



July 19-22
2019

PROGRAM
OF
SCIENTIFIC SESSIONS

Annual meeting of the IGCP 653
"The onset of the Great Ordovician
Biodiversity Event"

13th INTERNATIONAL
SYMPOSIUM ON THE
ORDOVICIAN
SYSTEM



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The onset of the
Great Ordovician
Biodiversity Event



Новосибирский
государственный
университет
НАУКА

RUSSIAN
FOUNDATION
FOR BASIC
RESEARCH
RFBR

ORGANIZATION



International Commission on Stratigraphy



Subcommission on Ordovician Stratigraphy



IGSP 653 Project “The onset of the Great Ordovician Biodiversification Event”



IPGG
SB RAS Trofimuk Institute Petroleum Geology and Geophysics SB RAS



Novosibirsk National Research State University



Siberian Branch of Russian Academy of Sciences



Russian Foundation for Basic Research (RFBR)

July 18, 2019

REGISTRATION

14-00 – 18-00



Venue: Trofimuk Institute of Petroleum Geology and Geophysics SB RAS,
Koptyuga ave., 3

July 19, 2019

REGISTRATION

8-30 – 10-00

13th ISOS



NOVOSIBIRSK 2019

July 19, 2019

Morning session
10-00 – 13-10



Venue: Trofimuk Institute of Petroleum Geology and Geophysics SB RAS,
Koptyuga ave., 3

10-00 – 10-30 - ***Opening ceremony***

10-00 – 10-05 – welcome address by Dr. Igor N. Yeltsov, Director of the Trofimuk Institute of Petroleum Geology and Geophysics SB RAS, Professor.

10-05 – 10-10 – Chair of the International Stratigraphic Committee of the IGU Professor, Dr. David A.T. Harper.

10-10 – 10-15 – Rector of the Novosibirsk State University, Professor, corresponding member of RAS, Dr. Mikhail P. Fedoruk.

10-15 – 10-20 – Dean of the Geology and Geophysics Department of the Novosibirsk State University, academician Valery A. Vernikovsky.

10-20 – 10-25 – Chair of the Ordovician Subcommission of the ISC Dr. Andrei V. Dronov.

10-25 – 10-30 – Chair of the Ordovician-Silurian Commission of the Interdepartmental stratigraphic committee of Russia, Dr. Nikolay V. Sennikov.

10-30 – 13-10

Chairman – Dr. Nikolay V. Sennikov

10-30 – 11-15 – *Key-note speakers*: Harper D.A.T. “The founding of the Ordovician System: the Legacy of Charles Lapworth”.

11-15 – 11-55 – Dronov A.V. “Global correlation of the Ordovician depositional sequences”.

11-55 – 12-35 – Gutierrez-Marcos J.C., Martínez-Graña A.M., and González-Delgado J.A. “Monsagro (Salamanca, Spain): an 'Ordovician village' built with Cruziana and other trace fossils from the Armorican Quartzite”.

12-35 – 13-10 – Kanygin A.V., Gonta T.V., and Timokhin A.V. “Boundaries and position of the Siberian paleocontinent in the Paleozoic: palinspastic versus and paleogeographic reconstruction”.

13-10 - 14-30 – **Lunch**

Afternoon session

14-30 – 18-20



14-30 – 15-15 - excursion to Mineralogical Museum of IGM SB RAS.

Chairman – Dr. David A.T. Harper.

15-15 – 15-45 – *Key-note speaker*: Zhang Y., Zhan R., Zhen Y., Fang X., Yuan W., Zhang J., and Li W. “An integrative stratigraphy for the Ordovician system of China: framework and questions”.

15-45 – 16-05 – Ghienne J.-F., Razin P., and Vandenbroucke T.R.A. “High-latitude Upper Ordovician canyons: a record of pre-Hirnantian glacial lowstands?”.

16-05 – 16-25 – Popov L.E., Álvaro J. J., Holmer L.E., Bauert H., Ghobadi Pour M., Dronov A.V., Lehnert O., Hints O., Männik P., Zhang Z., and Zhang Z. “Glendonite occurrences in the Tremadocian of Baltica: first Early Palaeozoic evidence of massive ikaite precipitation at temperate latitude”.

Coffee break: 16-25 – 16-40

Chairman – Dr. Andrei V. Dronov.

16-40 – 17-00 – Dzik J. “Biogeographic delimitation of the Trans-European Suture Zone”

17-00 – 17-20 – Hints O., Kaljo D., Lepland A., Liiv M., Martma T., and Ainsaar L. “Paired organic and carbonate carbon isotope records through the Middle and Upper Ordovician of Estonia”.

17-20 – 17-40 – Fan R., Deng S., Lu Y., Tan C., Ma X., Lu D., and Song H. “Relations between conodonts and U-Pb ages of the Sandbian and Katian in the south and west margins of the North China Platform”.

17-40 – 18-00 – Ainsaar L., Meidla T., and Hints O. “Carbon isotopic composition of Ordovician carbonates in Baltoscandia: shallow marine facies shifting the $\delta^{13}\text{C}_{\text{carb}}$ values in different ways”.

18-00 – 18-20 – Tinn O., Ainsaar L., Mastik V., and Sepp H. “Stable carbon isotope composition of Early Palaeozoic macroalgal, invertebrate and vertebrate fossils: implications from the Kalana Lagerstätte (Silurian, Estonia)”.

18-30 – 19-30 – ***Ice-breaking party.***



July 20, 2019

Morning session
9-00 – 13-10



Venue: Novosibirsk State University, Pirogova st. 1, new building
Chairman – Dr. Jerzy Dzik

9-00 – 9-30 – *Key-note speaker:* Buatios L.A. “Quantifying the role of bioturbation and bioerosion in ecospace utilization and ecosystem engineering during the Cambrian Explosion and the Great Ordovician Biodiversification Event”.

9-30 – 9-50 – Harper D., Cascales-Miñana B., and Servais Th. “Early Palaeozoic Diversifications and extinctions in the marine biosphere: onwards and upwards”.

9-50 – 10-10 – Sennikov N.V. and Obut O.T. “Ecosystem reconstruction for the Ordovician Basin of the Central Tuva (South Siberia).”

10-10 – 10-30 – Kushlina V.B. and Dronov A.V. “Ordovician trace fossils of the Siberian platform”.

10-30 – 10-50 – Gutiérrez-Marco J.C., Dronov A.V., Knaust D., and Lorenzo S. “Ordovician trace fossils from the Upper Tiouririne Formation of Morocco: preliminary results”.

Coffee break: 10-50 -11-10

Chairman – Dr. Juan Carlos Gutiérrez-Marco

11-10 – 11-30 – Zhan R. “Cold tongue-possible engine of the GOBE in South China”.

11-30 – 11-50 – Fan J. “Marine biodiversity change through the Ordovician”.

11-50 – 12-10 – Sinnesael M. “Ordovician cyclostratigraphy: an example from the upper Katian Vauréal Formation, Anticosti Island (Gulf of St. Lawrence, Canada)”.

12-10 – 12-30 – Rousselle J. “Ordovician climate: Attempt to explain the cooling tendency”.

12-30 – 12-50 – Servais T., Cascales-Miñana B., Cleal Ch. J., Gerrienne Ph., Harper D.A.T., and Neumann M. “The Great Ordovician biodiversification event (GOBE) of land plants”.

12-50 – 14-30 – Lunch

Afternoon session

14-30 – 18-20



Venue: Trofimuk Institute of Petroleum Geology and Geophysics SB RAS, acad. Koptyug av., 3

14-30 – 15-30 – Excursion to the Core facility center “GEOCHRON” and paleontological Museum of the IPGG SB RAS.

Chairman – Dr. Renbin Zhan

15-30 – 16-00 – *Key-note speaker:* Tolmacheva T.Yu., Dronov A.V., Alekseev A.S., Danukalova M.K., and Larionov A.N. “Biogeography of Ordovician conodonts in the Russian Arctic and its implication for paleogeography”.

16-00 – 16-20 – Lee J. “Keratose-like sponges and their importance in early reef evolution”.

16-20 – 16-40 – Li Q.J., Agematsu S., Na L., and Sardsud A.A. “Stromatolite abundance anomaly in Early Ordovician: the rise of sponge-microbial association?”

16-40 – 17-00 – Yan K., Shan L., and Li J. “Tremadocian Acritarch assemblages from South China: biostratigraphic and paleogeographic implications”.

Poster presentations
17-00 – 17-20

1. Sennikov N.V., Gusev N.I., Tokarev V.N., Yur’ev A.A., Timokhin A.V., Khabibulina R.A., Gonta T.V., Shcherbanenko T.A., and Gutak Ya. M. “The O/S boundary in Salair volcanic-sedimentary deposits: fauna, isotopic age (South Siberia, Russia)”.

2. Modzalevskaya T.L. “Brachiopods of Ordovician and Silurian boundary deposits in the Arctic”.

3. Della costa G.M., Cañas F.L., and Albanesi G.L. “Paleoenvironmental interpretation of the Lower Ordovician *Oepikodus evae* Zone at the Peña Sombría section, Precordillera, Argentina”.

4. Brodskii A.V. and Kiselev G.N. “The trilobite and cephalopod taxonomic diversity from Kunda Stage deposits of the northeastern part of the Baltic-Ladoga Glint”.

5. Makarenko S.N., Peregoedov L.G., Rodygin S.A., Savina N.I., and Tatianin G.M. “New data on the Ordovician deposits of Siberia”.

6. Candela Y., Gutierrez-Marco J.C., and Sá A.A. “New data on the ‘giant’ obolid fauna (Brachiopoda) from the Armorican quartzite facies (Lower Ordovician) of the Iberian peninsula”.

7. Akodad M., Benachour H., and Servais T. “New acritarch investigations on The Lower-Middle Ordovician of the Tazekka Massif, Eastern Morocco”.

8. Herrera Sánchez N.C., Toro B.A., and Lo Valvo G. “Lower-Middle Ordovician graptolite biostratigraphy and future challenges for the central Andean basin (NW Argentina and S Bolivia)”.
9. Pecherichenko D.A. “Late Ordovician conodonts from Gorny Altai”.
10. Pavlov V.E. “Elaboration of the Magnetic Polarity Scale for the Early Paleozoic”.
11. Stepanova N.I. “Ordovician stratigraphy of the South-West Yakutia (Siberian platform)”.
12. Markov G.P. “Magnetic signature of meteorites in the Ordovician sediments”.
13. Huff W. and Dronov A.V. “Ordovician K-bentonites of the Siberian Platform”.
14. Tolmacheva T.Yu. “Biostratigraphy and biodiversity of the Ordovician conodonts from the deep-water siliceous deposits of western part of the Central-Asian fold belt”.
15. Mikuláš R., Dronov A.V., Kanygin A.V., and Sennikov N.V. “Ichnofabrics and ichnofossils of the Cambrian-Ordovician succession of the Kulumbe River Section, Siberian Platform, Russia”.
16. Timokhin A.V., Gonta T.V., and Maslova O.A. “Biodiversity of benthic fauna (trilobites, brachiopods, ostracods) in the Ordovician of the Siberian platform”.
17. Zhen Y.Y., Zhang Y., Fang X., Yu S., and Li W. “Revised Ordovician lithostratigraphy and conodont biostratigraphy of southern-central Xizang (Tibet)”.
18. Sobolevskaya R.F. and Nekhorosheva L.M. “Ordovician deposits of Kotelny Island (New Siberian Islands)”.
19. Voldman G.G., Albanesi G.L., Ortega G., and Banchig A.L. “Ordovician conodont-graptolite biostratigraphy at the Vallecito Creek, southern La Invernada Range, Argentine Precordillera”.
20. Iskül G. “Sandbian «Sponge Beds» of the East Baltic – a biotic or diagenetic event?”

Coffee break: 17-00 – 17-20

Chairman – Dr. Sergey V. Rozhnov

17-20 – 17-40 – Fang X. “A cladistic approach to the palaeobiogeography of lituitid cephalopods in Middle and Late Ordovician”.

17-40 – 18-00 – Jeon J., Liang K., Lee M., and Kershaw S. “Earliest known spatial competition between stromatoporoids: paleoecological implications from the Upper Ordovician Xiazhen Formation of South China”.

18-00 – 18-20 – Penny A. and Kröger B. “Composition and microfossils of the Baltic Lithographic Limestone”.



July 21, 2019

Morning session
9-00 – 13-00



Venue: Novosibirsk State University, Pirogova st. 1, new building

Chairman – Dr. Luis A. Buatios

9-00 – 9-30 – *Key-note speaker*: Safonova I.Yu. “The Ordovician period of the evolution of the Paleo-Asian Ocean: ocean plate stratigraphy, intra-oceanic arcs and tectonic erosion”.

9-30 – 9-50 – Deng S., Lu Y., and Fan R. “Major regional unconformities in the Ordovician of the Tarim Basin, NW China: implication for oil exploration”.

9-50 – 10-10 – Buslov M.M., Cai K., Chen M., Kulikova A.V., Rubanova E.S., and Semenova D.V. “Tectonics and geodynamics of the southern frame of the Siberian Craton in Ordovician”.

10-10 – 10-30 – Zhang L.N. and Chen Q. “Paleogeographic evolution of South China in the Ordovician and its relationship with biodiversification event”.

10-30 – 10-50 – Wang C. and Wang X. “Ordovician sequence stratigraphy and correlation in the Middle-Upper Yangtze Region, South China”.

Coffee break: 10-50 – 11-10

Chairman – Dr. Olle Hints

11-10 – 11-30 – Gutierrez-Marco J.C. “First record of Lower Ordovician graptolites from Peru”.

11-30 – 11-50 – Lykova E.V. “*Isograptus* Moberg and *Pseudisograptus* Beavis and Middle Ordovician Zonal stratigraphy of the Gorny Altay (SW Siberia, Russia)”.

11-50 – 12-10 – Yakupov R.R., Suyarkova A.A., Krasnova E.A., Gorjanin V.M., Tolmacheva T.Yu., and Mavrinskaya T.M. “New data on Ordovician-Silurian boundary of the western slope of South Urals, Russia”.

12-10 – 12-30 – Wang W., Muir L.A., and Zhang M. “Micro-CT observation of internal structures in some Late Ordovician graptolites from South China”.

12-30 – 12-50 – Raevskaya E.G. and Hints O. “Acritarchs from the Middle and Upper Ordovician of Estonia and their stratigraphic implications”.

12-50 – 13-10 – Yan Ch. Upper lower Tremadocian (Lower Ordovician) conodonts from the upper Yeli Formation of Dayancha, Jilin Province, North China”

13-10 – 14-30 – Lunch

Afternoon session

14-30 – 18-15



Venue: Novosibirsk State University, Pirogova st. 1, new building

14-30 – 15-30 – Excursion to the «Earth's history museum» at the Novosibirsk State University.

15-30 – 16-10 – meeting with professors and students of the Geological Department of NSU.

Coffee break: 15-50 – 16-10

16-10 – 17-10 – The annual meeting of IGCP 653 “The onset of the Great Ordovician Biodiversification Event”.

17-15 – 18-15 – Ordovician Subcommission business meeting.

16-10 – 18-00 – According to personal requests – work with monographic (published) collections (holotypes, paratypes, lectotypes and neotypes) of Lower Paleozoic fossil groups from Siberia and other regions of Russia in the Paleontological Museum of IPGG SB RAS.

<http://www.ipgg.sbras.ru/ru/institute/structure/geochrone>



19-00 – 22-00 – **Conference dinner**



July 22, 2019

Morning session
9-00 – 12-30



Venue: Trofimuk Institute of Petroleum Geology and Geophysics SB RAS,
acad. Koptyug av., 3

Chairman – Tatiana Yu. Tolmacheva

9-00 – 9-30 – *Key-note speaker:* Jin J. “Tropical ecological gradient in the Late Ordovician and brachiopod faunal evolution in Laurentia”.

9-30 – 9-50 – Kröger B., Penny A., and Hints O. “Alpha, beta and gamma diversity controls on Ordovician-Silurian brachiopods of the Baltic Basin”.

9-50 – 10-10 – Huang B., Zhou H., Harper D.A., Zhan R., Chen D., and Rong J. “A latest Ordovician Hirnantia brachiopod fauna from Western Yunnan, South China and its significance”.

10-10 – 10-30 – Sproat C.D. and Zhan R. “Late Ordovician endemism in a paleogeographically significant brachiopod fauna from Tarim (Northwest China)”.

10-30 – 10-50 – Zhang Y., Zhan R., and Tang P. “The discovery of a Late Ordovician shallow water brachiopod fauna in Wushi, northwestern Tarim of Xinjiang, China and its implications”.

Coffee break: 10-50 – 11-10

Chairman – Yuandong Zhang

11-10 – 11-30 – Shcherbanenko T.A. «Brachiopods from Upper Ordovician sections northeast of Gorny Altai (Teletskoe Lakeside area)».

11-30 - 11-50 – Korovnikov I.V., Sennikov N.V., and Obut O.T. “Stratigraphic significance of first discovery of faunal remains in the Ordovician of the Central Tuva structural-facial zone.”

11-50 – 12-10 – Obut O.T., Tolmacheva T.Yu., and Izokh N.G. “Ordovician conodont zonation for the Gorny Altai: state-of-art, potential for biostratigraphy”.

12-10 – 12-30 – Na L. and Li. Q.J. “Quantifying Early Cambrian diversity pattern of small shelly fossils on the Yangtze Platform, South China”.

Poster presentations

10-50 – 11-10, 16-00 – 16-20

21. Ortega G., Banchig A.L., Albanesi G.L., and Voldman G.G. “The *Holmograptus latus* Zone (Middle Ordovician) in the La Invernada Range, Precordillera of San Juan, Argentina”.

22. Kaufmann C., Ortega G., and Goldman D. “Darriwilian graptolites of the Gualcamayo Formation at the Villicum Range, Eastern Precordillera, Argentina”.

23. Anekeeva G.A. and Rozhnov S.V. “Unbranched holdfasts of stalked echinoderms from the Ordovician of the Leningrad Region”.

24. Koromyslova A.V. and Sennikov N.V. Dianulites (Bryozoa, Trepomatata) from Late Ordovician (Sandbian) of the Teletskoe Lakeside in Gorny Altai”.

25. Torre G. and Albanesi G.L. “Biostratigraphy of Cambrian-Ordovician conodonts from the Los Sombreros Formation, Western Precordillera, Argentina”.

26. Pozdnyakov M.G. “Upper Ordovician ostracods and biostratigraphy of Bol’shaya Nirunda River basin (right tributary of Podkamennaya Tunguska River, Siberian platform)”.

27. Zhen Y.Y. and Percival I. “Synthesis of Middle Ordovician biostratigraphy and palaeogeography of Australia”.

28. Mirantsev G., Anekeeva G., Rozhnov S.V., Semenov N., and Terenev S. “New cyclocystoids (Echinodermata) from the Ordovician of the Saint Petersburg Region”.

29. Sychev O.V. "Lithology of the Ordovician deposits of the Siberian Platform".
30. Izokh O.P., Tarasenko A.B., Jarochowska E., and Grazhdankin D.V. "Isotopic geochemical proxies and facies across Silurian-Devonian boundary in the Obi-Safit Gorge (Kitab State Geological Reserve, Uzbekistan)".
31. Pokrovsky B.G., Zaitsev A.V., Dronov A.V., Bujakaite M.I., Timokhin A.V., and Petrov O.L. "C and Sr isotope stratigraphy of the Ordovician of Siberian Platform".
32. Izokh N.G., Obut O.T. "Middle–Upper Ordovician conodonts from Tuva and West Sayan".
33. Sennikov N.V., Kanygin A.V., Timokhin A.V., Izokh N.G., Obut O.T., and Filippov Yu.F. "Upper Ordovician deposits of the basement of the West Siberian Geosyneclise (Russia): evidence from borehole materials".
34. Gonta T.V. "Ordovician ostracods from Podkamennaya Tunguska River (Siberian Platform)".
35. Novozhilova N.V. "Early Cambrian tommotiids and their biostratigraphical significance (Central Tuva)".
36. Tsinkoburova M., Slastnikov V., and Khalimov T. "About possible causes of appearance and peculiarities with the selective silicification of the fossils in the Ordovician deposits of the east of Baltoscandia".
37. Tarasenko A. and Matveev V. "Krivec – the glacial detachment of Ordovician rocks on the river Polist' (Novgorod region, Russia)".
38. Ilyin D.A. «Upper Ordovician brachiopods of Teletskoe Lake area (Gorny Altai").
39. Luchinina V.A. "Evolution of Lower Paleozoic algoflora".
40. Albanesi G.L., Stouge S.S. *Paroistodus horridus* (Barnes and Poplawski), a taxon that gives much to talk about: taxonomic and biostratigraphic precisions.

12-30 – 14-00 – **Lunch**

Afternoon session

14-30 – 18-00



Venue: Trofimuk Institute of Petroleum Geology and Geophysics SB RAS,
acad. Koptyug av., 3

Chairman – Dr. Olga T. Obut

14-30 – 15-00 – *Key-note speaker:* Rozhnov S.V. “The Ordovician substrate revolution in the Baltic paleobasin”.

15-00 – 15-20 – Li W., Fang X., and Zhang Y.D. “A synopsis of the diversity history of the Late Cambrian and Ordovician gastropods of the major blocks of China”.

15-20 – 15-40 – Toom U. “Micro-coprolites inside Ordovician body fossils from Estonia”.

15-40 – 16-00 – Khabibulina R.A. “Upper Ordovician tabulate corals from Gorny Altai”.

Coffee break: 16-00 - 16-15

Chairmen – Dr. Nikolay V. Sennikov, Dr. Andrei V. Dronov, Dr. Alexander V. Kanygin

16-15 – 16-30 – Paiste T., Meidla T., Männik P., and Nõlvak J. “Clarifying Haljala Stage in Estonia”.

16-30 – 16-45 – Liang Y., Nolvak J., and Hints O. “Early diversification of chitinozoans on Baltica: new data from northern Estonia and Latvia”.

16-45 – 17-00 – *Closing ceremony, group photo*

