WINTER SCHOOL &

on Sensors for Air, Noise and Water Pollution Monitoring and Management

INDIAN INTERNATIONAL CONFERENCE ON AIR QUALITY MANAGEMENT

8th IICAQM 2023 INDIAN INTERNATIONAL CONFERENCE ON AIR QUALITY MANAGEMENT

Dates: 4th – 8th Dec 2023 | Venue: Indian Institute of Science, Bengaluru, India

In numerous countries, both rural and urban areas face significant challenges concerning poor environmental quality encompassing air, water, and noise pollution, with children and elderly individuals being particularly vulnerable. Poverty, disease, lack of education, and substandard living conditions intensify health risks. Additionally, environmental pollution not only affects human health but also has regional and global implications. Suitable monitoring is necessary so that the world can achieve sustainable growth, by maintaining a healthy society with good air and water quality. Environmental Monitoring(EM) has become a smart environment monitoring (SEM) system as the technology has enabled EM methods to monitor the factors impacting the environment more precisely, with an optimal control of pollution and other undesirable effects with Sensors. In this context, the winter school aims to address the use of sensors for understanding the fundamental aspects of pollution, measurement techniques, and the associated health impacts in both indoor and outdoor environments, while also exploring management strategies to mitigate environmental pollution.

AIM OF WINTER SCHOOL

- **To introduce the principles and concepts of air, noise and water pollution.**
- **To provide information on effects due to poor environmental quality and health risk assessment.**
- **To provide information on measurement of air, noise and water pollution.**
- **To understand the guidelines and framework for environmental quality management.**

ELIGIBILITY

Ph.D./M. Tech./M. Sc or Final year B.E./B. Tech. students from IITs/NITs/AICTE/UGC recognized colleges; Professionals working in Air Quality Management

Module 1: Characteristics of Air, Noise & Water pollution:

1. Introduction to air pollution
2. Sources and types of air pollutants in indoor & outdoor environment
3. Introduction to noise pollution and sources of noise in indoor & outdoor environments
4. Introduction to water pollution and its sources.

Group discussion: Problems of air, noise & water pollution

Module 2: Health risks related to Air, Noise & Water pollution:

1. Health risks associated with air pollution
2. Health risks associated with noise pollution
3. Health risks associated with water pollution

Module 3: Measurement of Air, Noise & Water pollution:

1. Measurement and monitoring of air pollution
2. Measurement and monitoring of noise pollution
3. Measurement and monitoring of water pollution

Group discussion: Smart sensors in urban air quality management and exposure analysis

Module 4: Demonstration of Air, Noise & Water pollution monitoring:

1. Demonstration of air, noise & water pollution monitoring instruments

Module 5: Lectures / Case studies: Attending keynote addresses and invited talks of the international conference on air quality management

Conference Day 1

Module 6: Lectures / Case studies: Attending keynote addresses and invited talks of the international conference on air quality management

Conference Day 2

Module 7: Lectures / Case studies: Attending keynote addresses and invited talks of the international conference on air quality management

Conference Day 3

CONFERENCE WEBSITE

https://2023.iicaqm.in/

Email: iicaqmiitm@gmail.com

RESOURCE PERSONS:

The teaching faculty will constitute experts from different specializations within IITs and guest speakers from other reputed institutions and organizations.

LECTURE NOTES: Soft copy of the lecture notes will be provided to the participants.

Note: The Last Date for receipt of completed registration forms is November 1st, 2023, and intimation of selection will be sent by email.

REGISTRATION FEE:

(a) Students from IITs/IISc/NITs/AICTE/UGC recognized colleges: Registration fee is Rs. 7500/-.

(b) Participants from other organizations: Few seats are also available for participants from Industry, Government Departments, and Research Organizations. They have to pay Rs. 15,000/- per candidate as registration fee. This amount is to be sent along with the application form. All payments should be made online.

Registration fee includes an electronic copy of the lecture handouts, IICAQM 2023 proceedings, and conference kit. Students must provide a bonafide certificate. Your registration will not be processed without payment.

Online Registration:
https://elearn.nptel.ac.in/IICAQM2023/

ABOUT ORGANIZING INSTITUTES

Indian Institute of Technology Madras is a leading institute in India, has 16 academic departments in engineering and pure sciences. Situated on a scenic 250-hectare wooded campus, it ranks 1st for engineering research and teaching in the country.

Indian Institute of Science Bengaluru, established in 1909, is a top-ranked institution in India. It offers 40 disciplines in PG and UG programs across 6 divisions and boasts a highly cited faculty worldwide.

Indian Institute of Technology Guwahati, established in 1994, has 11 departments, 5 interdisciplinary academic centers, and 4 schools, spanning engineering, science, and humanities. Its campus sprawls over 285 hectares on the north bank of the Brahmaputra River.

Australian National University is a leading public research university in Canberra, Australia. With 7 colleges, national academies, and institutes on its Acton campus, it holds the top spot in the 2022 QS World University Rankings for Australia and the Southern Hemisphere.

Mahidol University is a leading autonomous research institution in Thailand. It offers 629 programs across 17 faculties, 6 colleges, 9 research institutions, and 6 campuses. Ranked #1 in Thailand in 2011 by QS Asian University Rankings.

University of Bath is a prestigious UK public university located in Bath, established in 1966. Known for its excellence in research and teaching, it has secured a position within the top 400 globally (ARWU 2016) and has consistently ranked in the top 300 (World University Rankings 2016-2018).

Asian Institute of Technology, founded in 1959, is an international higher education organization located 40 km north of Bangkok, Thailand. It focuses on engineering, advanced technologies, sustainable development, and management. AIT ranks 2nd in Thailand for Engineering and Technology in the QS World University Rankings by Subject 2020.

University of California Riverside: Pioneering research on 1,200 scenic acres in Southern California. Top 1% globally (Center for World University Rankings) and a Forbes top 12 public university in the US.

Indian Institute of Technology Bombay, established in 1958, was the second IIT and the first with foreign assistance. UNESCO funds came from the Soviet Union. Designated an Institute of National Importance in 1961, it has grown into a top global technical university.

Indian Institute of Technology Kanpur, founded in 1959, is a premier institution established by the Government of India. It focuses on meaningful education, top-notch research, and technological innovation leadership.

Jointly organized by:

The Winter School will be held at IISc Bengaluru. The campus is located at a distance of about 35 km from Bangalore airport and 7 km from city central railway station and is well connected by city buses.

WINTER SCHOOL COORDINATORS:

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