



Lomonosov Moscow State University
Soil Science Faculty
Russian Society of Soil Scientists
V.V. Dokuchaev Soil Science Institute
Agrophysical Research Institute
Federation of Eurasian Soil Science Societies



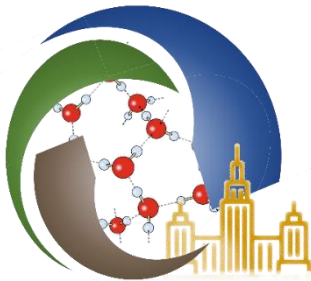
ОБЩЕСТВО
ПОЧВОВЕДОВ
ИМЕНИ В.В. ДОКУЧАЕВА



Почвенный институт
имени В. В. Докучаева



II INTERNATIONAL INTERDISCIPLINARY SCIENTIFIC CONFERENCE



KEY CONCEPTS OF SOIL PHYSICS: DEVELOPMENT, CURRENT APPLICATIONS AND PROSPECTS

**dated to the 80th anniversary of the Department of Soil
Physics and Reclamation
and 130th anniversary of Professor N.A. Kachinskiy**

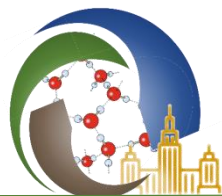
I INFORMATION LETTER

Dear colleagues!

Soil Science Faculty of Lomonosov Moscow State University invites you to participate in the II International Scientific Conference "*Key Concepts of Soil Physics: Development, Modern Applications and Prospects*", which will take place in Moscow at **25-31 May, 2024**.

The conference is dated to: the 80th anniversary of the formation of the Soil Physics and Reclamation Department and the 130th anniversary of the N. A Kachinskiy's birth. Nikodim Antonovich Kachinskiy was the founder and first head of this Department.

The scientific program of the conference is based on the interdisciplinary nature of soil physics and is devoted to issues of modern and promising applications of fundamental concepts of soil physics in soil science and related sciences. It is designed to bring together scientists and practitioners working at the intersection of disciplines to disseminate advanced scientific and practical experience and to discuss prospects for development and cooperation.



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FIRST ANNOUNCEMENT. First International Scientific Conference "Key Concepts of Soil Physics: development, modern applications and prospects" took place on 25-31 May 2019. The program included a wide variety of modern problems of Soil Science. 118 orals and 43 posters were presented at 2 plenary sessions, a round table and 7 sessions by 365 scientists from 22 cities of Russia and 12 foreign countries. The result of the Conference was the decision to make it regular.



Participants of the Conference near the Soil Science Faculty of Lomonosov Moscow State University, May, 2019

The materials of the Conference-2019 were published at:

- 1) <https://bookonlime.ru/node/4660> Proceedings of the International scientific conference, organized to commemorate the 90th anniversary of A. D. Voronin's birth "Key concepts of soil physics: development, future prospects and current applications", Moscow, May 27–30, 2019. – M.: KDU, 2019. – 795 p. – <https://doi.org/10.31453/kdu.ru.91304.0065>. – URL: <https://bookonlime.ru/node/4660>
- 2) [IOP Conference Series: Earth and Environmental Science, Volume 368, 2019 - IOPscience](#)



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CONFERENCE PRESIDENTS

- Pavel Krasilnikov* Prof., Corresponding Member of the Russian Academy of Sciences (RAS), Acting Dean of Soil Science Faculty, Head of the Department of General Soil Science, President of Russian Society of Soil Scientists, Honorary member of the International Society of Soil Scientists
- Aminat Umarova* Prof., Head of the Department of the Soil Physics and Reclamation, Faculty of Soil Science, Lomonosov Moscow State University

EXECUTIVE SECRETARIES

- Maria Shiroyan* Dr., Department of Soil Physics and Reclamation, Soil Science Faculty, Lomonosov Moscow State University, Moscow, Russia
- Marina Butylkina* Dr., Department of Soil Physics and Reclamation, Soil Science Faculty, Lomonosov Moscow State University, Moscow, Russia

ORGANISING COMMITTEE [Lomonosov Moscow State University, Soil Science Faculty, Faculty of Biology, Faculty of Chemistry, Faculty of Geography, Earth Science Museum, Moscow, Russia]

- Sergey Shoba* Prof., Corresponding Member of the RAS, Director of the Eurasian Center for Food Security, Department of Soil Geography
- Evgeniy Shein* Prof., Department of Soil Physics and Reclamation
- Tatiana Arkhangelskaya* Prof., Department of Soil Physics and Reclamation
- Peter Balabko* Prof., Department of Agriculture and Agroecology
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- Alexey Dymov* Prof., Department of Soil Physics and Reclamation
- Ivan Kovalev* Prof., Department of Soil Physics and Reclamation
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- Alla Nikiforova* Prof., Department of Soil Physics and Reclamation
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- Vladimir Romanenkov* Prof., Department of Agrochemistry and Plant Biochemistry
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- Andrey Smagin* Prof., Department of Soil Physics and Reclamation
- Andrey Smurov* Prof., The Earth Science Museum at MSU
- Aleksey Stepanov* Prof., Department of Soil Biology
- Ivan Sudnitsyn* Prof., Department of Soil Physics and Reclamation
- Inna Tolpeshta* Prof., Department of Soil Chemistry
- Aleksey Shcheglov* Prof., Department of Radioecology and Ecotoxicology
- Natalia Shchegol'kova* Prof., Department of Soil Geography
- Alexander Yakovlev* Prof., Department of Land Resources and Soil Evaluation
- Alexander Yaroslavov* Prof., Corresponding Member of the RAS, Chemistry of High Molecular Compounds
- Tatiana Prokofieva* Dr., Department of Soil Geography
- Alexander Rappoport* Dr., Moscow State Botanical Garden
- Yakimenko Olga* Dr., Department of Soil Chemistry



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<i>Anastasia Gasina</i>	Dr., Department of Soil Physics and Reclamation
<i>Maria Evdokimova</i>	Dr., Department of Land Resources and Soil Evaluation
<i>Anna Ivanova</i>	Dr., Department of Soil Biology
<i>Svetlana Kulachkova</i>	Dr., Department of Soil Geography
<i>Ekaterina Makarova</i>	Dr., Department of Soil Physics and Reclamation
<i>Larisa Pozdnyakova</i>	Dr., Department of Soil Physics and Reclamation
<i>Dina Abdulkhanova</i>	Department of Soil Erosion and Conservation
<i>Alexander Dembovetskiy</i>	Dr., Department of Soil Physics and Reclamation
<i>Zakhar Ezhelev</i>	Dr., Department of Soil Physics and Reclamation
<i>Ruslan Kinzhaev</i>	Dr., Department of Agrochemistry and Plant Biochemistry
<i>Anna Kokoreva</i>	Dr., Department of Soil Physics and Reclamation
<i>Vasiliy Kuznetsov</i>	Dr., Department of General Soil Science
<i>Nadegda Sadovnikova</i>	Dr., Department of Soil Physics and Reclamation
<i>Zemfira Tyugai</i>	Dr., Department of Soil Physics and Reclamation
<i>Dolgor Khaydapova</i>	Dr., Department of Soil Physics and Reclamation
<i>Alexander Shvarov</i>	Dr., Department of Soil Physics and Reclamation
<i>Larisa Arakelova</i>	Department of Soil Physics and Reclamation
<i>Elizaveta Derevenets</i>	Department of Soil Geography, Chairman of Student Scientific Society MSU
<i>Timofey Kalnin</i>	Department of Soil Physics and Reclamation, Eurasian Center for Food Security
<i>Ekaterina Klepikova</i>	Department of Soil Physics and Reclamation
<i>Konstantin Romanenko</i>	Department of Soil Physics and Reclamation, Scientific Secretary of Russian Society of Soil Scientists

SCIENTIFIC COMMITTEE

<i>Ivanov Andrey</i>	Academician of RAS, V.V. Dokuchaev Soil Science Institute, Moscow, Russia
<i>Majid Hassanizadeh</i>	Prof., Stuttgart University, Germany, and Utrecht University, Holland
<i>Laziza Gafurova</i>	Academician of RAS, National University of Uzbekistan named after Mirzo Ulugbek, Head of Centre of "AgroEcoBiotechnology", Tashkent, Republic of Uzbekistan
<i>Valeriy Kiriushin</i>	Academician of RAS, V.V. Dokuchaev Soil Science Institute, Moscow, Russia
<i>Askhad Sheudgen</i>	Academician of RAS, Kuban State Agrarian University, Krasnodar, Russia
<i>Yuriy Chesnokov</i>	Corresponding Member of RAS, Agrophysical Research Institute. Saint-Petersburg, Russia
<i>Anvar Kacimov</i>	Prof., Sultan Qaboos University, Muscat, Sultanate of Oman
<i>Dmitriy Kaverin</i>	Prof., Institute of Biology, Komi Scientific Center, Syktyvkar, Russia



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- Vladimir Androkhanov*** Prof., Institute of Soil Science and Agrochemistry of the Siberian Branch of the RAS, Novosibirsk, Russia
- Olga Bezuglova*** Prof., Southern Federal University, Rostov-on-Don, Russia
- Andrey Bolotov*** Prof., V. V. Dokuchaev Soil Science Institute, Moscow, Russia
- Sergey Gorbov*** Prof., Southern Federal University, Rostov-on-Don, Russia
- Sergey Goryachkin*** Prof., Institute of Geography of RAS, Moscow, Russia
- Natalia Granina*** Dr., Irkutsk State University, Irkutsk, Russia
- Nizamy Gummatov*** Dr., Research Institute of Crop Husbandry, Baku, Azerbaijan
- Elizaveta Dunaeva*** Dr., Scientific Research Institute of Agriculture of the Crimea, Simferopol, Russia
- Victoria Kolupaeva*** Dr., Russian Institute of Phytopathology, Moscow, Russia
- Ridvan Kızılkaya*** Prof., General Secretary of Federation of Eurasian Soil Science Societies, Vice President Soil Science Society of Turkey, Samsun, Turkey
- Elena Lapteva*** Dr., Institute of Biology, Komi Scientific Center, Syktyvkar, Russia
- Mikhail Mazirov*** Prof., Russian State Agrarian University - Moscow Timiryazev Agricultural Academy, Moscow, Russia
- Fariz Mikayilov*** Prof., Iğdir University, Department of Soil Science and Plant Nutrition, Iğdir, Turkey
- Tatiana Minkina*** Prof., Southern Federal University, Rostov-on-Don, Russia
- Tamara Persikova*** Prof., Belarusian State Agricultural Academy, Gorki, Belarus
- Elena Skvortsova*** Prof., V.V. Dokuchaev Soil Science Institute, Moscow, Russia
- Galina Stulina*** Prof., Interstate Coordination Water Commission, SIC ICWC Tashkent, Republic of Uzbekistan
- Anna Fedotova*** Prof., Federal Scientific Center of Agroecology of the RAS, Volgograd, Russia
- Galina Kharitonova*** Prof., Institute of Water and Ecological Problems Address, Khabarovsk, Russia
- Nikolay Khitrov*** Prof., V.V. Dokuchaev Soil Science Institute, Moscow, Russia
- Maxim Khramchenkov*** Prof., Kazan Federal University, Kazan, Russia
- Serafim Chukov*** Prof., Saint. Petersburg State University, Saint-Petersburg, Russia



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Working languages: Russian, English.

The Conference will be held in the form of plenary, breakout sessions and poster sessions. Remote participation is possible.

THE PRELIMINARY TOPICS*

1. Physics of the soil solid phase: dispersion, structure and pore space of soils, interphase interactions in soils and substrates, soil meliorants (gels, conditioners, polymers, etc.)
2. Fundamental and applied aspects of soil hydrology: moisture thermodynamics in soils and substrates, nutrient and pollutant flows. Ecological risks. Hydrothermal regimes of the soil. Soil reclamation
3. Soil as a source and sink of gases, soil and atmospheric physics, carbon polygons
4. Soil-physical factors, mechanisms and markers of biodiversity, bioproductivity and ecosystem sustainability
5. Modern challenges of applied soil physics: agrotechnologies and digitalization of agriculture, soil degradation and desertification, food security, urban environment health
6. Mathematical and physical modeling in soil science: opportunities, trade-offs, prospective areas of development
7. Modern technologies, tools, devices and research methods and monitoring of soil properties, plants and adjacent environments
8. Education and enlightenment in the field of soil science and related sciences: experience, problems, prospects, career
9. International youth forum-lecture hall "Successes and modern challenges of soil physics" (format - customized reports)

** The final topics of the sessions will be formulated during the formation of the Program*

Scientific excursion program is planned, which will be announced in the 2nd information letter.

The venue of the Conference and address of the organizing committee: 119991, Moscow, GSP-1, Leninskie Gory, Lomonosov Moscow State University, 1, p. 12, Faculty of Soil Science.

Tel. (495) 9393684

e-mail: soil.physics.2024@yandex.ru

Information about the Conference can be found in the Internet at the [link: https://lomonosov-msu.ru/rus/event/8484/](https://lomonosov-msu.ru/rus/event/8484/).





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DEADLINES & MILESTONES

<i>December 15</i>	mailing of the 1st information letter, the beginning of electronic registration of participants and acceptance of articles for participation in the work of the conference
<i>April 01</i>	the beginning of the electronic registration for the tour, the mailing of the 2nd information letter
<i>April 15</i>	the end of the electronic registration and the end of the acceptance of articles for publication of the conference speakers
<i>May 15</i>	the mailing of the 3rd information letter (including the conference Program)
<i>May 25-27</i>	the arrival of participants
<i>May 27-31</i>	the work of the conference
<i>May 31</i>	closing of the conference

* *Official invitations will be sent to the email address specified during registration*

To participate in the Conference, you have to fill out the electronic registration form at the link <https://lomonosov-msu.ru/rus/event/request/8484/form> up to 15 April 2024, articles are attached to the personal page of the registration form named by the first author (for example Petrov.doc). The Organizing Committee of the conference has the right to reject articles that do not correspond to the topic of the conference.

Registration of participants in the listener format is possible until May 25, 2024 inclusive.
on the website: <https://lomonosov-msu.ru/rus/event/request/8484/form>

REGISTRATION FEE includes:

- access to coffee breaks
- welcome cocktail
- participant bag

Duration of participation in the conference	Registration fee in Euro (€)
all days	70
1 day	40

For conference participants, presenting an accepted paper, from Low Income countries (<https://blogs.worldbank.org/opendata/new-world-bank-group-country-classifications-income-level-fy24>) the conference fee may be waived upon request addressed to the Organizing Committee.



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Registration fee in euro (EUR, €):

Account holder: Landviser Llc

SWIFT/BIC: TRWIBEB1XXX

IBAN: BE44 9671 5479 0845

Wise's address: Wise Europe SA, Rue du Trône 100, 3rd floor Brussels 1050 Belgium

Please, indicate the "Registration fee" in the purpose of payment and the full name of the conference participant during paying the registration fee. After payment of the fee, you should send a copy of the confirming payment document to the address: anastasiagasina@gmail.com.

If you have any questions about paying the registration fee, please, contact with us: anastasiagasina@gmail.com.

PUBLICATIONS

PROCEEDINGS OF THE CONFERENCE MATERIALS (RSCI)

The materials of reports accepted by the Organizing Committee will be published in **the electronic collection** of conference materials (RSCI) **without editorial editing**.

Requirements for materials

The publication can be submitted in Russian or in English. Russian version of the article requires an abstract in both languages, Russian and English, with a volume of up to 10 lines for each. Pictures and captions to them in the publication should be drawn up by the author in both languages, Russian and English.

Abstract volume – up to 2500 characters

Article volume – no more than 10 pages

Font - Times New Roman, font size - 12 p, line spacing - 1,5.

Text and tables in Word for Windows format only. Fields: right - 1 cm, the rest - 3 cm.

Paragraph - 0.75 cm

1 line of abstracts of the report – UDC (Russian Scientific Identification, can be dropped by foreign conference participants);

2 line - Name of the abstract in capital letters (centered);

3 line - Last name of the author (s), initials (centered);

4 line - Place of work, city (if not used in the name of the organization), country and email address of the main author or speaker;

5 line - empty;

6 line - text of the report.

In the text, it is desirable to adhere to common Headings in scientific publications (introduction, objects and methods of research, discussion of results, conclusions).

THE JOURNAL "BULLETIN OF MOSCOW STATE UNIVERSITY"

The best articles selected by the Organizing Committee will be published in an expanded volume in the journal Bulletin of Moscow State University. Ser.17 Soil Science, 2024, No.4.

Invitations to publish in the journal will be sent before 05/01/2024.

Please familiarize all interested specialists with this information letter



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The history of the Soil Physics and Reclamation Department began with the research of outstanding scientists who worked at Lomonosov Moscow State University in various years: N.I. Zhelezov, A.N. Sabanin, S.A. Zakharov, V.V. Gemmerling, A.G. Doyarenko. Nikodim Antonovich Kachinskiy (1894-1976), a student of Professor S.A. Zakharov, graduate of the Petrovsky

(Timiryazev) Academy, was invited to Lomonosov Moscow State University, to the Department of Soil Science in 1923. He led the work of the faculty in solving state-level tasks: designing the Volga-Don Canal, protecting the Akhtuba floodplain, exploring the steppes of Azerbaijan and the



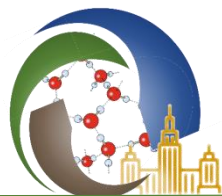
Soil Science Faculty, Lomonosov Moscow State University

Volga region, developing and implementing technologies for the rapid construction of ground coverings of the Soviet Airforce airfields. During the Second World War, in December 1943, the Soil Physics Department was established. The staff of the department developed and introduced a scientifically based system of methods for studying soil physical properties and a whole series of

research and education. Classification and evaluation scales of physical properties of soils and soils by N.A. Kachinskiy, based on a generalization of the international systems, his own work and the work of the team, formed the basis for the national classification of soils by granulometric composition, assessment of their density, soil structure, and water conductivity.

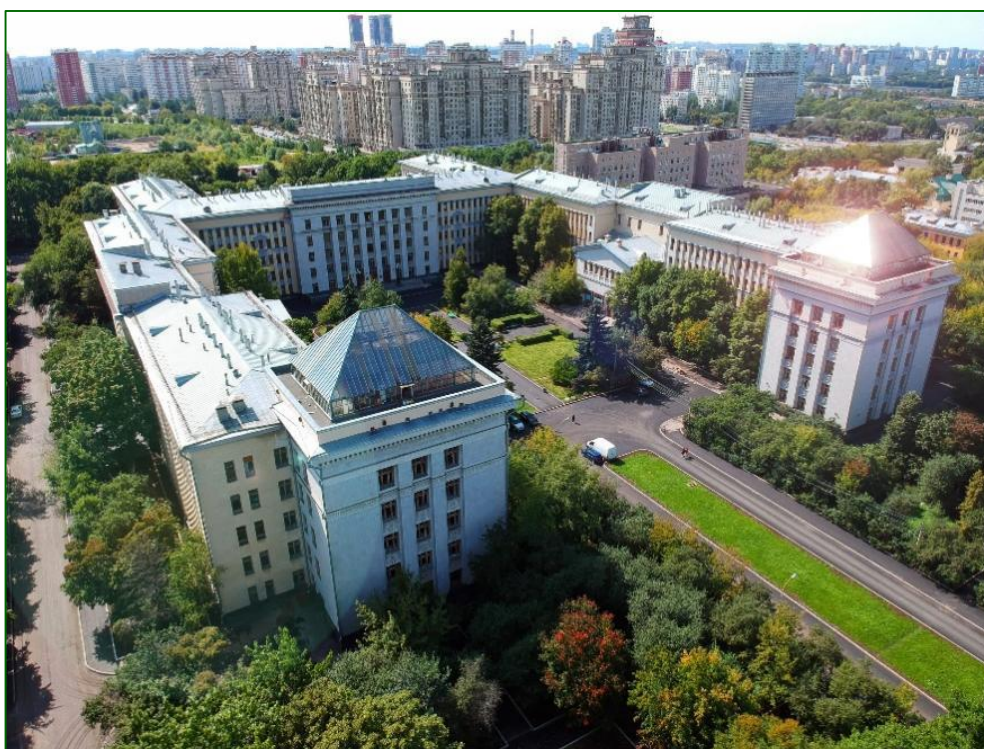


The auditorium named after G.V. Dobrovolskiy



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We are looking forward to welcoming you at the Conference!

Organising committee