Monday, October 20

St. Petersburg, Birzhevaya line, 6.

Registration: 9.00–10.45.


Welcome words:
Chairman of the Organizing Committee, President of SPSN D. Yu. Vlasov
Senior Pro-Rector for Academic Affairs and Research of SPSU I.A. Gorlinsky
Director of the Institute of Earth Sciences SPSU S. V. Aplonov
Dean of the Faculty of Biology SPSU A. D. Kharazova
Head of IC DAAD M. Klieneberg

Plenary Session: 11.30–13.50.

Chair: Vlasov D. Yu., Pinevich A. V.
12.10–12.30. Versilin N.N., Oknova N.S. Birth, life and death of organisms is the basis of existence of the Earth.
12.30–12.50. Malyshev V.V. Use of membrane technologies to studying bioinert interactions.

Coffee Break: 12.30–12.50.

Chair: Kniep R., Brusnitsin A. I.

13.05–13.25. Askhabov A. M. Nanocluster (quataron) concept of crystal nucleation and growth.


13.45–14.05. Vlasov D. Yu. Modern problems of geobiology


Methods for studying the interactions between biogenic and abiogenic components

Chair: Plötze M., Chizhikova N. P.

15.10–15.40. Lessovaia S. N., Stefan Dultz, Michael Plötze, Andreeva N., Polekhovsky Y., Filimonov A. Linkage of porosity of basic and ultrabasic rocks to soil clay mineralogy in cold humid climates of Russia.


16.00—16.15. Kovalevski V.V., Makarikhin V. V. Biogenic and abiogenic microbiomorphs in geological environments.

16.15—16.30. Belashev B. Z., Gorkovets V. Ya., Bolondinsky V. K. Radon as an agent of
intergeospheric interactions.

16.30–16.45. Bardamova I. V., Doroshkevich S. G. Phytotoxicity of the wastes of ore processing, the dzhidinsky tungsten-molibdenum combine (Buryatia)


Coffee Break: 17.00–17.15

Methods for studying the interactions between biogenic and abiogenic components

Chair: Plötze M., Lessovaia S. N.

17.15–17.30. Altunina L. K., Svarovskaya L. I., Yashchenko I. G. Rehabilitation of the damaged environment of oil-producing areas.


17.45–18.00. Inisheva L. I., Golovchenko A. V., Szajdak L. W. Distribution of organic compounds in the system of the geochemically linked mires.

18.00–18.15. Aleksandrova O. N. Spin labeling epr analyses of soil: a new method to investigate biogenic and abiogenic interactions of amines in the soil environment and their environmental fate.

18.30–18.45. Ryabinkin S. V. Leifman-Vasoevich coefficient as one of the fundamental characteristics of coalification fluid generation.


**Welcome party: starts at 19.00**

**Tuesday, October 21**

*St. Petersburg, Birzhevaya line, 6.*

**Biomineralization in geosystems**

*Chair:* Marin F., Panova E. G.


10.25–10.40. Dobretsova I. G. On the formation of carbonate structures (bioherms) on the seabed rock material of the Russian prospection area on the Mar


Coffee Break: 11.25–11.40

Biomineral interactions in soil

Chair: Guggenberger G., Lessovaia S. N.


12.00–12.20. Morahovskii V. N. Was there life on Mars, will continue life on Earth?

12.20–12.35. Kalinin P. I., Alekseev A. O. Variations of chemical composition of loess- soil complexes of the southeast of Russian plain as the sign of conditions of their formation and dynamics of the climate in pleistocene.

12.35–12.50. Inozemtsev S., Targulian V. Pedosedimentary model of upper permian paleosols formation and duration of pedogenesis (The Northeast of the Moscow synclise).


Lunch: 14.00–15.00.

**Geochemistry of biogenic-abiogenic systems**

*Chair:* Bundeleva I., Kotelnikova E.N.

15.00–15.20. Abakumov E.V., Andreev M.P. Soils of Clements massif, eastern Antarctica

15.20–15.35. Alekseenko V.A. Quantitative estimations of environmental and geochemical state of soil and its changes.


15.50–16.05. Kolushpayeva A., Akbasova A. New geochemical barrier to detoxify of soil from arsenic and mercury.

16.05–16.20. Frid A.S. Migration models of Cu, Zn, Cd in soils under irrigation with urban wastewater.

16.20–16.35. Smirnova O.C., Doroshkevich S.G., Matyugina E.B. Trace elements mobility and microbiota activity in tailings dam (after sulfide-tungsten ores dressing) and adjacent soils.

_Coffee Break: 16.50–17.05._

Geochemistry of biogenic-abiogenic systems

**Chair:** Alekseev A. O., Charikova M. V.

17.05–17.25. Kotelnikova E. N. Particularities of superperiodical molecular packing in crystal structures of organic substances of biological and geological origin

17.25–17.45. Pinevich A. V. Picocyanobacteria: a leadership in the global carbonic vitalization

17.45–18.00. Chazhengina S. Y., Kovalevski V. V. Transformation of shungite carbon in soil.

18.00–18.15. Panova E. G., Oleynikova G. A., Matinian N. N., Bahmatova K. A. Geochemistry of soil nanoparticles.

18.15–18.30. Matinian N. N., Bachmatova K. A, Sheshukova A. A. Rare earth elements in quarternary deposits — the main parent soil-forming materials of North-West Russia.


18.45–19.00. Gavrilenko V. V. The problems of the ecological geochemistry of the big sities geoecosystems.

19.00–19.15. Ivanova V. L. Geochemical elements in development of natural bio-inert system.
Wednesday, October 22

St. Petersburg, Birzhevaya line, 6.

The role of living organisms in the destruction of cultural heritage

Chair: Gorbushina A. A., Frank-Kamenetskaya O.V.


O.V., Rytikova V.V. Deterioration of Saint — Petersburg stone monuments connecting with the activity of microorganisms.


Coffee Break: 11.45–11.55

Medical geology

Chair: Yalcin M.G., Volfson I.F.

11.55–12.15. Volfson I.F., Farrakhov E.G, Dasayeva L.A and Bespalova J.V. Some words about applied medical geology


Mineral formation in living organisms and biomimetic materials

Chair: Kniep R., Golovanova O.A.


Poster session 16.10–17.00

Chair: Frank-Kamenetskaya O.V., Brusnitsin A.I.

Poster Session


3. Battaloglu R., Yakupoglu E., Yalcin F., Ilbeyli N. Determination of some polycyclic aromatic hydrocarbons (pahs) and simple statistics of heavy metals contents in the honey samples from Nigde city, Turkey.


5. Dobretsova I.G., Dobinchouk V.T. On bacteria participation in the formation of magnetite balls and introducing magnesium to the composition of hydrothermal ferriferous crusts from the MAR.


8. Isakov A.I., Kotelnikova E.N., Lorenz H. Crystal chemistry of non-equimolar discrete compounds formed in the system of malic acid enantiomers.
9. Ivanova E.A. Analysis of microbial communities by using high-throughput sequencing — a new approach applied to studies of conservation state monuments.


17. Leventeli Y. The importance of qanats in effective usage of groundwater.

18. Machulina S. A. The Black Smokers of Stylsky gorst of the southwest Donbass as an example of ancient biomineralization.

19. Medvedev P. V., Chazhengina S. Y., Svetov S. A. Application
of Raman spectroscopy and high-precision geochemistry for study of stromatolites.


23. Rozhkova V. S., Kochneva I. V., Korobkina E. V., Kovalevski V. V. Initial biomineral transformation of shungite rocks.

24. Ryabinkin S. V. Misunderstandings during the solution of the equations of material balance


28. Versilin N. N. Geographical cover and biosphere — concepts.
relationships, evolution.


32. Zhegallo E. A. Biological contaminants in sedimentary rocks.

Closing Ceremony: starts at 17.00