

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

ELIGIBILITY: Ph.D./M. Tech./M. Sc or Final year B.E./B. Tech. students from IITs/NITs/AICTE/UGC recognized colleges are eligible to apply. Professionals working in the area of Air Quality Management are also welcome to apply.

REGISTRATION FEE:

(a) Students from IITs/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 2021 proceedings, conference kit, refreshments, and twin sharing hostel accommodation. Students must provide a bonafide certificate. Your registration will not be processed without payment.

ABOUT ORGANIZING INSTITUTES

Indian Institute of Technology Madras (IITM) is one of the foremost institutes of national importance in India for higher technological education, basic and applied research. IIT Madras is ranked 1st in India for research and teaching institutions in engineering. The Institute has sixteen academic departments and advanced research centers in various disciplines of engineering and pure sciences. IIT Madras is a residential institute with nearly 550 faculty, 8000 students, and 1250 administrative & supporting staff and is a self-contained campus located in a beautiful wooded land of about 250 hectares. The EWRE laboratory of Civil Engineering department has setup a Continuous Ambient Air Quality Monitoring Station in collaboration with Central Pollution Control Board (CPCB), New Delhi. The air quality management research group focuses on air quality modelling, hotspot air quality management, indoor air pollution, source apportionment, low-cost sensors, and exposure assessment (<https://www.iitm.ac.in>).

Indian Institute of Technology Guwahati (IIT Guwahati), the sixth member of the IIT fraternity, was established in 1994. The academic programme of IIT Guwahati commenced in 1995. At present, the Institute has eleven departments and five inter-disciplinary academic centers and four schools covering all the major engineering, science, and humanities disciplines, offering BTech, BDes, MA, MDes, MTech, MSc and PhD programmes. IIT Guwahati's campus is on a sprawling 285 hectares plot of land on the north bank

of the river Brahmaputra around 20 km from the heart of the city. The Air & Noise Pollution Research Lab of IIT Guwahati is actively involved in the state-of-art research on aerosol, black carbon, their optical properties and effects on the northeast India rainfall and human health.

University of Bath is a public university located in Bath, Somerset, United Kingdom. It received our Royal Charter in 1966 and is now established as a top 10 UK university with a reputation for research and teaching excellence. Internationally it is placed in the top 400 by the 2016 ARWU and has featured in the top 300 in 2016, 2017 and 2018 THE World University Rankings.

Helmholtz Centre for Environmental Research (UFZ) was founded in December 1991 and it was the first and only research institute in the Helmholtz Association of German Research Centers to be exclusively dedicated to environmental research. UFZ is located at the towns of Leipzig, Halle, and Magdeburg.

ABOUT CONFERENCE VENUE: The winter school and IICAQM 2021 will be held as a hybrid event at IIT Guwahati, combining a "live" in-person event with a "virtual" online component.



CONTACT PERSONS

Prof. S.M. Shiva Nagendra
Dept. of Civil Engineering
IIT Madras
Chennai -600 036
Phone: +91-44-2257 4290
Email:snagendra@iitm.ac.in

Prof. Sharad Gokhale
Dept. of Civil Engineering
IIT Guwahati
Guwahati -781039
Phone: +91-361-258 2419
Email:sharadbg@iitg.ac.in

WEBSITE: <http://iicaqm.in/>
Email: iicaqmiitm@gmail.com

**WINTER SCHOOL
ON
“AIR QUALITY MONITORING, MODELLING &
HEALTH RISK IN INDOOR & OUTDOOR
ENVIRONMENTS”**

14th - 15th DECEMBER 2021

&

**6th INDIAN INTERNATIONAL CONFERENCE
ON
AIR QUALITY MANAGEMENT (IICAQM 2021)**

16th - 18th DECEMBER 2021



Jointly Organized by

	Indian Institute of Technology Madras (IITM), Chennai, India
	Indian Institute of Technology Guwahati (IITG), India
	University of California, Riverside (UCR or UC Riverside), California
	University of Bath Bath, Somerset, United Kingdom
	UFZ Helmholtz Centre for Environmental Research, Leipzig, Germany

BACKGROUND

Poor air quality, exposure, and health risk in rural and the urban area is a major challenge in several countries. Children and elderly people are more vulnerable. Poverty, disease, lack of education, and poor living conditions exacerbate the health risk. Besides health, air pollution also causes regional and global impacts. Therefore, maintaining good air quality is important. The winter school will impart knowledge of air pollution basics, measurements, mathematical modeling, and associated health impacts in both indoor and outdoor environments. The course will also cover management options to reduce air pollution.

AIM OF WINTER SCHOOL

- To introduce the principles and concepts of air pollution
- To provide information on air quality monitoring
- To provide information on health effects due to poor air quality
- To share the experience on air pollution monitoring, modeling and health risk assessment
- To understand the guidelines and framework for the air quality management

Module 1: Air pollution: sources and health impacts (Lectures / Case studies):

1. Introduction to air pollution
 2. Sources and types of air pollutants in indoor & outdoor environment
 3. Air pollution impacts on surrounding environment
 4. Health impacts
 5. Air pollution and climate change
- Group discussion on air pollution problems in traffic, residential, traffic and industrial sites

Module 2: Monitoring of air quality at urban areas and industrial clusters (Lectures / Case studies):

1. Concepts and principles of measurement
2. Instruments used for measurement of air pollutants.
3. Personal exposure monitoring in indoor and outdoor environment

4. Ambient air quality management-models, standards, and guidelines

Module 3: Air quality modelling and human exposure assessment (Lectures / Case studies):

1. Urban air quality management concepts
2. Air pollution modelling
3. Exposure assessment of air pollutants
4. Indoor air pollution and health risk assessment

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

Module 4: Lectures / Case studies: Attending keynote addresses and invited talks of the international conference on air quality management (Conference Day 1).

Module 5: Lectures / Case studies: Attending keynote addresses and invited talks of the international conference on air quality management (Conference Day 2).

Module 6: Lectures / Case studies: Attending keynote addresses and invited talks of the international conference on air quality management (Conference Day 2).

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

Note: The Last Date for receipt of completed registration forms is November 1st, 2021 and intimation of selection will be sent by email.

FEE PAYMENT

Online transaction details:

Bank Name: State Bank of India, IIT Madras Campus

Bank Account No: 35302485347

Account Name: International Conference on Air Quality Management

Transfer within India: IFSC Code: SBIN 0001055

IIT Madras GSTIN: 33AAAA13615G1Z6

WINTER SCHOOL

ON

“AIR QUALITY MONITORING, MODELLING & HEALTH RISK IN INDOOR & OUTDOOR ENVIRONMENTS”

14th - 15th DECEMBER 2021

&

6th INDIAN INTERNATIONAL CONFERENCE ON AIR QUALITY MANAGEMENT (IICAQM 2021)

16th - 18th DECEMBER 2021

REGISTRATION FORM

Name: _____

Job Title -----

Organization: _____

Mailing Address: _____

_____ PIN _____

Mobile No _____

E-mail: _____

Date: _____ Signature _____

Online transaction details..... Date/...../2021 for Rs. 7,500/ (Students)- or 15,000/- (Others)

Sponsorship Certificate: Certified that Mr./Miss./..... is being sponsored for attending the above winter school and the conference to be conducted at IIT Guwahati during December 14th to 18th December 2021.

(Signature of Sponsoring/forwarding Authority with date and seal)

Please send scanned copy of completed registration from to: iicaqmiitm@gmail.com