**Lomonosov Moscow State University** 







Department of Soil Physics and Land Reclamation



**Russian Soil Scientists Society** 



Federation of Eurasian Soil Science Societies





All-Russian Scientific Conference with international participation

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

Organized to commemorate the 90th anniversary of A. D. Voronin 's birth.

#### 1st INFORMATION LETTER

#### Dear Colleagues!

The Faculty of Soil Science of Lomonosov Moscow State University invites you to participate in the All-Russian Scientific Conference with international participation "Key concepts of soil physics: development, current applications and future prospects" The conference will be held at The Lomonosov Moscow State University, Faculty of Soil Science on May 27-31, 2019.

The conference is organized to commemorate the 90th anniversary of prof. A. D. Voronin 's birth.

**Anatoly Danilovich Voronin**, Professor, Head of the Department of the Soil Physics and Reclamation (1976-1998), Dean of the Faculty of Soil Science of Moscow State University (1989-1995).

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 the fundamental concepts of soil physics in soil science and related sciences, designed to bring together scientists at the intersection of disciplines to spread best scientific and practical experience and to discuss future development and cooperation.



Voronin Anatoly Danilovich (1929-1998), a graduate of the department, devoted almost 50 years to soil physics. He developed a theory of the structural and functional organization of the soil as a physical system, which made a great contribution both to the development of the theoretical foundations of domestic and world soil physics, and to the solution of applied problems related to the regulation of the physical properties and ecological functions of the soil. On this basis, he created a new area in soil physics - structural-functional soil hydrophysics.

He taught the course "Soil Physics" for students of the Faculty of Soil Science at Moscow State University, as well as the special courses "Energy and Kinetics of Soil Moisture", "Physical Chemistry of Surface Phenomena in Soils". He prepared more than 30 candidates of sciences, among them

P.M. Sapozhnikov, L.I. Krumkachev, A.P.Shvarov, T.N.Pochatkova, L.N.Teslenko, A.V.Smagin, A.B. Umarova and others, raised 5 Doctors of Science: A.Kh.Abdullaev, S.A. Sahakyan, N.A. Maksimova (Sereda), P.M. Sapozhnikov, M.A.Mazirov. His students work in many scientific and educational institutions in Russia and abroad (Germany, Syria, Egypt, China, Vietnam).

He was a member of dissertation councils on soil science and agrochemistry at Moscow State University and the Russian State Agrarian University - Moscow Timiryazev Agricultural Academy, chairman of the council on soil science at the Russian Academy of Sciences (1989-1995), vice president of the Dokuchaev's society of soil scientists (1992), chairman of the commission on soil physics of the All-Union Society of Soil Scientists (1970-1990), Deputy Editor-in-Chief of the "Soil Science" Journal, Editor-in-Chief of the "Bulletin of the Moscow State University, Soil Science Series". Laureate of the Lomonosov Award for a series of works "Theoretical and applied aspects of the structural and functional hydrophysics of the soils" (1987), W. R. Williams (1993) Award. He was awarded the Order of the Red Banner of Labor (1980) and a number of medals.

Author of more than 170 papers, including 5 monographs: "Soil-biogeocenotic studies in forest biogeocenoses" (1980, et al.), "Structural-functional hydrophysics of the soils" (1984), "Mass transfer in disperse systems involving water films" (1988, et al.), "Surface water films in dispersed structures" (1988, et al.), "Soil formation and anthropogenesis: structural and functional aspects" (1991, et al.) And the textbook "Fundamentals of Soil Physics" (1986).

#### ORGANIZING COMMITTEE

#### Chairman of the Organizing Committee:

Shoba Sergey Alekseevich, Corresponding Member of the Russian Academy of Sciences, Prof., Dean of the Faculty of Soil Science, Lomonosov Moscow State University, Chairman of the Dokuchaev's soil society.

#### Vice-chairman:

*Umarova Aminat Batalbievna*, Doctor of biological Sciences., Prof., Head of the Department of the Soil Physics and Land Reclamation, Faculty of Soil Science, Lomonosov Moscow State University.

#### Conference Executive Secretary:

Butylkina Marina Alexandrovna, Dr., Scientific Researcher of the Department of the Soil Physics and Land Reclamation, Faculty of Soil Science, Lomonosov Moscow State University. Kokoreva Anna Alexandrovna, Dr., Scientific Researcher of the Department of the Soil Physics and Land Reclamation, Faculty of Soil Science, Lomonosov Moscow State University.

#### PROGRAM COMMITTEE

Ivanov A.L.	Dr. of biological Sciences	. Academician of RAS	. Prof Director of V.V.

Dokuchaev Soil Science Institute (Moscow, Russia)

Yakushev V.P. Dr. of agricultural Sciences, academician of RAS, professor,

Agrophysical Scientific Research Institute (St.-Petersburg, Russia)

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and Agrochemistry RAS (Novosibirsk)

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scientific work research Institute of Agriculture, Ministry of

Agriculture of the Republic of Azerbaijan

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Watt University, Edinburgh, United Kingdom

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agriculture and methods of experimental work of the Russian State Agrarian University - Moscow Agricultural Academy. K.A. Timiryazeva

(Moscow, Russia)

Olchev A.V.	Dr. of biological Sciences, Leading Researcher, Department of Meteorology and Climatology, Faculty of Geography, Lomonosov Moscow State University (Moscow, Russia)		
Persikova T.F.	Dr. of agricultural Sciences, Professor, head of Department of soil science, Belarusian state agricultural Academy (Gorki, Belarus)		
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Rusakov A.V.	Dr. of geographical Sciences, Professor, Head Department of Soil Science and Soil Ecology, Institute of Earth Science, St. Petersburg State University (St. Petersburg, Russia)		
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Skvortsova E.B.	Dr. of agricultural Sciences, the head of Department of soil physics and hydrology, V.V.Dokuchaev Soil Science Institute (Moscow, Russia)		
Stepanov A.L.	Dr. of biological Sciences., Head of the Department of the Soil Biology, Faculty of Soil Science, Lomonosov Moscow State University (Moscow, Russia)		
Stulina G.V.	Dr. of Biological sciences, leader researcher, Interstate Coordination Water Commission, Scientific - Information Center, SIC ICWC Tashkent, Republic of Uzbekistan		
Sudnitsyn I.I.	Dr. of biological Sciences, leader researcher, Department of physics and reclamation, Soil science faculty, Lomonosov Moscow State University (Moscow, Russia)		
Uskov I.B.	Dr. of Physics and Mathematics, Professor, Corresponding Member of the Russian Academy of Sciences, Chief Researcher at the Agrophysical Research Institute (St. Petersburg, Russia)		
Shein E.V.	Dr. of biological Sciences, professor, Department of physics and reclamation, Soil science faculty, Lomonosov Moscow State University (Moscow, Russia)		
Kızılkaya R.	Dr., Prof., General Secretary of Federation of Eurasian Soil Science Societies, Vice President Soil Science Society of Turkey, Ondokuz Mayis University (Samsun, Turkey)		
Mikailsoy F.D.	Dr., Professor Igdir University, Department of Soil Science and Plant Nutrition (Iğdır, Turkey)		

The conference will be held in the form of plenary, breakout sessions and poster session. It is possible remote participation

## Planned areas of scientific reports (sections):

The conference will consider the following questions:

- 1. Physics of the soil's solid phase: surface phenomena, dispersion, structure and pore space of soils
- 2. Fundamental and applied aspects of soil hydrophysics (hydrology)
- 3. Migration of toxicants and salts in soil
- 4. Physical conditions of living and their influence on soil biota
- 5. Mathematical modeling in soil science
- 6. Recultivated and urban soils
- 7. Spatio-temporal heterogeneity and soil evolution
- 8. Temperature regime of soils and cryogenesis questions
- 9. Substance and energy flows in the soil and landscape
- 10. Scientific and applied aspects of land reclamation
- 11. Modern challenges of applied soil physics: food security, digital (smart) agriculture

Before the beginning of the conference and after the end of the meetings, a scientific excursion program, which will be announced in the 2nd information letter, is planned.

The address of the organizing committee: 119991, Moscow, GSP-1, Leninskie Gory, Moscow State University, 1, bldg. 12, Faculty of Soil Science.

Tel./Fax: +7(495) 9393684;

E-mail: soil.phys.2019@gmail.com

Information about the conference can be found in the Internet at <u>site.</u>

### **Key Dates**

February 01 – 1st Newsletter

March 01 – Deadline for submission of the electronic registration form.

April 01 – Deadline for early receipt of abstracts and for payment of early registration fees

May 01 – Deadline for late receipt of abstracts and for payment of late registration fees

May 27 – Arrival and registration of the participants

*May 27-31* – Conference work

May 31 – Conference closing

\*Official invitations will be sent via email address provided during registration.

To participate in the conference, you need to fill out the electronic registration form at <a href="https://lomonosov-msu.ru/rus/event/request/5470/form">https://lomonosov-msu.ru/rus/event/request/5470/form</a>.

#### **PAYMENT**

**Registration fee\*** is paid for each publication by one of the authors, including the publication of materials in the electronic collection of the conference; the number of publication is not limited.

	When paying	When paying after
Registration fee	(before April, 01)	(April, 02 – May, 15)
	800₽	1000 ₽

Organizational fee\* includes: conference participant package, coffee breaks, welcome drinks, press center services.

Organizational fee	Early registration (before March, 31)	Late registration (after March, 31)
Regular	3000 ₽	3500 ₽
Young scientists (under 35 years old)	1500 ₽	2000 ₽
Students	free	1000 ₽

<sup>\*</sup>Registration and Organization fees are 500 ₽ less for Russian Federation residents.

Payment details will be available soon at the conference website (<a href="https://lomonosov-msu.ru/eng/event/5470/">https://lomonosov-msu.ru/eng/event/5470/</a>).

A copy of the document confirming payment of the registration fee and publishing services (available in one payment), send to the e-mail address: <a href="mailto:soil.phys.2019@gmail.com">soil.phys.2019@gmail.com</a>
Articles in accordance with the scientific theme of the conference should be attached to the registration form (<a href="https://lomonosov-msu.ru/eng/event/request/5470/form">https://lomonosov-msu.ru/eng/event/request/5470/form</a>) named by the name of the first author (for example PETROV.doc).

#### **Publication of Abstracts**

Materials of abstracts accepted by the Organizing Committee will be published without editorial changes. The obligatory condition for the publication of abstracts is the payment of the registration fee.

Additional information about the conference, program and excursions will be sent out in March with the 2nd information letter.

# **Requirements for Abstracts**

Volume - no more than 5 pages, font - Times New Roman, font size - 12 pt, 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;
- 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 from the red line. In the text, it is desirable to adhere to the headings accepted in scientific publications (introduction, objects and methods of

research, discussion of results, conclusions). Those interested can submit a summary in English of about 10 lines).

The end of spring is a high tourist season in Moscow, that's why we recommend to think about your accommodation in advance. For booking you can use well known public services (booking.com, trivago.ru, Airbnb.com, etc.). If you need a visa support, please, contact with organizing committee.

Please familiarize all interested specialists with this information letter.

Thanks in advance for your interest!