SMART4ENV

1ST SUMMER SCHOOL
OCTOBER, 2 -4, 2023

SUMMER SCHOOL ON LOW-COST SMART ENVIRONMENTAL SOLUTIONS TO MONITOR CITY AIR QUALITY

TUBITAK MARMARA RESEARCH CENTER, GEBZE, KOCAELI

Overview
The EU Green Deal Strategy defined tackling climate and environmental-related challenges as ''this generation's" defining task. One of the key areas the European Council encourages the Commission to act in are digital solutions for climate mitigation. SMART4ENV project funded from EU Horizon Europe Widera Programme, aims to improve TUBITAK MAM R&I capacities to strengthen its scientific reputation, attractiveness and networking channels while stimulating scientific excellence in key applications of Smart Environmental Solutions for the mitigation and adaptation to climate change of Turkish economy. More information about the project can be obtained from project website and project YouTube Channel.The project is launching a 3-day Summer School aimed at providing opportunity to network and share practices and activities with high-level experts on the subject of low cost smart environmental solutions to monitor city air quality.

Learning outcomes of the Summer School:
Participants will have an opportunity:
·To understand main causes of air pollution and physical interactions in atmosphere
·To gain knowledge on basic principles of air quality monitoring and modeling
·To learn about techniques used by scientists/communities for the monitoring of air quality
·To analyze data produced by low-cost monitoring system and assess its performance
·To perform a modeling exercise using distribution or receptor models
·To participate in laboratory experiment and field work

Expected audience
Summer school is expected to host a total of 25 participants, especially undergraduate, master and PhD students that are eager to involve in air quality monitoring and modelling studies.

How to apply
Applicants are kindly requested to fill in the application form available from the link.

Costs
Lunches, coffee breaks, transportation to and from the summer school venue to Gebze Marmaray train stations will be provided without charge for all participants at the school.

Scholarships:
Accommodation and transport expenses of up to five participants outside Istanbul and Kocaeli will be covered by the project. The priority will be given to students from 11 cities affected by February 2023 earthquake.

Important Information

Application Deadline: 01/09/23. **Announcement of Accepted Applicants:** 08/09/2023. **Upon acceptance, participants will be required to confirm their participations:** 12/09/2023. **Summer school dates:** 02-04/10/2023.

SMART4ENV has received funding from the European Union's Horizon Europe – Horizon-widera-2021-Acess-03 under grant agreement No 101079251.

SUMMER SCHOOL AGENDA

TUBITAK MAM GEBZE CAMPUS

02/10/2023 (1st Day)		
09:30-10:00	**Registration**	
10:00-10:15	Opening and welcome	TUBITAK MAM Presidency
10:15-10:30	An introduction to the project, presentation of our teamwork	Assoc. Prof. Selda MURAT HOCAOĞLU (TUBITAK MAM)
10:30-11:00	Icebreaking activity	
11:00-11:30	**Coffee break**	
11.30-12:30	Importance of air quality monitoring and modeling studies, interaction between air quality and climate change	Prof. Selahattin İNCECİK (Istanbul Technical University)
12:30-14:00	**Lunch Break**	
14:00-15:00	Latest findings on air pollution and health relationship	Prof. Sinan KESKİN (Marmara University)
15:00-15:30	**Coffee break**	
15:30-16.30	Air quality monitoring infrastructure in Türkiye	Zeliha GEMİCİ (Ministry of Environment, Urbanization and Climate Change)
16:30	**End of meeting**	

03/10/2023 (2nd day)		
10:00-11:00	Interaction between monitoring and modeling. Modelling secondary pollution.	Prof. Giorgio PASSERINI (Università Politecnica delle Marche)
11:00-11:15	**Coffee break**	
11:15-12:15	Speciation of pollutants (e.g. VOC, PM etc.)	Dr. Enrico MANCINELLI (Università Politecnica delle Marche)
12:15-13:00	**Lunch Break**	
13:00-14:00	Meteorology and air quality modeling	Prof. Mete TAYANÇ (Marmara University)
14:00-15:00	Air quality modeling using WRF-Chem	Dr. Mauro MORICHETTI (Università Politecnica delle Marche)
15:00-15:30	**Coffee break**	
15:30-16:30	An example of dispersion modelling	Melike Neşe TEZEL OĞUZ (TUBITAK MAM)
16:30	**End of meeting**	

04/10/2023 (3rd day)		
09:30-10:30	Laboratory visit: Methods used for air quality monitoring	Fatma Pınar AKSOY KAYA (TUBITAK MAM)
10:30-11:00	**Coffee break**	
11:00-12:00	An example of receptor modeling	Ece Gizem ÇAKMAK (TUBITAK MAM)
12:00-13:30	**Lunch Break**	
13:30-14:30	Development and application of low-cost monitoring systems	İbrahim Ural BOSTANCI (ARGATE)
14:30-15:00	**Coffee break**	
15:00-16:00	Observation of low-cost monitoring systems during operation and assessment of data collected	Enes Furkan SANCAK (TUBITAK MAM)
16:00	**End of meeting**	

TUBITAK MAM contact details:
TUBITAK MAM project e-mail: mam.smart4env@tubitak.gov.tr
Selda Hocaoglu, selda.murat@tubitak.gov.tr, T +9 (0) 262 641 2941
Burcu Kiran, T +9 (0) 262 677 2919. Sebnem Aynur, T +9 (0) 262 677 2983

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