



**Joint IITB - Washington University in St. Louis  
Aerosol and Air Quality Workshop  
(Sponsored by MPCB, India)**

**June 8-9, 2017 at IIT Bombay**

**MOTIVATION AND FORMAT**

Aerosol physics and chemistry encompasses the basic principles that describe the formation, growth, and evolution of a system of particles suspended in a gaseous medium, and the measurement, characterization, and modeling of their properties. Advances in this cross-disciplinary area of research are pivotal for improving our understanding and estimation of climate forcing; ensuring air quality protection; assessment of health impacts; and enablement of advanced material synthesis. Over the years, findings of large variations in formation pathways, morphology, chemical composition and optical properties of aerosols have spurred a rapid growth of interest in this discipline. The purpose of this workshop is to bring together a group of researchers from Indian Institute of Technology Bombay and Washington University in St. Louis with diverse interests and expertise in nucleation, transport, growth, instrumentation, characterization, and multi-scale modeling of aerosols to discuss recent advances, current challenges, and new directions.

The workshop will kick-off with welcome remarks by IITB Director Dr. Devang Khakhar and Washington University School of Engineering Dean Dr. Aaron Bobick, followed by four moderated sessions. Each of these sessions will be led by four/five subject matter experts to discuss the state-of-the-art and identify critical issues pertinent to the session. Each speaker will introduce the topical area by presenting state of the art and challenges. Following this, they will identify the future directions and needs. A group-style discussion will follow at the end of each session with the goal of formulating a visionary guide for future research directions.



## PROPOSED PROGRAMME

### June 8, 2017

8:30	Welcome Remarks	IITB Director Devang Khakhar
8:40	Welcome Remarks	WUStL Dean Aaron Bobick
8:50	Workshop Logistics	Representatives from IITB & WUStL

### Session I      Aerosol Formation, Growth and Transport

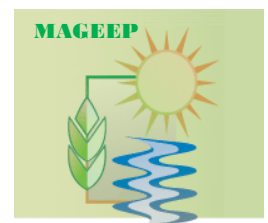
**Moderators : Pratim Biswas and Y.S. Mayya**

9:00	Pratim Biswas (WUStL)
9:15	Rajan Chakrabarty (WUStL)
9:30	Y.S. Mayya (IITB)
9:45	Jyoti Seth (IITB)
10:00	Moderated Discussion
10:30	Coffee Break

### Session II      In-situ Particle Dynamics and Measurement

**Moderators : Rajan Chakrabarty and Ratul Dasgupta**

11:00	Rochish Thaokar (IITB)
11:15	Ratul Dasgupta (IITB)
11:30	Brent Williams (WUStL)
11:45	Rajan Chakrabarty (WUStL)
12:00	Moderated Discussion
12:30	<b>Lunch</b>





### **Session III Atmospheric Aerosols and Monitoring**

**Moderators : Jay Turner and Virendra Sethi**

- 14:00 Virendra Sethi (IITB)
- 14:15 Jay Turner (WUStL)
- 14:30 Rudolph Husar (WUStL)
- 14:45 Chandra Venkataraman (IITB)
- 15:00 Harish Phuleria (IITB)
- 15:15 Moderated Discussion

### **Session IV Particle Technology and Pollution Control**

**Moderators : Partha Sarathy Goswami and Pratim Biswas**

- 15:45 Partha Sarathy Goswami (IITB)
- 16:00 P. Sunthar (IITB)
- 16:15 Richard Axelbaum (WUStL)
- 16:30 Pratim Biswas (WUStL)
- 16:45 Moderated Discussion
- 17:15 Coffee Break

### **Summary and Concluding Remarks**

- 17:30 – 18:30 All Participants: Propose potential research areas for collaborative work  
Discuss Outline of White Paper

