Bp2RptqEB3VptQm0KJ1Rx74e3D&reserved=0
PHOTOGRAPHS, DRAWINGS

Henning Uffenorde

Photos from ISO Meeting 5 in Hamburg, 1974

From left to right: Gerd Hartmann, Beata Moos*), K. Ishizaki, Alexander Liebau.

From left to right: Heinz Malz, Henri Oertli, R. H. Benson, Jean-Pierre Peypouquet, R. Damotte, J.-F. Babinot.

From left to right: Ray Bate, Peter Sherrington, Eric Robinson, Dick Field, Alan Lord.
Vincent Perrier
Photos from ISO 19, 2022, Lyon

IRGO business meeting in the conference venue (amphithéâtre Depéret, Université Lyon 1).

Mid-symposium excursion, ISO participants collecting ostracods in an abandoned Rhône river meander near Balan village.
Post-symposium excursion, Burkhard Scharf showed participants his technique for concentrating ostracods in a sample.

Post-symposium excursion, collection of ostracods near a rice field in Camargue.
Post-symposium excursion, participants looking for Cenozoic ostracods in the sandstones of Saint Restitut (but finding mostly shark teeth!).

Post-symposium excursion, Burkhard Scharf is ready to look at the first ostracod samples of the excursion in the lobby of our hotel in Arles.
Post-symposium excursion, collection of ostracods in a hypersaline lake in Camargue.
Dave Horne collecting living *Cytherissa lacustris* in Loch Leven (Kinross, Scotland) [photo: Dave Horne]

Elly Brouwers and Alan Lord at EOM6
Some of the samples that were collected from the early Late Cretaceous deposits of Texas and those from Algeria are proving difficult to break down. We are using the Glauber’s salt treatment to break them down. Here is a description of that method.

Another method to break down samples, using a supersaturated Glauber’s salt solution, was done as an experiment to see if it resulted in better preservation than using hydrogen peroxide. Slipper (2019) presented a general description of the method, although the specifics were not given. This technique included making a supersaturated solution of Glauber’s salt (mirabilite: Na₂SO₄ · H₂O), then freezing the sample to promote the growth of tiny crystals that break up the sample. First, the sample was broken into pieces and dried in the oven at 70°C for 2-3 days. To make a supersaturated solution, enough of Glauber’s salt was added to boiling water so that it could not all be dissolved (that is, the salt gathered at the bottom of the pan). The warm sample was then placed in a glass beaker and enough of the saturated Glauber’s salt was added to cover the sample. The beaker was then covered with plastic to prevent evaporation and placed in the oven for overnight to allow the solution to soak into the pores. The salt solution was then decanted to allow for expansion between the rock chips. The beaker was then placed in ice for approximately 30 minutes to cool down, then placed in a freezer overnight. The rapid chilling results in a high nucleation rate and small crystals grow that breaks the sample apart with minimal damage to the microfossils. The beakers are then filled with water and boiled in a microwave oven until the rock turns into a soupy consistency and is then ready for sieving. The samples that used this method were better than the hydrogen peroxide method.

Discussion on color blindness in figures for papers

Lucas Silveira Antonietto
Recently, it came to my attention that scientific journals are asking researchers to be more sensitive about color-blindness while making figures for papers. I tried to get some tips on how to manage that, but I am still a little overwhelmed by the amount of information on improper color schemes. Does anyone know a color-blind colleague who could help with some advice?

Nicole Boerner
Check the website: https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.toptal.com%2Fdesigners%2Fcolorfilter__%3B!!LkSTlj0I!Hx1URpheYuPybTiAKD-sbfOKJUcxyYIsoXMMeEjnk4reDy5UNrohHxEL1XC5JaVo_tS2WXKZgXd3RCZI6tRy08onsx7vYs464MhQ%24&data=05%7C01%7C%7C3b6f13d7d45a43d0a8d508daf25ac617%7C84df9e7fe9f640af835aaaaaaaa%7C1%7C0%7C638088768935978030%7CUnkown%7CTWFpbGZsb3d8eyJwIjoiMC4wLjAwMDAiiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=Qj%2FfrKTHgyMOJk2IdaahB%2FpRE%2BklVvnBBFsKNpp6xT0%3D&reserved=0, where you can experience color blindness on your own. You can enter links for websites and filter for various types of color blindness to check out what they will look like. Hope it helps.

Todd Oakley
I recommend color brewer:
https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcolorbrewer2.org%2F%3B!LkSTlj0I!ASgdNMHLGW0BC2--upsQ0XCA3H0fygrOE35YDX3qLQ6Q4zH_Q-lotKhm-yd-w52MXQXAAPiXF_nk0XXK9U1LXHf5vf%24&data=05%7C01%7C%7C73ad98052e44c6e89508daf2941683%7C84df9e7f9f640afbf435aaaaaaaaaaaa%7C1%7C0%7C638089015110367273%7CUnknown%7CTWFpbGZsb3d8eyJWljo8MC4wLjAwMDAiLCJQIjo8V2luMziLiLCJB Gil 6lk1haWwILCJQV1lMaW5vLjAwMDAiLCJQIjoiV2luMziLiLCJB Gil 6lk1haWwILCJQV1lMaW5vLjAwMDAiLCJQIjoiV2luMziLiLCJB Gil 6lk1haWwILCJQV1lMaW5vLjAwMDAiLCJQIjoiV2luMziL

It allows you to choose color palettes, and they have a box for "color blind safe". You can choose different needs, like if you need three categories (or more) and if you want to show divergent, or sequential data sets. It gives you the hex codes for the colors to put in the software you use for graphics. It is really great!

Okabe M. and Ito K. (2002). Color Universal Design (CUD)—How to make figures and presentations that are friendly to colorblind people. Available from https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcolorbrewer2.org%2F%3B!LkSTlj0I!ASgdNMHLGW0BC2--upsQ0XCA3H0fygrOE35YDX3qLQ6Q4zH_Q-lotKhm-yd-w52MXQXAAPiXF_nk0XXK9U1LXHf5vf%24&data=05%7C01%7C%7C73ad98052e44c6e89508daf2941683%7C84df9e7f9f640afbf435aaaaaaaaaaaa%7C1%7C0%7C638089015110367273%7CUnknown%7CTWFpbGZsb3d8eyJWljo8MC4wLjAwMDAiLCJQIjo8V2luMziLiLCJB Gil 6lk1haWwILCJQV1lMaW5vLjAwMDAiLCJQIjoiV2luMziLiLCJB Gil 6lk1haWwILCJQV1lMaW5vLjAwMDAiLCJQIjoiV2luMziLiLCJB Gil 6lk1haWwILCJQV1lMaW5vLjAwMDAiLCJQIjoiV2luMziL

which we used in our paper.

Koen Martens


https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.26496%2Fbjz.2021.91__%3B!LkSTlj0I!FwLuS9xJxmdXW6qVcz6bMWNfunDpB5JPVCnGX Bs4QAijnZfey1-en_i_hfHf9tX3ATNC0fsRrfoXe-b_NXln5Eo%24&data=05%7C01%7C%7C54a1f1f79e95940fe5d5108daf2e762f3%7C84df9e7f9f640afbf435aaaaaaaaaaaa%7C1%7C0%7C638089372860511675%7CUnknown%7CTWFpbGZsb3d8eyJWljo8MC4wLjAwMDAiLCJQIjoiV2luMziLiLCJB Gil 6lk1haWwILCJQV1lMaW5vLjAwMDAiLCJQIjoiV2luMziLiLCJB Gil 6lk1haWwILCJQV1lMaW5vLjAwMDAiLCJQIjoiV2luMziL

which we used in our paper.
AWARDS

David Horne
The Micropalaeontological Society’s 2022 Brady Medal was awarded to David J. Horne “in recognition of a hugely successful academic career with substantial contributions to research, teaching, mentoring of research students, service on committees, and journal editorial work. David’s research is characterized by his breadth of work with both living and fossil ostracods, from marine and non-marine environments, from deep time (Jurassic) to the present.” The medal is named in honour of George Stewardson Brady (1832–1921) and Henry Bowman Brady (1835–1891) in recognition of their outstanding pioneering studies in micropalaeontology and natural history.

Elvis Guillam
Received the 2023 award for young researcher in Palaeontology from the Palaeontological Association of Villers-sur-Mer–Normandie, France. This scholarship is designed to reward French doctoral students for an original contribution to their research field and to help them to fund a research project.

Toshiaki Irizuki
Awarded The Geological Society of Japan Best Paper Award for 2023.
NEW TAXA

Higher taxa
Anticytherideinae new subfamily, Puckett and Hunt, 2022
Martensininae new subfamily, Savatenalinton, 2022, Thailand, Recent
Neocypridellinae new subfamily, Savatenalinton, 2022, Africa, Recent
Plesiocypridopsini Jacobs and Martens, 2022

Genera
Asculdoracythereis new genus, Puckett and Hunt, 2022
Frodocythereis new genus, Puckett and Hunt, 2022
Klyasinella bella new genus, Melnikova, 2022, Ordovician
Laevipellacythereis new genus, Puckett and Hunt, 2022
Leiocyamus magnus new genus, new species, Stepanova, 2022, Ordovician
Malawidopsis new genus, Jacobs, and Martens, 2022
Martensina new genus, Savatenalinton, 2022, Thailand, Recent
Paranacythere nigripallus new genus, new species
Songkhramodopsis new genus, Savatenalinton, 2023, Thailand, Recent
Thaicypris new genus, Savatenalinton, 2022, Thailand, Recent
Tumulocythereis new genus, Puckett and Hunt, 2022
Vizcainocypria new genus, Bisquert-Ribes and others, 2023, Spain, Recent

New Species, Recent
Ambrostracon frenzeli Dykan and Daniel, 2023
Anchistrocheles hayatotanakai Ito and Tsukagoshi, 2022, Order Podocopida, Family Pussellidae
Aurila diodoroi Sciuto, Baldanza and Reitano, 2022
Aurila seguenzai Sciuto, Baldanza and Reitano, 2022
Bairdoppilata hirsutella Maddocks, 2022, Order Podocopida, Family Bairdiidae
Chrisssia muangkanensis Savatenalinton, 2023, Thailand, nonmarine
Cimbaurila ramdohri Sciuto, Baldanza and Reitano, 2022
Cistacythereis oertlli Sciuto, Baldanza and Reitano, 2022
Costa agyrina Sciuto, Baldanza and Reitano, 2022
Cyclocypris pangi Yu and others, 2022, living, Beijing, China
Cypris songkhramensis Savatenalinton, 2022, Thailand, nonmarine
Echinocythereis hartmannii Sciuto, Baldanza and Reitano, 2022
Elpidium litoreum Pereira, Rocha, Pinto, and DaSilva, 2022, Order Podocopida, Family Limnocytheridae
Eucytherura sanctavenerae Sciuto, Baldanza and Reitano, 2022
Hemicytherura trindadiensis Luz and Coimbra, 2022, Order Podocopida, Family Cytheruridae
Loxoconcha pokornyi Sciuto, Baldanza and Reitano, 2022
**Loxocorniculum micropapillosum** Luz and Coimbra, 2022, Order Podocopida, Family Loxoconchidae

**Malavidopsis antoniae** Jacobs and Martens, 2022
**Malavidopsis ruwaydae** Jacobs and Martens, 2022
**Malavidopsis stellae** Jacobs and Martens, 2022

**Martensina thailandica** Savatenalinton, 2022, Thailand, nonmarine

**Paracytheridea longicristata** Sciuto, Baldanza and Reitano, 2022

**Parasterope busanensis** Pham and Karanovic, 2022, Order Myodocopida, Family Cylindroleberididae

**Parasterope sagami** Pham and Karanovic, 2022, Order Myodocopida, Family Cylindroleberididae

**Parasterope singular** Pham and Karanovic, 2022, Order Myodocopida, Family Cylindroleberididae

**Parasterope sohi** Pham and Karanovic, 2022, Order Podocopida, Family Cylindroleberididae

**Phlyctocythere apua** Luz and Coimbra, 2022, Order Podocopida, Family Loxoconchidae

**Phlyctocythere christophei** Luz and Coimbra, 2022, Order Podocopida, Family Loxoconchidae

**Poseidonamicus parasculptus** Huang, Yasuhara, Cronin, Okahashi and Hunt, 2022

**Pseudocandona cheni** Yu and others, 2022, Inner Mongolia, China

**Pseudocypretta amor** Ferreira, Higuti and Martens, 2022

**Pseudostrandesia tenebrarum** Smith and Ozawa, 2021

**Sarscypridopsis denticulata** Smith and Ozawa, 2023

**Semicytherura parva** Luz and Coimbra, 2022, Order Podocopida, Family Cytheruridae

**Songkhramodopsis meischi** Savatenalinton, 2023, Thailand, nonmarine

**Tegmenia mariasophiae** Sciuto, Baldanza and Reitano, 2022

**Tenedocythere eleonorae** Sciuto, Baldanza and Reitano, 2022

**Thaiicypris panhai** Savatenalinton, 2022, Thailand, nonmarine

**Tonnacypris rectangularis** Yu and others, 2022, living, Inner Mongolia, China

**Vizcainocypria viator** Bisquert-Ribes, Rueda, Palero, Savatenalinton, Mesquita-Joanes, 2023 Thailand, nonmarine

### New Species, Fossil

**Aaleniana franzii** Tesakova, 2022, Silurian

**A. volganica** Tesakova, 2022, Silurian

**A.? ovoidea** Tesakova, 2022, Silurian

**Acrocythere sokurensis** Tesakova, 2022, Silurian

**Anticythereis dorsennus** Puckett and Hunt, 2022

**Anticythereis slipping** Puckett and Hunt, 2022

**Asculdoracythereis asculdora** Puckett and Hunt, 2022

**Asculdoracythereis invicta** Puckett and Hunt, 2022

**Asculdoracythereis pseudoalamensis** Puckett and Hunt, 2022

**Bairdiacypris xainzaensis** Song, 2022, Upper Devonian Chaguoluoma Formation, Tibet, China

**Bingeria jakutica** Stepanova, 2022, Ordovician

**Calocaria callundosa** Perrier 2023, Mina Guillermín section, Alcaracejos (Córdoba, Spain), Pridoli Series, Silurian.
Camptocythere (Anabarocythere) triangula  Tesakova, 2022, Silurian
C. (Camptocythere) quinta  Tesakova, 2022, Silurian
C. (Palaeoloxoconcha) caudata  Tesakova, 2022, (with the subspecies  C. (P) caudata caudata  Tesakova, 2022 (subsp. nov.) and  C. (P) caudata nuda  Tesakova, 2022 (subsp. nov.)), Silurian
C. (P) ryazanica  Tesakova, 2022, Silurian
Ceratopsis persicus  Salas, 2022, Katkoyeh Formation, Upper Ordovician, Central Iran
Clavofabella lanshella  Guillam, Forel, Song, and Crasquin, 2022, Order Palaeocopida, Family Primitiopsidae
Cyprideis atalaiensis  Linhares and Ramos, 2022, Miocene, Amazonas, Brazil, Western Amazon
Cyprideis dictyon  Linhares and Ramos, 2022, Miocene, Amazonas, Brazil, Western Amazon
Cypris pretusi  Mesquita-Joanes, Aguilar-Alberola, Palero and Rueda, 2020
Deefgella? pulchra  Melnikova, 2022, Ordovician
Frodocythereis frodoi  Puckett and Hunt, 2022
Glyptocythere bathonica  Tesakova, 2022, Silurian
Ilyocypris leptolina  Wang and Zhai 2022, Late Quaternary, Xiaojinggou section of Inner Mongolia
Laevipellacythereis colossus  Puckett and Hunt, 2022
Laevipellacythereis laevipellis  Puckett and Hunt, 2022
Leiocyamus magnus  Stepanova, 2022, Ordovician
Longiscula? destorta  Melnikova, 2022, Ordovician
Nanacythere octum  Tesakova, 2022, Silurian
Procysterura ippolitovi  Tesakova, 2022, Silurian
Procysterura iyae  Tesakova, 2022, Silurian
Satiellina zarandensis  Salas, 2022, Katkoyeh Formation, Upper Ordovician, Central Iran
Signetopsis obliteratus  Stepanova, 2022, Ordovician
Tollitia alakitica  Stepanova, 2022, Ordovician
Trachycythere peculiaris  Tesakova, 2022, Silurian
Tumulocythereis incompta  Puckett and Hunt, 2022
Tumulocythereis tiberti  Puckett and Hunt, 2022
Tumulocythereis tumulus  Puckett and Hunt, 2022
Velatomorpha xavante
Velatomorpha pseudoaltilis
Vizcainocypria viator  Bisquert-Ribes, Rueda, Palero, Savatenalinton and Mesquita-Joanes, 2023

Ambostracon frenzeli  sp. nov.

Holotype. *Ambostracon frenzeli* sp. nov. (Fig. 3, 1 – adult, female, RV, external, × 210, SEM DN-4, station GeoB 20615, L = 0.48 mm, H = 0.28 mm, L/H = 1.71; Fig. 3, 2 – adult, male, LV, external, SEM OF-E-014, station GeoB 20615, L = 0.53 mm, H = 0.28 mm, L/H = 1.89. South Africa, Maputo Bay, lat. 25°33.073S, long. 33°12.181E, 200 m water depth, int. 0-5 cm, mud substrate, Recent. Collection M123-2016, Institute of Geosciences (University of Jena, Germany).

**Diagnosis**: Shell is small, maximum convexity in the median ventral and posteromedian parts. Valves finely sculptured, cellular-ribbed; ridges high and narrow; cells average to large with fuzzy muri. Loop-shaped ridge well expressed, elongated, high, with longitudinal ridge inside. Ocular ridge well expressed, long, low, narrow, runs through smooth, flattened, average size eye tubercle, isolated from ventral ridge. There are two ventral ridges in the ventral part of the valve. High narrow ridges run along the anterior end and anteroventral part of the valve. Numerous very small teeth are located along anterior end. One to two marginal teeth developed posteroventrally. Surface pore canals well expressed. Hinge paramphidont, terminal teeth are crenulated, low, long; median part is represented by fine-crenulated groove (RV).

**Stratigraphical position**. Recent: continental shelf of East and South Africa, estuaries, and lagoons of the eastern coast of South Africa (Wilderness area, Knysna estuary).

**Geographical distribution**. South-East Africa: continental shelf of Maputo Bay to southwest of Durban, estuaries, and lagoons of the eastern coast (Wilderness area). South Africa: continental shelf of the southern coast, Mossel Bay.

SEM OF-E-014 (holotype), A, ♂, LV, external, × 200, South Africa, Maputo Bay, station GeoB 20615, 200 m water depth, surface sediment (0-5 cm), Recent.

Mark Puckett

**FUNDING OPPORTUNITIES**

The O-Bazaar at ISO19 yielded the amount of €712,80 for SF*IRGO. Many thanks to all who donated and bought material.

**David Horne**
I would like to draw attention to this advertisement for a new postdoc position, especially to anyone with interests and expertise in Quaternary nonmarine ostracods.

https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.bournemouth.ac.uk%2Fabout%2Fjobs%2Fpost-doctoral-research-assistant-ahrc-peopling-tularosa-basin-palaeoenvironments__%3B!!LkSTlj0I!GeH_2_VjqjC4bALi9H_YhGX6rifzLhLZgUhKYh7qyk4Z8sRZKnea5k-

**Renate Matze-Karasz**
I would like to draw the attention of my colleagues in Eastern Europe to this student funding opportunity in the State of Bavaria:

The Free State of Bavaria awards annual scholarships to higher education institution graduates from Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Russia, Serbia, Slovakia and Ukraine who have opted for postgraduate studies in Bavaria.

Link to the English call:
https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.uni-regensburg.de%2Fassets%2Fbayhost%2Fde%2Fstip-incoming%2Fstip-Ausschreibung%2FFlyer_BAYHOST_Jahresstipendien_en.pdf__%3B!!LkSTlj0I!EE0NvyB9dlzxRleeGigmPm9qeMP-yXh85WpXDpo9d2_4MQp2rTEoonIjAIydQzrxdL2OmoAxvVLZtYQyKGQMidV3%24&data=05%7C01%7C%7Cfa8d37c50e1b4479ba1e08db8ea2e02c%7C84df9e7fe9f640afb435aaaaaaaaa

Feel free to spread this information.
OBITUARIES

WILLIAM MELROSE BRIGGS JR.
11/12/1931-04/07/2023

In 2023, we learned of the passing of William Briggs. Bill was born in Bath, Maine, in 1931. He earned a master’s degree from George Washington University, where he worked under Dr. Greg Sohn in the Department of Geology. Greg taught micropaleontology and taxonomic methods, basic to both paleontologists and zoologists. It must have been then that Bill fell in love with ostracod taxonomy, and it became the main research focus of his career.

Bill went to Victoria University of Wellington, New Zealand, in 1965/1966, on release from the U.S. Geological Survey to study for a PhD on upper Tertiary ostracods. He collected many large samples from all over the country, washed and picked them. The samples were stored in rooms all around the annex of the Geology Department where he had an office. He had remarkable knowledge of ostracod taxonomy but could never commit himself to writing it up. Years later, he documented the molting process of Quadracythere sp. in aquaria. This fascinated him and he wrote it up for his dissertation, which was titled “Studies on Ostracoda from New Zealand: progressive calcification and ultrastructure of carapace of some adult Cytherocopina.” Bill defended his dissertation in 1973, and soon after returned to the United States.

Bill moved to Boulder, Colorado, where he lived for the rest of his life, and spent his spare time in his cabin in the mountains in Ward, Colorado. He drove an old truck with the steering wheel on the wrong side that was originally a mail delivery truck. His property had an ephemeral pond inhabited by Heterocypris incongruens, which laid eggs when the pond dried and these would hatch when the pond got wet again. He shared some of this sediment material with Anne Jennings (University of Colorado, Boulder) who was able to immerse it in water and got a good crop of the ostracods that kept reproducing for years until she released them.

Bill worked at the Institute of Arctic and Alpine Research (INSTAAR) at the University of Colorado, Boulder, as one of the Past Global Change Group of researchers. His research focused on taxonomy and ecology of Arctic Ostracoda. Bill greatly contributed to the knowledge and faunal data on Arctic ostracods working with many other Arctic ostracod specialists. One of the most notable contributions is his work with Thomas Cronin (USGS), and other Arctic ostracod specialists, on the Arctic Ostracode Database (Cronin and others, 2021). The AOD is used extensively in many paleoceanographic, ecological and stratigraphic studies.

I (A. Stepanova) met Bill when I was a PhD student working on the Laptev Sea Ostracoda in the early 2000s. Tom Cronin recommended me to address some of the taxonomic questions I had to Bill. He helped me with the revision of multiple taxa I was working on for my dissertation. We continued taxonomy discussions by email for many years and became good friends. I met Bill in person for the first time at the International Symposium on Ostracoda in 2005 in Berlin. After
moving to the United States in 2008, my family and I visited Bill a few times in Boulder. He was already retired. His apartment in Boulder was very cluttered with all his ostracod samples and publications he collected throughout his life.

In 2019, his health declined, and he had to move to an assisted living location, and his belongings were moved to storage. A former colleague from INSTAAR helped him, later a niece of the colleague, Xay, started to take care of him. She contacted me in 2021 and asked me to help her organize Bill's samples and publications. I traveled to Boulder and spent a weekend organizing his collections. All his Arctic materials were sent to Tom Cronin at USGS and eventually these faunal slides may be deposited in the U.S. Museum of Natural History in Washington, DC with other USGS ostracod collections.

Bill’s passing is an irreplaceable loss to the Ostracodologists’ community, but his work legacy will continue to help and inspire future generations of ostracod researchers.

The following colleagues and friends contributed to this obituary:
Anna Stepanova, Texas A&M University
Tom Cronin, USGS
Anne Jennings, INSTAAR, University of Colorado
Stephen Eagar, Victoria University of Wellington
Giff Miller, University of Colorado
Jenifer Hall-Bowman, University of Colorado
John Andrews, University of Colorado

Published Papers:


Tucker, W. B., Keating, V., and Cate, D. (1996). The 1994 Arctic Ocean Section: The first major scientific crossing of the Arctic Ocean. DIANE Publishing. (W. Briggs and T. Cronin were shore-based investigators)

Anna Stepanova, Bill Briggs, and Carlos Alvarez-Zarikian in Boulder, Colorado
Merv Kontrovitz died in 2015—this memorial is in honor of his contributions and his outstanding work on Cypris in the early days of the newsletter.

Mervin Kontrovitz passed away at age 80 on Friday, Sept. 4, 2015, after a short illness. He was born in Toledo, Ohio on January 15, 1935. An inspired teacher, noted researcher and respected paleontologist, Kontrovitz was instrumental in shaping the Department of Geological, Environmental, and Marine Sciences (GEMS). He began his academic career at Rider University and served as head of GEMS (then known as the Department of Geosciences) before receiving an endowed professorship. He earned a B.S. in geology and a B.Ed. from the University of Toledo, and then went on to earn a M.S. in geology from Tulane University. He served in the U.S. Army Reserve as a second. Lt. from 1958 to 1966.

He was elected senior fellow of the Geological Society of America and was a member of the American Association of University Administrators, American Association for the Advancement of Science, Paleontological Society (emeritus), British Micropaleontology Society, International Research Group on Ostracoda, North American Micropaleontology Section SEPM, American Petroleum Institute, the Louisiana Academy of Sciences, and the New Jersey Academy of Sciences. He was a member of the honor societies Sigma Xi, Phi Kappa Phi, Sigma Gamma Epsilon and Gamma Theta Epsilon.

After his time at Rider, Kontrovitz accepted a faculty position at the University of Louisiana at
Monroe, where he served as the head of the Geoscience Department and then as Dean of Pure and Applied Sciences. After his retirement from ULM, he was elected professor emeritus of geosciences. Professor Jonathan Husch, Chair of GEMS, says Kontrovitz was instrumental in shaping the department during his numerous years as a faculty member and leader. "He was the one who brought me to the university, and he set a high standard for me to follow, both as new faculty member, and later as chair of the department," Husch says. Throughout his lifetime, Kontrovitz inspired others with his dedication to the field of paleontology and micropaleontology.

He was a prolific researcher and published dozens of research papers in Paleontology and Micropaleontology in peer reviewed journals, gave dozens of papers and presentations at professional meetings and conferences around the world, and edited CYPRIS, the International Ostracoda Newsletter. He was Visiting Scientist at the National Museum of Natural History, Smithsonian Institution, a consultant to CADW Welsh Historical Monuments, reviewed grant proposals for the NSF, was a member of the Ancient Mounds Heritage Area and Trails Advisory Commission, Office of the Governor, State of Louisiana, Distinguished Scientist of the Year 1991 Louisiana Academy of Sciences, and many other accomplishments and honors.

Steven R. Bell 1979, who was a student of Kontrovitz during his time at Rider, remembers his teacher as a mentor whose approach was both supportive and inspirational. "What was great about Merv is that he had very high standards, but he delivered those high standards in constructive and encouraging ways," Bell says. "He really raised the bar of expectation for me and my fellow students." Bell, who studied paleontology and micropaleontology with Kontrovitz, went on to pursue his master's degree in geology from the University of Southwest Louisiana. "His courses were very intense," Bell says. "They involved microscope work and library research, but the courses really prepped me for graduate studies. As a graduate teaching assistant facing my own class, I used exactly the lab he gave us, and my students were astounded."

He was passionate about his field of investigation. The research he did in his later years really contributed to science and is used by paleontologists and the current climate change research that is so important today.

Merv Kontrovitz made significant contributions to the understanding of ostracods in geology. His studies on the use of phosphates (i.e., Calgon®) in sample processing demonstrated that it degrades the shells, and thus the use of which should be abandoned. He published several papers on the taphonomy of ostracod shells, including studies that showed current thresholds for removal of valves and carapaces. He made pioneering studies on the use of ostracod eye structures in determining the maximum depth of the seafloor in past times. Similar to conodonts, Kontrovitz demonstrated that ostracod shells can be used to determine thermal history of sedimentary deposits. All of his studies are characterized by meticulous work and careful observations.

Kontrovitz is survived by his wife of 41 years, Eileen Romeo Kontrovitz, and their two children.

**Published papers:**


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TRAJAN PETKOVSKI

1926-2023

Burkhard Scharf, Svetozar Petkovski, Dan Danielopol, Ivana and Tomislav Karanovic, Dietmar Keyser, Claude Meisch

Trajan Kiril Petkovski was born on February 13, 1926, in Romanovce, near Kumanovo, North Macedonia. He passed away on September 21, 2023, in Skopje, at the age of ninety-seven. The funeral ceremony (memorial service) was held on September 24, 2023, at the Butel City Cemetery in Skopje.

Trajan attended elementary school in his birthplace of Romanovce. Upon graduation from secondary school in Kumanovo, Trajan joined the army to serve his country until the end of WWII. Upon leaving the military, he attended the Faculty of Biology at St. Cyril and Methodius University in Skopje.

Trajan married the love of his life, Smilja, on February 12, 1950. They were together until her passing on March 24, 2023. They raised their three sons together: Svetozar (1950), Zoran (1955) and Vlasto (1957).

Trajan started his professional career in the Macedonian Museum of Natural History in Skopje in 1952, as an assistant of the famous zoologist Dr. Stanko Karaman. Under supervision of Dr. Karaman, he started studying Copepoda, followed by Ostracoda and Cladocera on the territory of Yugoslavia.

In August, 1963, the catastrophic earthquake in Skopje significantly damaged the museum, located in the city centre, destroying most of the museums’ collections, especially those conserved in glass
containers (jars), including type specimens of numerous species. During the earthquake, Trajan was in the Museum building, but he survived without any injuries.

From 1967-1969, Trajan went on to study at the Hamburg Zoological Museum and Institute of the University of Hamburg, Germany, working with Prof. Gerd Hartmann, as a stipendiary of the Aleksander von Humboldt Stiftung Foundation.

He defended his doctoral (PhD) thesis entitled, “Taxonomic-morphological and Zoogeographic-ecological Study of Calanoida in Yugoslavia” at the Institute of Biology, Faculty of Natural Sciences and Mathematics, at St. Cyril and Methodius University in Skopje.

In 1976, Trajan was awarded the Macedonian State Order for Merit “October 11” for his contribution to biological sciences. He retired in 1986, spending his entire working career at the Macedonian Museum of Natural History in Skopje. From July 1996 to September 2006, Trajan and his wife Smilja, lived with his youngest son Vlasto and his family in Toronto, Canada. On February 12, 2015, Trajan and Smilja received a congratulatory message from the Governor General of Canada and from Her Majesty the Queen, Elizabeth II, on behalf of their sixty-fifth wedding anniversary.

Trajan was a truly great man whose impact will be forever felt by his family that loves him dearly. He was a selfless man whose passing left an unfillable gap in the hearts of his loved ones. His ability to sacrifice, provide, support, and love will be forever engrained in everyone that knew him.

**Dan Danielopol:** Trajan was my mentor when I started the study of freshwater ostracods during 1963-1964. My first publication in cooperation with Emil Vespremeanu was accepted for publication in the journal *Fragmenta Balcanica* of the Natural Sciences Museum at Skopje, due to the active support of Trajan. During the next years Trajan was kind enough and verified my ostracod taxa, some of them new species that I planned to publish. In my second publication representing a part of my master thesis I dedicated one of the species to him, namely *Eucypris petkovskii*. It was in 1965. We continued actively to communicate for many years. So, now I accept his departure between us with much sadness. Dr. Trajan Petkovski was also a good friend of Professor Heinz Löffler, they communicated not only about ostracods but also about Ohrid and Prespa lakes. From this communication our students profited at the University of Vienna who participated in a well prepared scientific excursion.

**Ivana and Tomislav Karanovic:** Dr. Trajan Petkovski was lucky to spend almost 98 years on this beautiful planet, and to contribute to our knowledge of its amazing diversity of life. He studied ostracods, copepods and cladocerans, mostly from his beloved Macedonia. Ohrid, Dorjan, and Prespa were on his doorstep and most of his scientific discoveries are related to these three lakes. Trajan was an exceptional taxonomist, with many deep insights into morphological characters we all use today. He was teacher to several ostracodologists and copepodologists, including my husband and me. In 1994 we visited him for the first time in the Museum of Natural Sciences in Skopje, with a few samples and basic books, and returned with boxes of literature and the confidence to pursue our careers. His support and dedication did not stop there, and over the years we went to this charming museum and spent time with him trying to solve taxonomic puzzles.
while overlooking zebras and lions in the zoo next door. First steps in science are the hardest and Trajan for sure eased them for us. Thank you and may your soul rest in eternal peace.

**Dietmar Keyser:** I have the privilege of knowing Trajan Petkovski in the year 1962. He had a grant from the Alexander von Humboldt Stiftung to stay again with his friends Gesa and Gerd Hartmann for two months in Hamburg. I learned how effective his style of scientific work was and how careful he was with his statements. I am proud to have published some papers with him and learned a lot in scientific work from him. He was a great scientist and a nice and friendly person. We will miss him.

**Claude Meisch:** From the start of my studies on ostracods in the mid-1970s and right up to the present day, I have made extensive use of Trajan Petkovski’s publications on the taxonomy and distribution of our common study group. Throughout the years I have appreciated and benefited from Trajan’s clear descriptions and illustrations as well as from his sound understanding of species taxonomy. In the late 1980s I contacted Trajan by post and later by email. Although we then had several telephone exchanges, to my great regret I never met Trajan in person. Nevertheless, our exchanges led to the publication of five joint publications on the taxonomy and distribution of quite a number of freshwater ostracods of Europe and beyond (see references below). I really enjoyed our easy and pleasant collaboration.

**Svetozar Petkovski:** Trajan was a truly great man whose impact will be forever felt by his family that loves him dearly. He was a selfless man whose passing left an unfillable gap in the hearts of his loved ones. His ability to sacrifice, provide, support, and love will be forever engrained in everyone that knew him.

**Burkhard Scharf:** In 1995 I started working with limnic ostracods in my spare time. After the Fourth International Symposium on Ostracoda, held in Austria in 1996, my wife Sigrid and I visited the Petkovski family in Skopje. It was a very warm meeting. Among other things, I remember the unusually spicy food for me. On recommendation, we visited Lake Ohrid and the monastery Sveti Naum. Also, a very nice memory! Since then, Trajan and I have been in loose correspondence. We met again in 2009 when I took part in an excursion to Lake Ohrid, organized by the University of Brunswick, Germany, together with Finn Viehberg and Julia Lorentschat. The last time I met Trajan and his wife was in July and October 2020 and September 2022, when I was collecting crustaceans for the revision of the genus *Psychrodromus* with his son Svetozar and Emilia Stojkoska in the Persister Mountains. Father Trajan had advised his son where we should collect the species we were looking for. And the search was successful! And again, we had very nice meals together in the Petkovski family's house. Trajan was a fatherly friend and teacher to me. I grieve very much for him. Alongside ostracods, and with the same enthusiasm, Trajan Petkovski studied two other groups of small crustaceans, the Copepoda and Cladocera, mainly from the Balkan countries. His colleagues specializing in these two groups will no doubt confirm the importance of his work in these areas of research.

**Publication list of Dr. Trajan Petkovski**


Congratulatory message from Her Majesty the Queen, Elizabeth II, on behalf of the sixty-fifth wedding anniversary of Smilja and Trajan Petkovski.

Dr. Trajan Petkovski in the year 2009. Photo B. Scharf
Trajan Petkovski, Julia Lorentschat and Burkhard Scharf during the Ohrid excursion in 2009. Photo Finn Viehberg.

Smilja and Trajan Petkovski in the year 2020. Photo B. Scharf
JEAN PIERRE PEYPOUQUET
1944-2023

J-P passed away last Sunday. He had not been well since the death of Marie France his wife in 2020.

He joined Michel Vigneaux's laboratory as an assistant in 1971 after defending his doctoral thesis in 1970. He was the first to study the deep ostracod faunas of the Cap Breton Trench, pioneering research in this field, and to have formulated the first paleoceanographic interpretations in this field. After his national service, he went on an internship at the Smithsonian Institution in Washington with Richard Benson where he perfected his knowledge of the deep fauna but also of ocean circulation. It was there that he discovered the problem of architectural variations in ostracods, a notion that he would import with many ideas. Upon his return, he began his research on the variability of ostracod morphologies as a function of the current deep-domain environment, first fossil and then fossil. For him, these variations are mainly due to variations in chemical equilibria at the water-sediment interface. This analysis differs from Benson's, for whom it is variations in physical equilibrium that come into play. This work led him to his state thesis, which he brilliantly defended in 1977. It is with this in mind that he relates the shape and size of the vestibule in various species of *Krithe* as a function of oxygenation at the water-sediment interface. This hypothesis, which will give rise to discussions that are still topical, will allow him to propose evolutions of oceanic paleoenvironments since the Cretaceous (Le Kef, Aquitaine Basin, etc.). Lecturer, then Associate Professor, he ended his career as Director of Studies at the Ecole Pratique des Hautes Etudes.

His contagious enthusiasm and dynamism have made him one of the driving forces of this laboratory. He was the driving force behind the "Bordeaux school" of the study of ostracods initiated by Jean Moyes. In addition, he offered an original teaching that was highly appreciated by students at all levels. A number of them found themselves under his supervision in their research.

His activity has taken the form of missions at sea, numerous publications, interventions in conferences and participation in numerous research programs, some of which he has been the scientific director.

Although he has taken a step back from science since his retirement, Jean-Pierre leaves a void in our community, which he has marked with his enthusiasm, creativity, and communication skills.

P. Carbonel
October 2023
Jean-Pierre Peypouquet in Houston 1982 ISO (Henning Uffenorde)
Bibliography


**ANTONIO RUSSO**

On behalf of the Italian Ostracodological Group, it is with deep sadness that we announce the passing of Prof. Antonio Russo on Wednesday, 21 June 2023, at the age of 83, in Reggio Emilia. The funeral took place on Friday 23 June in Modena at the church of Sant’Antonio di Padova.
Antonio Russo, Tonino for all his friends, was full Professor of Palaeontology at the University of Modena.

During his long career, Prof. Antonio Russo was Director of the Institute of Palaeontology and subsequently founded, and was Director for several years, of the Museum of Paleobiology and the Botanical Garden. He was the President of the Italian Paleontological Society from 2003 to 2006. His studies, still relevant today and of reference for many scholars, concerned general palaeontology and the paleoecology of ostracods, corals and porifera. He worked a lot in Italy, but also abroad and above all in Africa (Ethiopia and Somalia). He dedicated the last years of his career to scientific dissemination and museum activity.

His curiosity and enthusiasm for ostracods and for research in general led his career. Despite his serious health problems, he never lost his sense of humour. He will be truly missed.

Below you can find a list of his main publications about Ostracoda and Cnidaria.

Ilaria Mazzini

**Publications on Ostracods**


**Publications on Porifera and Cnidaria**


Dr JOHN EUSTACE WHITTAKER  
(25.09.1945 – 29.07.2023)

John Whittaker was a distinguished micropalaeontologist who served his entire career at the Natural History Museum, London. With an understated enthusiasm for all that he tackled he made a major contribution to his science both in service and in published works. A much-valued mentor of students and colleagues alike, he had an endearing, mischievous smile and a charming wit and was respected by all who knew him.

John was a down-to-earth character, one that reflected his background. He grew up in a rural backwater of East Lancashire, the son of a farmer. He acknowledged that, in addition to his Roman Catholic school Marist priests, three “amazing mentors” had a huge influence on his education and career path: Ken James, a charismatic geography and geology teacher at ‘Blackburn Grammar’; Robin Whatley of Aberystwyth University, John’s PhD supervisor; and, in John’s words, the “late, great” Geoff Adams, his senior colleague at the Natural History Museum.
Having graduated from Aberystwyth University with a degree in Geography and Geology (1967) John then stayed on to undertake doctoral studies on the ostracod crustaceans of the Fleet lagoon, Dorset (1972). As Peter Sylvester-Bradley, his PhD examiner at Leicester would later remark, it was an outstanding piece of research. To the good fortune of the then British Museum (Natural History), London, John was appointed to its staff in 1971. After 35 years distinguished service, he retired in 2005 as Head of Micropalaeontology, but continued to work as an Honorary Scientific Associate of Natural History Museum and was still publishing scientific papers in 2023. The museum collections and its Heron-Allen Library were a constant source of inspiration to him.

John made a sustained scientific contribution throughout his career. He was a renowned authority on the systematics, ecology and environmental significance of living and fossil ostracods and foraminifera. He authored or co-authored more than two hundred papers, monographs, and books, such as the lauded *Marine and Brackish water ostracods* in the Linnean Society’s *Synopses of the British Fauna* series, now long out of print but still in demand. There were countless reports on fossil biotas world-wide, for national geological surveys and commercial companies. In the latter part of his career, he was at the forefront of demonstrating the utility of microfossils in the palaeoenvironmental analysis of archaeological sites, especially key early human localities such as Boxgrove in West Sussex and Happisburgh in Norfolk. Such research opened a new world and friendships for John.

John was never one to push his own self-interest or importance, but his skills and integrity were acknowledged and sought-after. He was Head of Micropalaeontology at the Natural History Museum for fourteen years. He served as Editor of various learned journals and held positions on the Councils of many societies. He was elected Vice-President of the Palaeontographical Society; Chair of Fleet Study Group; and President of The Micropalaeontological Society. His claim to be an “Old Stager” of the latter Society was certainly true: he was a founder member (1970) and served ‘TMS’ admirably in many roles over decades. In recognition of his achievements John received Honorary Membership of The Micropalaeontological Society and The Cushman Award of the Smithsonian Institution, Washington.

John conveyed his enthusiasm for palaeontology to others, always grounded in the specimens themselves. Generations of students in many universities in Wales and England benefited from his teaching, supervision, support, and examiner’s eye. His approval was effusive, where approval was due, but he deplored “slackness” which he would counter with advice to “get a grip.” He had a guiding influence on the professional careers of many.

John the man will undoubtedly endure in the memory, with his easy-going, convivial personality. Socializing or collaborating with John was always nothing less than “fun.” Banter was an eclectic mix of science, sport, jokes, and stories – so many tales! He promoted the ‘Rent-a-Wreck Award’ for the most decrepit vehicle on Micropalaeontological Society field trips; he used nicknames whenever, as a play on the names of friends and colleagues (“JA”, "Hat", “Boyd the Bucket”, “Otto”, “Box-wallah” and “Monsoon Disaster”); and he offered a “dial a microfossil identification” service for instant over-the-phone taxonomic help (indeed, his lengthy and informative calls, invariably concluded with an abrupt “g’bye”, are remembered with affection by recipients).
John’s hobbies and interests were legion - almost as numerous as the size of his family. “Up the Clarets” was his cry, as an ardent supporter of Burnley FC. He spent much energy organizing football and cricket teams for his sons. Yet, he still found time for his treasured collections of Dinky and Corgi toys and postage stamps; his roses and vegetable garden; and his passion for train sets and railway literature. From a small boy he was hooked on steam trains – “real stuff,” as he would often quip. John remarked that he had “never grown up,” but that was a mark of his widespread interests and his charm. He bequeathed an enduring scientific and educational legacy.

John is survived by his devoted wife of 45 years, Christine, whom he met when they worked together in the Palaeontology Department of the Natural History Museum; his six sons, Jonathan, Dan, Joel, Dominic, Gregory, and Robin; and two grandchildren.

David Siveter and Dave Horne

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