

Scientific Programme

Wednesday, July 19, 2023



8:00	Registration desk open, hanging posters, uploading presentations etc.	
9:00	9:20	Opening Ceremony
		Session 1: Ordovician of the World Chair: Thomas Servais
9:20	10:00	David A.T. Harper , Tõnu Meidla and Thomas Servais: The Ordovician System: From overlapping unit stratotypes to Global Stratotype Sections and Points (Keynote)
10:00	10:20	Yong Yi Zhen and Ian G. Percival : Ordovician stratigraphy of the Junee–Narromine Volcanic Belt in central New South Wales, Australia: conodont studies and regional correlations
10:20	10:40	Cristiana J.P. Esteves , Patrick I. McLaughlin, Alyssa M. Bancroft, Thomas W. Wong Hearing, Mark Williams, Jahandar Ramezani, Poul Emsbo and Thijs R.A. Vandenbroucke: Upper Ordovician chronostratigraphic correlation between the Appalachian and Midcontinent basins
10:40	11:00	Carolina Zabini , Lívia Rodrigues, Fernando Lavié, Ana Beatriz Furtado Carvalho, Enrique Alberto Randolfe, Juan José Rustán, Francisco Arouca, Ana Laura Silva Gomes, Rodrigo Adórno, Matheus Denezine, Dermeval A. do Carmo and Mário L. Assine: A summary of the Brazilian Paraná Basin Ordovician
11:00	11:30	COFFEE & TEA
		Session 2: Ordovician of Baltica Chair: Olle Hints
11:30	11:50	Tõnu Meidla , Leho Ainsaar, Olle Hints and Sigitas Radzevičius: Recent advances in the Ordovician stratigraphy of the Baltic Palaeobasin and Tornquist margin of Baltica
11:50	12:10	Svend Stouge , Gabriella Bagnoli, Carmen Bauert, Heikki Bauert and Christian M.Ø. Rasmussen: The detailed Middle to early Late Ordovician faunal succession and $\delta^{13}\text{C}_{\text{carb}}$ chemistry of the Kårehamn drill core, offshore eastern Öland, Sweden: implications for stratigraphy and correlation
12:10	12:30	Tõnn Paiste , Peep Männik, Svend Stouge and Tõnu Meidla: Towards a revised Sandbian conodont biozonation of Baltica
12:30	12:50	Leho Ainsaar and Tõnu Meidla: Age of the Ordovician sedimentary succession in Lumparn Bay, Åland Islands, Finland
12:50	13:10	Andrej Ernst : Ordovician Bryozoa of Estonia
13:10	14:00	LUNCH
		Session 3: Ordovician of China Chair: Zhifei Zhang
14:00	14:40	Yuandong Zhang , Renbin Zhan, Yongyi Zhen, Wenhui Wang, Yan Liang, Xiang Fang, Rongchang Wu, Kui Yan, Junpeng Zhang and Wenjie Li: Ordovician geology and stratigraphy of China: A synthesis (Keynote)
14:40	15:00	Rongchang Wu , Fangyi Gong, Mikael Calner, Jianbo Liu, Oliver Lehnert, Xiacong Luan, Guanzhou Yan, Lixia Li and Renbin Zhan: High-resolution carbon isotope stratigraphy of the Lower and Middle Ordovician succession of the Yangtze Platform, China
15:00	15:20	Zhongyang Chen , Wenjie Li, Xiang Fang, Chao Li, Clive Burrett, Mongkol Udchachon and Yuandong Zhang: Ordovician conodonts from the Ban Tha Kradan area, Western Thailand
15:20	15:40	Qing Chen and Linna Zhang: Biogeographic dynamics of graptolite species during the end Ordovician mass extinction in South China
15:40	16:20	POSTERS, TEA & COFFEE
		Session 4: Regional aspects Chair: Patrick I. McLaughlin
16:20	16:40	J. Javier Álvaro and Blanca Martínez-Benítez: Advances in the Lower Ordovician of the western Iberian Chain, NE Spain
16:40	17:00	Sean Davis, Frank R. Etensohn and William M. Andrews: Using 3-D Mapping to understand an Upper Ordovician buildup and facies complex in the upper Lexington Limestone, central Kentucky, U.S.A.
17:00	17:20	Lixia Li and Joachim Reitner : A remarkable new halichondrid demosponge, <i>Ptilospongia hemisphaeroidalis</i> , from the latest Ordovician Beigong Biota, South China
17:20	Ordovician Subcommittee Business Meeting and book presentation	

Thursday, July 20, 2023

8:30	Registration desk open, uploading presentations etc.	
Session 5: Late Ordovician extinction		Chair: David A. T. Harper
9:00	9:40	Christian M.Ø. Rasmussen: The Late Ordovician extinction conundrum (Keynote)
9:40	10:00	Audrey Morrison, Amy Lefebvre, Ariel Van Patter, Alyssa Davis, Nigel Blamey, Jisuo Jin, Sylvia Riechelmann and Uwe Brand: Drivers of the Late Ordovician Mass Extinction: redox, volcanism, atmospheric oxygen/carbon dioxide and/or glaciation
10:00	10:20	Patrick I. McLaughlin, Thijs R.A. Vandenbroucke, Cristiana J.P. Esteves, Alyssa M. Bancroft, Timothy R. Paton, Carlton E. Brett, Mark Williams and Poul Emsbo: The late Katian Elkhorn event: precursor to the Late Ordovician mass extinction
10:20	10:40	Joshua B. Zimmt, Steven M. Holland, Mariko Cappello, David S. Jones, Jisuo Jin, Jon M. Husson, Blair Schoene, Charles Mitchell, Michael Melchin, Seth Finnegan and André Desrochers: An integrative biostratigraphic, chemostratigraphic, and sequence stratigraphic perspective of the Ordovician-Silurian boundary on Anticosti Island (Canada)
10:40	11:00	Olle Hints and Petra Tonarová: A diverse Hirnantian scolecodont assemblage from northern Estonia and resilience of polychaetes to the end-Ordovician mass extinction
11:00	11:30	COFFEE & TEA
Session 6: Basins, palaeogeography & evolution		Chair: Leho Ainsaar
11:30	11:50	Frank R. Ettensohn and Gustavo Martins: Tectonic, foreland-basin origins of Upper Ordovician black gas shales in the Appalachian Basin of eastern United States
11:50	12:10	Juwan Jeon, Jeong-Hyun Lee, Stephen Kershaw, Zhong-Yang Chen, Jun-Ye Ma, Kun Liang and Yuan-Dong Zhang: The earliest known stromatoporoid and its contribution to reef construction
12:10	12:30	Fan Liu, Christian B. Skovsted, Timothy P. Topper, Yue Liang and Zhifei Zhang: The morphological disparity, ecological evolution and palaeobiogeography of Palaeozoic hyoliths
12:30	12:50	Yan Kui, Thomas Servais, Huang Bin, Li Jun and Shan Longlong: Global palaeogeographical implication of acritarchs in the Upper Ordovician
12:50	13:10	Anna McGairy, Christopher P. Stocker, Mark Williams, Phong Duc Nguyen, Thomas H. P. Harvey, Toshifumi Komatsu and Dayou Zhai: An Ordovician ostracod palaeopsychrosphere?
13:10	14:00	LUNCH
Session 7: Ordovician palaeontology		Chair: Yuandong Zhang
14:00	14:20	Jana Bruthansová, Petr Kraft and Jirí Bruthans: Subway into the Ordovician (Prague Basin, Czech Republic)
14:20	14:40	Petr Kraft and Jana Bruthansová: Preservation of fossils in the Šárka Formation (Darriwilian, Czech Republic)
14:40	15:00	Martina Aubrechtová and Vojtech Turek: Three-dimensionally preserved siphuncle in an actinoceratid cephalopod from the late Katian of Bohemia
15:00	15:20	Martina Nohejlová, Christophe Dupichaud, Bertrand Lefebvre, Elise Nardin and Farid Saleh: Echinoderm Lagerstätten from high-latitude Gondwana – filling the gap in the Ordovician diversification of the phylum
15:20	15:40	Mike Reich: Where are all the Ordovician sea cucumbers (Echinodermata)?
15:40	16:20	POSTERS, TEA & COFFEE
Session 8: Ordovician brachiopods		Chair: Alycia Stigall
16:20	16:40	David A.T. Harper: The Irish Ordovician brachiopod fauna: A taxonomic renaissance
16:40	17:00	Lars E. Holmer, Leonid E. Popov, Mansoureh Ghobadi Pour, Liang Yue and Zhifei Zhang: Siphonotretoid brachiopods - a thorny problem
17:00	17:20	Yue Liang, Luke C. Strotz, Timothy P. Topper, Lars E. Holmer, Graham E. Budd, Yanlong Chen, Ruisen Fana, Yazhou Hu and Zhifei Zhang: When lingulid brachiopods become infaunal(?) – perspectives from the morphological and anatomical information
17:20	17:40	Jorge Colmenar, Juan Carlos Gutiérrez-Marco and César Augusto Chacaltana: Lower-Middle Ordovician brachiopods from the Eastern Cordillera of Peru: biostratigraphical and palaeobiogeographical significance
17:40	IGCP 735 Business Meeting	
19:00	Conference Dinner	

Friday, July 21, 2023

8:30	Registration desk open, uploading presentations etc.	
Session 9: Ordovician palaeobotany and microfossils Chair: Lars E. Holmer		
9:00	9:40	Paul K. Strother : An evo-devo perspective on no Ordovician land plants (Keynote)
9:40	10:00	Charles H. Wellman , Cameron R. Penn-Clarke, Claire Browning: Early land plant remains from the uppermost Ordovician-?lowermost Silurian Cedarberg Formation of South Africa
10:00	10:20	Claudia V. Rubinstein and Vivi Vajda: Middle-Late Ordovician organic-walled phytoplankton from Sweden: diversity and early radiation
10:20	10:40	Yan Liang , Olle Hints, Jaak Nõlvak and Peng Tang: On future directions of Ordovician chitinozoan research
10:40	11:00	Sonia Camina , Olle Hints and Anthony Butcher: Chitinozoan nomenclature and databases
11:00	11:30	COFFEE & TEA
Session 10: GOBE Chair: Petr Kraft		
11:30	11:50	Birger Schmitz and Fredrik Terfelt: The breakup of the L-chondrite parent body 466 Ma and its terrestrial effects – a search for a mid-Ordovician biodiversity event
11:50	12:10	Alycia L. Stigall , Shaolin M. Censullo, Sarah A. Hennessey, Jennifer E. Bauer, Adriane R. Lam, and David F. Wright: Diversification and speciation among Laurentian brachiopods during the GOBE: insights from basinal and regional analyses
12:10	12:30	M. Gabriela Mángano , Luis A. Buatois, Beatriz G. Waisfeld, Diego F. Muñoz, N. Emilio Vaccari and Ricardo A. Astini: Trilobite expansion into estuarine environments during the Ordovician radiation
12:30	12:50	Ernesto E. Vargas-Parra and Melanie J. Hopkins: Phylogeny and evolutionary modularity of a trilobite family over the Ordovician radiation
12:50	13:10	Luis A. Buatois , M. Gabriela Mángano, Maximiliano Paz, Nicholas J. Minter and Kai Zhou: The ichnologic signature of deep-sea colonization during the Ordovician radiation
13:10	14:00	LUNCH
Session 11: Isotopes and geochemistry Chair: Ian G. Percival		
14:00	14:20	Peep Männik , Oliver Lehnert and Michael M. Joachimski: Ordovician climate changes in the northern subtropics: The $\delta^{18}\text{O}$ record from the Tunguska Basin, Siberia
14:20	14:40	Alicja Wudarska , Michael Wiedenbeck, Olle Hints, Peep Männik, Aivo Lepland, Michael M. Joachimski, Frédéric Couffignal, Maria Rosa Scicchitano and Franziska D.H. Wilke: Oxygen isotope compositions of conodonts – analytical challenges of in situ SIMS studies
14:40	15:00	Imre Andreas Martin , Leho Ainsaar and Aivo Lepland: Palaeozoic carbon isotope excursions and carbonate component analysis
15:00	15:20	Mawo Ndiaye , Merlin Liiv, Toivo Kallaste, Sophie Graul and Rutt Hints: Nitrogen and organic carbon isotope record in Tremadocian highly metalliferous black shales from Baltica
15:20	15:40	Sophie Graul , Toivo Kallaste, Marko Moilanen, Mawo Ndiaye and Rutt Hints: Early diagenetic transformation stages revealed by micro-analytical studies of shelly phosphorites, Rakvere Region
15:40	16:20	POSTERS, TEA & COFFEE
Session 12: Events, faunas and scientometrics Chair: Bertrand Lefebvre		
16:20	16:40	Timothy Paton , Patrick McLaughlin, Poul Emsbo, Thijs R.A. Vandenbroucke and Carlton Brett: Upper Ordovician hardgrounds - from localized surfaces to global biogeochemical events
16:40	17:00	Ursula Toom , Jukka Kuva and Dirk Knaust: Ichnogenus <i>Trypanites</i> in the Ordovician of Estonia (Baltica)
17:00	17:20	Björn Kröger , Andrej Ernst, Amelia Penny, Hans Arne Nakrem and Ursula Toom: Diversity and spatial turnover of bryozoan assemblages in the reefs of the Vasalemma Formation (Late Ordovician), Estonia
17:20	17:40	Yukio Isozaki : Coupled extinction-regression episodes revisited in mid-oceanic settings for comparative extinction study during the Palaeozoic in view of non-bolide extraterrestrial causes
17:40	18:00	Alysson Mazoni, Rodrigo Costas and Carolina Zabini : Ordovician scientometrics
18:00	Closing Ceremony	

Poster Presentations

1. **Mariana Vilela de Andrade** and Alycia L. Stigall: Developing a phylogenetic framework for tiny Ordovician brachiopods (Atrypida: Anazyginae and Catazyginae) from the eastern United States
2. Galyna Anfimova and **Volodymyr Grytsenko**: The Ordovician collections stored at the National Museum of Natural History NAS of Ukraine
3. **Jana Bruthansová** and Petr Kraft: Ordovician conulariid monospecific assemblages (Czech Republic, Morocco)
4. **Gisella M. Della Costa** and Guillermo L. Albanesi: The Evae transgression: A major event?
5. **Liting Deng**, Ming Li and Mo Huang: Darriwilian (Middle Ordovician) graptolites from northern margin of the Qaidam Basin (Qinghai, China)
6. Christophe Dupichaud, **Bertrand Lefebvre** and Martina Nohejlová: Solutan echinoderms from the Lower Ordovician of the Montagne Noire (France): new data and palaeobiogeographic implications
7. **Rao Fu**, Yue Liang, Lars E. Holmer, Yutong Lu, Yi Xiang, Yazhou Hu and Zhifei Zhang: Late Ordovician gastropods from the Zhaolaoyu Formation in the southwestern margin of the North China Platform
8. **Pauline Guesner**, Martina Nohejlová, Elise Nardin and Bertrand Lefebvre: A methodological scheme to analyse the early Palaeozoic biodiversification with the example of echinoderms
9. **Linda Hints** and Jaak Nõlvak: Latest Sandbian brachiopods and chitinozoan biostratigraphy in North Estonia
10. Yazhou Hu, Luke C. Strotz, Dirk Knaust, Jiayue Wang, Yue Liang and **Zhifei Zhang**: Distinguishing borings and burrows in intraclasts
11. Ming Li, Pengju Liu, Lixia Li and **Liting Deng**: Tremadocian (Ordovician) reclined graptolites from Baishan, North China
12. Qijian Li, Lin Na, Shenyang Yu, **Oliver Lehnert**, Axel Munneck and Yue La: Late Ordovician beachrock as a far-field indicator for glacial meltwater pulse
13. **Fernando E. Lopez**, Gladys Ortega, Guillermo L. Albanesi and Aldo L. Banchig: New contributions to the Ordovician biostratigraphy of the Western Precordillera, Argentina
14. **Monika Luptáková** and Petr Kraft: Impoverished fossil association in the lowermost Sandbian of the Prague Basin (Czech Republic)
15. **Peep Männik** and Jaak Nõlvak: Boundary between the Porkuni and Juuru regional stages in the Neitla section, Estonia
16. **Tõnu Meidla**, Olle Hints and Leho Ainsaar: Searching for the Ordovician-Silurian boundary in Estonia, Latvia and Lithuania
17. Lucy A Muir and **Juan Carlos Gutiérrez-Marco**: A new species of the problematic organism *Webbyites* from the Early Ordovician Fezouata Biota of Morocco
18. Johann Müller, Michael Joachimski, **Oliver Lehnert**, Peep Männik and Yadong Sun: Changes in shelf phosphorus burial during the Hirnantian glaciation and its implications
19. **Jaak Nõlvak**, Yan Liang and Olle Hints: Latest Ordovician age of the *Spinachitina fragilis* Chitinozoan Biozone in Baltoscandia
20. **Helje Pärnaste**, Ursula Toom and Leonid Popov: The earliest Ordovician trace fossils *Cruziana* and *Rusophycus* from Baltica
21. Maxime Renaud, **Bertrand Lefebvre**, Denis Bailliot, Marie-Noëlle Bailliot, Sophie Coat, Christian Gaudu and Muriel Vidal: First report of the mitrate *Mitrocystella* (Echinodermata, Stylophora) in the Middle Ordovician of the Crozon Peninsula, Brittany (France)
22. Dulce Raquel Reyes-Montoya, Francisco Javier Cuen-Romero, Pilar Navas-Parejo, Nohemí Gámez-Meza, Juan José Palafox-Reyes and **Juan Carlos Gutiérrez-Marco**: Early Tremadocian graptolites from the Arivechi area, Sonora, northern Mexico
23. **Petra Tonarová**, Thomas J. Suttner, Michal Kubajko and Olle Hints: Late Ordovician jawed polychaete fauna from Spiti Valley, northern India
24. **Olev Vinn**, Kenneth De Baets, Mare Isakar and Ursula Toom: Parasite-induced shell damage in brachiopod *Porambonites* (*Porambonites*) *laticaudata* from the Late Ordovician (Sandbian) of Estonia
25. **Chuanshang Wang** and Yong Hu: Distribution pattern of the Ordovician black shale constrained by graptolite zonation in the western margin of the Ordos Block, North-West China
26. **Zhifei Zhang**, Yue Liang, Fan Liu and Yazhou Hu: Reconstruction of the first animal consumer-driven marine ecosystem on Earth, perspectives from early Cambrian small skeletal fossils from China