



VIDIS SUMMER SCHOOL 2023

Innovative methods in air pollution and atmospheric aerosols monitoring and modelling

5-day Summer School
organized by the VIDIS project,
<https://vidis-project.org>

**28 August -
2 September, 2023**

**Borkovac
Ruma, Serbia**



Vinča

Institute of Nuclear Sciences
University of Belgrade
National Institute of the Republic of Serbia



**Co-funded by
the European Union**

BACKGROUND AND AIM

The Summer School 2023 is organized as part of the EU-cofounded H2020 VIDIS project, and it will showcase the most recent research and development activities related to air quality and atmospheric aerosols. This 2nd VIDIS summer school aims to present innovative methods and tools in air quality and atmospheric aerosols monitoring and modelling. The summer school will provide participants with both theoretical knowledge and hands-on experience in relation to low-cost PM sensors, and other sensing technologies.



SUMMER SCHOOL PARTICIPATION BENEFIT

Participants will have an opportunity:

- To use air quality low-cost sensors/devices developed by the VIDIS partners and related projects and make sense of the collected data through visualization platforms. A team of VIDIS project participants will be there to guide participants throughout these exercises.
- To participate in an in-field experiment utilizing a small-scale network of sensors assembled during the summer school and to analyse real time data obtained using low-cost sensor measurements and scanning mobility and optical particle sizers. Experiments will be hands-on, fun and imitate real life situations.
- To perform calibration of low-cost sensors using both common techniques and state of the art machine learning approaches.
- To demonstrate data fusion technologies that utilize measurement data of different temporal and spatial resolution e.g., satellite data and ground-level PM data
- To present their own research through poster(s).

WHO SHOULD ATTEND

VIDIS summer school will host a total of 20 participants from various countries. For attendees, the cost of accommodation and meals will be covered by the VIDIS project. Priority will be given to PhD students, Early-Stage Researchers and young researchers involved in air quality and atmospheric aerosols studies, low-cost and remote sensing technologies, application of advanced tools for air quality monitoring and modelling. In addition, summer school is aimed at air quality experts, e.g. developers and operators of existing monitoring stations to learn about sensor technologies, and at air quality monitoring network owners or operators as well as app developers interested in offering new applications and advanced services on air quality.

Attendees will be selected based on the relevance of the summer school to their research activities and general work, as well as to ensure gender balance and geographic diversity. A motivation letter will be required.

During summer school poster season showcasing work of participants will be organized.

REGISTRATION PROCEDURE

The VIDIS Summer School involves a registration and a selection procedure. Registration is free of cost, but seats are limited. You are eligible to participate ONLY if you have received (and accepted) the official invitation from VIDIS project – registration is not enough. The invitations are to be expected in the middle of June 2023.

Applications open:	May 15 st
Program update:	June 1 st
Applications close:	June 15 th
Applicant's notification of acceptance:	June 20 th

Each applicant has to apply via a google form, <https://forms.gle/vecZPT2tPWudnvcA> , providing personal info plus the following documents (in addition to filling-in the registration form, the documents should be sent via email to webiopat.prj@vin.bg.ac.rs :

1. A motivation letter briefly (max 1 page) introducing the applicant, interest in the topics of the workshop, motivation, and expected benefits to the participant from VIDIS Summer School especially in relation to own studies and career goals and/or the possibility to disseminate the Summer School topics through education or awareness sessions within their own institute or countries. Applicants should also include a title of the poster that they will present, which can discuss their current research activities.
2. The applicant's CV including relevant publications.

BORKOVAC 2023 theme: Borkovac – going up in flames? Methods to develop an area fire detection system.

- **Overview of monitoring methods and standardization for PM measurements**
- **Low-cost PM sensors and their use on various monitoring platforms**
- **Mobile monitoring of PM with low-cost and research grade instruments**
- **Advances in on-line PM measurements**
- **Understanding and exploring air quality satellite data**
- **Advanced computational methods to improve information about PM**

BORKOVAC 2023 lecturers

- **Dr Milena Jovasevic-Stojanovic, VINCA (VIDIS project coordinator, program committee chair)**
- **Dr Alena Bartonova, Environment and climate institute NILU Norway**
- **Prof dr Saverio de Vito, ENEA – Italian Agency for New Technologies, Energy and Sustainable Economic Development, PV & Smart Devices Division**
- **Prof dr Zoran Ristovski, Queensland University of Technology, Centre for Environment**
- **Dr Milos Davidovic, VINCA (VIDIS Strategy and Development lead, assistant research professor):**
- **Mr Franck Rene Dauge, Environment and climate institute NILU Norway**
- **Dr Philipp Schneider, Environment and climate institute NILU Norway**
- **Dr Kerstin Stebel, Environment and climate institute NILU Norway**
- **Dr Amirhossein Hassani, Environment and climate institute NILU Norway**
- **Dr Daniel Harrison, Senior Lecturer with Southern Cross University**