



NYC Urban Soils Institute

Brooklyn College



Russian Science Foundation



RUDN university



SMART URBAN NATURE



TAURUS



# 3MUGIS 2020 INTERNATIONAL ONLINE SUMMER SCHOOL

*July 3 – 13, 2020*

[3mugis.org](http://3mugis.org)

## About 3MUGIS

The Monitoring, Modeling, Managing Urban Green Infrastructure and Soils (3MUGIS) Summer School is an annual event, which addresses relevant contemporary environmental consequences and opportunities of urbanization with special emphasis on soil functions.

The 3MUGIS-2020 is held online. At the end of the program, students will better understand ecology and biogeochemistry of urban soils and plants, advances in monitoring and modeling of urban soils and green infrastructures, role of nature-based solutions and urban green infrastructure for human health and well-being.

We will use Zoom platform for running the summer school. The school rooms will be open during lectures and workshops according to this program.

If it is possible, please try to attend lectures and seminars in real time.



Please note that all lectures are held in Moscow time (UTC +3)

## Summer School Exam and Best Project Contest

The summer school exam will be organized as a project defense. All participants will do projects in teams. You will be provided with data, instructions and time to complete the project. At the end of the Summer school, we will have a project defense and at the same time a project contest: the best projects will receive special prizes.

All the participants of the project defense will receive the official 1 ECTS certificate, recognized internationally.

## Zoom Instructions and Rules

Please prepare for classes on the **Zoom** platform.

Download and install the **Zoom** application (<https://zoom.us/download>) on your computer. It can be used from a PC, phone or tablet.

To start using **Zoom**, you need to register in the system and create an account.

Please, read the platform's terms of use, learn the interface and functions with the help of quick video instructions about **Zoom** functions (<https://zoom.us/resources>).

Test the microphone, headphones and camera.

Each time you follow the link to the meeting room, you will need to register. This is necessary for compiling registration sheets. We ask you to write your full name and surname, as well as fill out the other fields of the registration form.

Using **Zoom**, if possible, turn on video, lecturers are always pleased to see their audience, even in a remote format.

Please make sure that your microphone is turned off and extraneous sounds do not interfere with the meeting.

Turn on your microphone when you want to ask a question or make a comment. You can also use chat for questions.

Be polite to all participants. Do not post questions or comments that can offend other people.

Save the time of other participants. Write briefly and only on the topic of conversation.

## Lecture Videos on Facebook

As the participants of the summer school are from different countries with different time zones we will record all the lectures and the workshops.

We will post these videos to the school group on Facebook every day.

<https://www.facebook.com/groups/3MUGIS>

**L0 Introduction to 3MUGIS** [Zoom link](#)

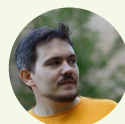
10:00 - 10:30

**Vyacheslav Vasenev**  
RUDN University, Russia**L1 Tree Talkers: new generation technique for tree monitoring** [Zoom link](#)

10:30 - 12:00

**Riccardo Valentini**  
RUDN University, Russia / UNITUS, Italy12:00 - 12:30 **Break****P1 Evaluating ESs of urban trees real-time** [Zoom link](#)

12:30 - 14:00

**Victor Matasov**  
RUDN University, Russia**Alexsey Yaroslavtsev**  
RUDN University, Russia14:00 - 14:30 **Intro video 1** [Zoom link](#)14:30 - 15:00 **Break****L2 Current State of Climate and Future Development – Drivers, Consequences, Challenges** [Zoom link](#)

15:00 - 16:00

**Michael Leuchner**  
RWTH, Germany**L3 Urban climate: measuring, modeling and assessment** [Zoom link](#)

16:00 - 17:00

**Pavel Konstantinov**  
Lomonosov Moscow State University, Russia17:00 - 17:30 **Opening ceremony** [Zoom link](#)17:30 - 18:30 **Team building and designing project work Intro** [Zoom link](#)18:30 - 19:00 **Short summary of DAY 1** [Zoom link](#)

## DAY 2

4 July 2020 (SATURDAY)

### L4 Carbon stocks and fluxes in urban soils: from local to global

 [Zoom link](#)

10:00 - 11:30



**Vyacheslav Vasenev**  
RUDN University, Russia

11:30 - 12:00 **Break**

### P2 Estimating C balance of urban green lawns

 [Zoom link](#)

12:00 - 14:00



**Olga Gavrichkova**  
National Research Council, Italy



**Kristina Ivashchenko**  
RUDN University, Russia

14:00 - 14:30 **Intro video 2**

 [Zoom link](#)

14:30 - 15:00 **Break**

### L5 Assessing soil pollution by heavy metals

 [Zoom link](#)

15:00 - 16:30



**Zhongqi Cheng**  
City University of New York, USA

### P3 Assessment multiple pollution by heavy metals

 [Zoom link](#)

16:30 - 18:30



**Anna Paltseva**  
City University of New York, USA



**Olga Romzaykina**  
RUDN University, Russia

18:30 - 19:00 **Short summary of DAY 2**

 [Zoom link](#)

## DAY 3

5 July 2020 (SUNDAY)

10:00 - 19:00

### Day for practical exercises and working on team projects

 [Zoom link](#)

## DAY 4

6 July 2020 (MONDAY)

### L6 Urban lawns: ecological and cultural phenomena [Zoom link](#)

10:00 - 11:30



**Maria Ignatieva**  
The University of Western Australia, Australia

11:30 - 12:00 **Break**

### L7 SUITMAs: formation, functions and ESs [Zoom link](#)

12:00 - 14:00



**Jean Louis Morel**  
Lorraine University, France

14:00 - 14:30 **Intro video 3**

 [Zoom link](#)

14:30 - 15:00 **Break**

### P4 How to consider ESs of SUITMAs in urban planning [Zoom link](#)

15:00 - 18:00



**Geoffroy Sere**  
INRA, France

18:30 - 19:00 **Short summary of DAY 4**

 [Zoom link](#)

## DAY 5

7 July 2020 (TUESDAY)

### L8 Practical tools for green infrastructure management and assessment [Zoom link](#)

10:30 - 12:00



**Carlo Calfapietra**  
National Research Council, Italy

### P5 Practical tools for green infrastructure management and assessment [Zoom link](#)

12:00 - 14:00



**Carlo Calfapietra**  
National Research Council, Italy

14:00 - 14:30 **Intro video 4**

 [Zoom link](#)

14:30 - 15:00 **Break**

## DAY 5 (CONTINUE)

7 July 2020 (TUESDAY)

### L9 Cultural services of urban green spaces

 [Zoom link](#)

15:00 - 16:30



**Diana Dushkova**  
Humboldt University, Germany

16:30 - 18:00 **Guidance for team projects**

 [Zoom link](#)

18:30 - 19:00 **Short summary of DAY 5**

 [Zoom link](#)

## Smart and Sustainable Cities Online Conference

### DAY 6

8 July 2020 (WEDNESDAY)

10:30 - 11:30 **Plenary session**

 [Zoom link](#)

### Session 1

11:30 - 13:00 **Monitoring and assessment of tree health and stability in cities**

 [Zoom link](#)

13:00 - 13:30 **Break**

### Keynote

 [Zoom link](#)

13:30 - 14:30



**Alexander Baklanov**  
World Meteorological Organization (WMO)

14:30 - 16:00 **Session 2  
Urban climate and air quality (PEEX "Pan-Eurasian Experiment" Session)**

 [Zoom link](#)

16:00 - 17:00 **Poster session**

 [Zoom link](#)

17:00 - 17:30 **Opening ceremony**

 [Zoom link](#)

### Round table 3

17:30 - 19:00 **University campus as an open lab for sustainable green solutions and innovative education synergy**

 [Zoom link](#)

19:00 - 19:30 **Short summary of DAY 6**

 [Zoom link](#)

## Smart and Sustainable Cities Online Conference

DAY 7

9 July 2020 (THURSDAY)


10:00 - 11:30 **Session 3**  
Soil-water-atmosphere interactions in cities [Zoom link](#)

11:30 - 13:00 **Round table 1**  
New techniques in monitoring urban infrastructure: from science to policy-makers [Zoom link](#)

13:00 - 13:30 **Break**

13:30 - 15:00 **Session 5**  
Soil quality assessment for sustainable management of urban soil resources [Zoom link](#)

15:00 - 16:00 **Poster session** [Zoom link](#)

16:00 - 17:00 **Keynote** [Zoom link](#)  
 **Peter Groffman**  
CUNY Advanced Science Research Center, Brooklyn College, USA

17:00 - 18:30 **Session 6**  
Biogeochemical cycles in urban soils and ecosystems [Zoom link](#)

19:00 - 19:30 **Short summary of DAY 7** [Zoom link](#)

## Smart and Sustainable Cities Online Conference

DAY 8

10 July 2020 (FRIDAY)

10:00 - 11:30 **Session 4**  
Assessment, modelling and mappings urban ecosystem services [Zoom link](#)

11:30 - 13:00 **Session 8**  
Health risks in urban environment [Zoom link](#)

13:00 - 13:30 **Break**

## Smart and Sustainable Cities Online Conference

DAY 8 (CONTINUE)

10 July 2020 (FRIDAY)

### Keynote: Nature Based Solutions in the New Green Deal perspective

 [Zoom link](#)

13:30 - 14:30



**Carlo Calfapietra**  
National Research Council, Italy

### Session 7

14:30 - 16:00

### Nature-Based Solutions and Urban Farming: challenges and perspectives

 [Zoom link](#)

### Round table 2

16:00 - 17:30

### Ecosystem services assessment for sustainable landscape architecture: from science to practice

 [Zoom link](#)

17:30 - 18:00

### Short summary of the conference

 [Zoom link](#)

18:00 - 18:30

### Closing ceremony

 [Zoom link](#)

19:00 - 19:30

### Short summary of DAY 8

 [Zoom link](#)

DAY 9

11 July 2020 (SATURDAY)

10:00 - 16:00

### Day for practical exercises and working on team projects

 [Zoom link](#)

### Workshop: How to write a scientific paper?

 [Zoom link](#)

16:00 - 18:00



**Yakov Kuzyakov**  
GAU, Germany



**Michael Leuchner**  
RWTH, Germany

DAY 10

12 July 2020 (SUNDAY)

10:00 - 19:00

### Day for practical exercises and working on team projects

 [Zoom link](#)



DAY 11

13 July 2020 (MONDAY)

10:00 - 15:00 **Day for practical exercises and working on team projects**

 [Zoom link](#)

15:00 - 17:00 **Team project defense**

 [Zoom link](#)

17:00 - 18:00 **Closing ceremony**

 [Zoom link](#)

THANK YOU FOR ATTENDING 3MUGIS 2020

## 3MUGIS 2021 in Brief

### 3MUGIS SUMMER SCHOOL 2021

### “ANTHROPOGENIC AND NATURAL SOIL LANDSCAPES IN EUROPEAN RUSSIA: FROM SEA TO SEA”

- ✔ 5 days of intensive lectures, seminars and practical exercises in RUDN University in Moscow
- ✔ 16-days field tour from Teriberka (69N; 35E) to Abrau-Durso (44N; 37E)
- ✔ 6 bioclimatic zones from Tundra to Subtropics
- ✔ 4 natural reserves
- ✔ Teriberka - a village on the shore of the Arctic Ocean
- ✔ Typical Chernozems – the most fertile soils in the world
- ✔ Kursk Magnetic Anomaly – the largest world ore mining area
- ✔ Starocherkask – a historical area of kozak’s culture
- ✔ Advance techniques of on-site express monitoring (XRF, IRGA, EC)
- ✔ Hiking, banya and local food

### CONTACTS

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