



10th INTERNATIONAL CONFERENCE ON SERPENTINE ECOLOGY (ICSE 10)

Second circular

The conference site is now open at:

<http://icse10.urfu.ru>

E-mail: icse10@urfu.ru

Dear Colleagues! We cordially invite you to attend the 10th International Conference on Serpentine Ecology that will take place in Ekaterinburg, Russian Federation, from June 21-30, 2020. The conference is organized by Ural Federal University (<https://urfu.ru/en/about-theuniversity/>) and The Institute of Natural Sciences and Mathematics of the Ural Federal University (<http://insma.urfu.ru/en/>).

The International Conference on Serpentine Ecology (ICSE), directed by The International Serpentine Ecology Society (ISES), has been held every three years since 1991. It is one of the major international scientific forums in the field of serpentine ecology, bringing together botanists, zoologists, microbiologists, physiologists, geneticists, geologists, soil scientists, and other applied specialists studying the ecology of ultramafic rocks and soil. Previous conferences took place in the USA, New Caledonia, South Africa, Cuba, Italy, Portugal, Malaysia, and Albania. The conference will be held in Russia for the first time.

The ICSE is a worldwide multidisciplinary group of scientists interested in different aspects of serpentine biota, including diversity, ecology, evolution, physiology, and applied research in green technologies and conservation. The main goal of the ICSE is to create a platform for the exchange of ideas and experiences, and to promote scientific dialogue, among scientists from numerous fields that share interests in the study of serpentine habitats worldwide. The previous ICSE conference was held in Tirana and Pogradec (Albania) 5-9 June 2017. The conference was attended by more than 100 delegates from 29 countries.

Venue

Ekaterinburg (also, Yekaterinburg) is the fourth largest city in Russia, located on the eastern slope of the Ural Mountains, on the Asian side of the boundary between Asia and Europe. Ekaterinburg is called the "third capital of Russia" as it is ranked third in size in terms of economy, culture, transportation, and tourism. It is located about 1,420 kilometres (880 miles) to the east of Moscow. Ural Federal University (UrFU) is the oldest university in the Ural region. It was established in Yekaterinburg in 1920 by the Soviet government.

Scientific Committee

Alan J. M. Baker: University of Queensland, Australia

Robert Boyd: Auburn University, Alabama, USA

Guillaume Echevarria: University of Lorraine, France

Antony van der Ent: University of Queensland, Australia

Jean Louis Morel: University of Lorraine, France

Nishanta Rajakaruna: California Polytechnic State University, San Luis Obispo, California, USA

Roger D. Reeves: Massey University, Palmerston North, New Zealand

Stefan Siebert: North-West University, South Africa

Takafumi Mizuno: Mie University, Japan

Alexander Paukov: Ural Federal University, Russia

Anzhelika Teptina: Ural Federal University, Russia

Main Program

June 21: Registration; Welcome reception

June 22: Registration; Scientific sessions

June 23: Scientific sessions; Poster sessions

June 24: Mid-conference field trip to serpentine areas

June 25: Scientific sessions; Poster session; Banquet dinner

June 26: Scientific session

June 27-30: Post-conference field trips

Sessions

1 Geology and Soils

Geological and pedological processes, biogeochemical cycles, mineralogy of ultramafic parent materials, soil chemical and physical characteristics, climate-edaphic relations

2 Biodiversity and Phytosociology

Diversity of plants, fungi and associates, insects, microbes, and vertebrates in ultramafic habitats, phytogeography and phytosociology

3 Ecology and Evolution

Ecology of plant communities, experimental ecology, cross kingdom interactions, evolutionary processes and speciation, evolutionary ecology, phylogenetic approaches to diversity

4 Ecophysiology and Genetics

Physiology of traits underlying serpentine adaptation, genetic basis for adaptive traits, biochemistry/secondary metabolite chemistry of serpentine plants, experimental approaches to understanding physiological mechanisms of tolerance to heavy metals, Ca/Mg ratio, low nutrients, drought, and other abiotic stressors

5 Metal Hyperaccumulation

Discovery of new metal hyperaccumulators, physiology and genetics of metal hyperaccumulation, adaptive significance of metal hyperaccumulation, biotic and abiotic factors that influence metal hyperaccumulation, new technologies in the study of metal hyperaccumulation (such as x-ray microprobes and XRD technologies)

6 Conservation Practices

Conservation of rare and endemic plants in ultramafic habitats, restoration of degraded serpentine habitats, *in situ* and *ex situ* conservation efforts for ultramafic plants, effects of global change on

serpentine plants and their communities, use of technologies (LIDAR, GIS, modelling) in the study of conservation approaches, threats to ultramafic habitats

7 Green Technologies

Phytoremediation, rhizofiltration, and other technologies used in the remediation of metal-contaminated sites, agromining/phytomining technologies, the pros and cons of using non-native or genetically-modified organisms in the remediation of contaminated sites

8 Ecosystem Health

Metal transfer from soil to plants and other higher organisms, contamination of soil and water from metal leaching, ecotoxicology, threats to human and ecosystem health, contamination of agricultural settings from nearby ultramafic settings

9 Other Harsh Edaphic Habitats

Any of the above topics as relating to non-ultramafic but other similarly harsh edaphic environments. Examples include substrates such as limestone, dolomite, gypsum, gabbro, granite, sandstone, etc., and edaphic habitats created by anthropogenic sources, including mine tailings, waste dumps, etc. In this session, we welcome talks that explore what all harsh edaphic habitats have in common and what special features might characterize one habitat from another. What traits confer cross tolerance to different edaphic habitats? Are there similar lessons we can learn from the study of different harsh edaphic habitats?

The proceedings of the conference will be published by the Ecological Society of Japan in 'Ecological Research'.

ECOLOGICAL RESEARCH

Important dates

15th March 2020

Deadline for early registration (reduced rates) and abstract submissions (oral and posters)
Deadline for early registration for post-conference field trip

15th April 2020 – 3rd circular

Notification to authors of acceptance of abstracts (oral and posters)
Deadline for late registration and late abstract submissions (posters only)
Deadline for late registration for post-conference field trip

1st May 2020 – Final scientific program

Notification of acceptance to authors (late abstracts)
Acceptance of participants for the post-conference field trip

June 2020

ICSE 10, June 21-26
Post-conference field trips, June 27-30

Registration and abstract submission are open!

<https://icse10.urfu.ru/en/registration/>

<https://icse10.urfu.ru/en/submitting-oral-poster-abstract/>

The routes of Mid- and Post-Conference tours are announced on the Website

<https://icse10.urfu.ru/en/program/mid-conference-tour/>

<https://icse10.urfu.ru/en/program/post-conference-tour/>

We are looking forward to seeing you in Ekaterinburg!