

CA18226 ADOPT Training School
DETECTION OF BIOAEROSOLS USING MOBILE AND LOW-COST DEVICES
 June -August 2023, Vilnius, Lithuania



About this training school. Bioaerosols are among the most complex components of the atmosphere and have the potential to act as pathogens on crops and forests, as aeroallergens with implications for human health and as precursors of climate-related physical processes. The variety of bioaerosol particles and their associated properties depend largely on the nearest emitters. Most of the studies carried out in this topic have been carried out by sampling at various stationary facilities or points up to 25 m from the ground surface. Studies using aeroplanes or unmanned aerial vehicles have shown contradictory results. These are just some of the arguments indicating the need for additional knowledge before it will be possible to control bioaerosol occurrences. A limiting factor for observations is the shortage of mobile and low-cost instruments and the penetration of related new techniques in the frontiers of research.

ADOPT CA18226 participants have developed low-cost prototypes that can be used for bioaerosol monitoring and sampling. The training school in Vilnius in June 2023 is tailor-made to explore innovative approaches and test these techniques. The lecture session will be organised virtually. The practical part of the training will cover hands-on testing of the devices in different scenarios. Individual and group experiments in urban environments, natural ecosystems and agricultural sites will allow each trainee to operate mobile and low-cost bioaerosol measurement devices. The analysis of collected samples in the laboratory is an integral part of this training.

Format. The training consists of three sessions: (1) half-day online lectures on the 6 and 13 of June, (2) hands-on workshop and field tests in Vilnius on 21-23 June, (3) webinar on data analysis and results evaluation on 22 August.

Participant requirements: the ability to use a microscope and to identify pollen or spores. It is highly recommended that each participant brings with him/her a personal laptop. Participants are welcome to bring their mobile or low-cost devices for sampling bioaerosols, either made by themselves or purchased.

Registration. Everyone can apply for participation. Register by filling in [Registration Form](#). Registration is open until 30 April 2023. Anticipated number of participants from min. 10 – max. 18. Preference will be given to COST CA18226 ADOPT participants. For not COST ADOPT participants, priority is granted to the earliest applicants.

Course fees: 200 EUR (fee includes participation in virtual lectures, webinar, practical training and coffee breaks). Members of ADOPT CA18226 are exempt from the fee. All participants are responsible for their travel and accommodation during the practical training in Vilnius.

Financial support: The expenses of ADOPT CA18226 members will be reimbursed in accordance with the COST rules. Some grants may be available from aerobiological societies.

Travel and accommodation: Vilnius easily reachable by [plane](#), [rail](#), [bus](#) and car. Hotel options includes many availabilities: [Amberton Cathedral Square Hotel Vilnius](#); [ibis Vilnius Centre](#); [15th Avenue](#) and etc. To make the most of your time in Vilnius visit [GoVilnius](#).

Organisers: COST action ADOPT CA18226, Vilnius University [Šiauliai Academy](#) and [Faculty of Chemistry and Geosciences](#) in cooperation with Lithuanian Association of Unmanned Aircraft Users. Local organisers in charge are [Ingrida Šaulienė](#), [Laura Šukienė](#), [Gintautas Stankūnavičius](#), [Ričardas Skorupskas](#), [Antanas Gedvilas](#).