WINTER SCHOOL
ON
RECEPTOR MODELLING AND SENSOR APPLICATIONS IN AIR QUALITY MANAGEMENT

Monday, 16th December 2024		
Venue Vishweshwaraya Seminar Hall (BSB 368), Department of Civil Engineering, Indian Institute of Technology Madras		
08:30 - 9:00	Registration & Orientation	
09:00-09:30	**Inaugural address** **Welcome address:** Dr. Tanushree Parsai, IIT Madras **Course overveiw:** Prof. Shiva Nagendra S M, IIT Madras & Prof. Uwe Schlink, Helmholtz Centre for Environmental Research - UFZ, Germany **Inaugural address:** Prof. Benny Raphael, Head, Department of Civil Engineering, IIT Madras	
09:30-09:45	Introduction of the Participants	
Module 1: Introduction to air quality monitoring and modelling		
09:45-10:30	Basics of air pollution, current challenges and opportunities (Online)	Prof. Shiva Nagendra S M, IIT Madras
10:30-11:15	Measurement of gaseous pollutants and particulate matter in ambient air	Prof. R Ravi Krishna, IIT Madras
11:15-11:30	Break	
11:30-12:15	India's policy landscape for combating air pollution (Online)	Prof. Mukesh Khare, IIT Delhi
12:15-13:00	Regional climate modelling and air quality	Dr. Chandan Sarangi, IIT Madras
13:00-14:00	Lunch Break	
Module 2: Air quality exposure assessment using wearable technology		
14:00-14:45	Introduction to wearable technology for air quality monitoring	Prof. Uwe Schlink, Helmholtz Centre for Environmental Research - UFZ, Germany
14:45-15:30	Data collection and analysis techniques using wearable devices	Prof. Uwe Schlink, Helmholtz Centre for Environmental Research - UFZ, Germany
15:30-15:45	Break	
15:45-16:30	Leveraging R for air quality management and analysis	Dr. Aswin Giri, IIT Madras
16:30-17:15	Introduction to noise pollution and its monitoring techniques	Ms. Lakshmi Pradeep, IIT Madras
17:15-18:00	Networking & research opportunities at IIT Madras	

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Module 3: Receptor modelling for personal exposure and health risk assessment		
09:00-09:45	Introduction to receptor modelling	Prof. Shiva Nagendra S M, IIT Madras
09:45-10:30	Types of receptor models & its application in air pollution studies	Prof. Uwe Schlink, Helmholtz Centre for Environmental Research - UFZ, Germany
10:30-11:15	Air pollution: From sampling to analysis	Dr. Arul Veerappan, NYU Langone Health
11:15-11:30	Break	
11:30-12:15	Forest fires and public health: Understanding the risks and consequences	Dr. Tanushree Parsai, IIT Madras
12:15-13:00	**Group Discussion** Air pollution monitoring, source identification, exposure and health risk assessment	
13:00-14:00	Lunch Break	
Module 4: Demonstration of Air & Noise pollution monitoring		
14:00-15:30	Demonstration of air and noise monitoring instruments	Dr. Senthilkumar, TNPCB Ms. Chaithra S, Mr. Vijayakumar, Dr. Ezhilkumar, Mr. Debabrat Biswal, Ms. Lakshmi Pradeep, Dr. Aswin Giri IIT Madras
15:30-15:45	Break	
Module 5: Pre-conference workshop		
15:45-17:30	Pre-Conference workshop on 'Scientific writing: Hints and tips'	Ms. Neha Sharma, Springer
17:30-18:00	Networking & research opportunities at Organising Institutes	