

Curriculum Vitae  
**VIRENDRA SETHI**  
Professor

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**Environmental Science and Engineering Department (ESED)**  
**IIT Bombay, Powai, Mumbai 400076, India**

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## ■ TEACHING AND RESEARCH INTERESTS

Air Quality and Aerosol Processes, Communication and Soft Skills

Combustion Aerosols, Hot-gas Clean-up, Satellite Remote Sensing for Air Quality, Energy and Environment, Ventilation and Indoor Air Quality

## ■ EDUCATION

1996 Ph.D.    Environmental Engineering, University of Cincinnati, Cincinnati, Ohio, USA  
1990 M.S.    Environmental Engineering, University of Cincinnati, Cincinnati, Ohio, USA  
1984 A.E.P.    Advanced Entry Programme (First Year), NID, Ahmedabad, India  
1983 B.Tech.    Chemical Engineering, IIT Bombay, Mumbai, India

## ■ PROFESSIONAL EXPERIENCE

2021-Date    Head, Centre for Urban Science and Engineering, IIT Bombay  
2007-Date    Professor, Environmental Science and Engineering Department, IIT Bombay  
2009-2012    Head, Centre for Environmental Science and Engineering (Now ESED), IITB  
2000-2007    Associate Professor, Centre for Environmental Science and Engineering, IITB  
1999-2000    Research Professor, University of Cincinnati, Cincinnati, OH, USA  
1996-1999    Adjunct Assistant Professor, University of Cincinnati, Cincinnati, OH, USA  
1994-1999    Oak Ridge Fellow, NRMRL, USEPA, Cincinnati, OH, USA  
1991-1994    Graduate Research Assistant, University of Cincinnati, Cincinnati, OH, USA  
1990-1991    Research Scientist, California State Department of Health & UC Berkeley, USA  
1988-1990    Graduate Assistant, USEPA Project, University of Cincinnati, OH, USA  
1984-1987    Production Engineer, Bombay Offshore Project, ONGC, Mumbai, India

## ■ SERVICE

- 2024 Member, Hon'ble Supreme Court Committee for Air Quality in TTZ
- 2024 Member, Teaching-Learning-Assessment Committee at IIT Bombay
- 2024 Convener, Head's Handbook Revision Committee, IIT Bombay
- 2023 Member, Hon'ble High Court Committee for Air Quality in Mumbai
- 2023 Member, Committee for Revision of Air Pollution Standards, CPCB, Delhi
- 2023 Member, Faculty Academic and Research Meet (FARM) Organizers Team, IITB
- 2021 Member, Board of Governors, (Senate Nominee), IIT Bombay (2-year Term)
- 2020 Convener, IIT Bombay Ventilation Committee for COVID Preparedness (2 Years)
- 2014 MPCB Chair Professor, IIT Bombay (3 Years)
- 2014 VMC Chairman's Nominee KV School, IIT Powai, Mumbai (3 Years)

## ■ AWARDS

- 2024 Lifetime Achievement Award, Air Quality Management Association, IIT Madras
- 2023 Excellence in Teaching Award in ESED, IIT Bombay
- 2017 Professor S.P. Sukhatme Excellence in Teaching Award, IIT Bombay
- 2014 VASVIK Industrial Research Award (Environmental Sciences and Technology)
- 2009 Excellence in Teaching Award, IIT Bombay
- 2002 Excellence in Teaching Award, IIT Bombay
- 1994 Oak Ridge Fellowship, USEPA, Cincinnati, OH, USA
- 1985 Outstanding Engineer of the Year, ONGC, Mumbai
- 1983 Institute Cultural Citation, Students' Gymkhana, IIT Bombay, Mumbai
- 1978 *Victor Ludorum*, Cambrian Hall School, Dehra Dun, India

## ■ LIST OF PROJECTS

### CONSULTANCY PROJECTS

- 2006 Development of Air Pollution Source Profiles (Central Pollution Control Board, Delhi)
- 2008 Chemical analysis of air quality sample filters (CSIR-NEERI)
- 2013 Emission Inventory and Air Quality Model Development for Industrial City Centres in Maharashtra: Framework for Air quality Management with Resources to Science based Policy and Action Plan for Chandrapur Area (MPCB)

- 2013 Development of tool for remote and on the ground environment status for Wani Industrial Region (MPCB)
- 2014 Study of Efficiency of Control Devices and Stack Smoke Visibility(RCF Ltd.)
- 2014 Development of a Conceptual Framework for Ensuring Sustainable Environment Infrastructure for Textile Park: Amravati (Nandgaon Peth) and Nandubar (MIDC)
- 2015 Air Quality monitoring and emission source apportionment studies for 10 cities (with CSIR-NEERI) (MPCB)
- 2016 Setting up of Wind Augmentation and air purifying Unit (WAYU) on Air pollution control system for traffic junctions and congested roads in Mumbai (MPCB)
- 2017 Particulate Source Apportionment Study for Air Quality in Vasco da Gama, Goa (Goa SPCB)
- 2017 Portable Testing Facility for Cookstoves (CLEAN)
- 2017 Assessment of Contribution of suitable burning in Haryana and Punjab in Air Quality if Delhi-Remote Sensing Component (Through NEERI, CPCB)
- 2019 Vetting of Scrubber Design for Air Pollution Control in a PNG based Gas Crematorium (Vicchare & Co Pvt. Ltd.)
- 2020 Air Quality Monitoring and Emission source apportionment studies and preparation of Action plans of 7 Number of non-attainment cities in Maharashtra (MPCB)
- 2021 AP Source Apportionment of Kota City (Rajasthan PCB) (IIT Jodhpur as Lead)
- 2022 Selection of technical resource expert agency to support capacity building, technical assistance and knowledge dissemination initiatives for “Clean Air Accelerator” Project, (Sustainable Communities India Pvt. Ltd.)

### **SPONSORED PROJECTS**

- 2006 Chemical Characterization of Particulate Matter for Source Apportionment (Department of Environment)
- 2007 High Temperature Gas Phase Synthesis and Characterization of Tailored Ultra Fine Powders: SERC Scheme (DST)
- 2009 Study and Optimization of DI Engine performance running on Jatropha bio-diesel blend and straight vegetable oil (SVO) (DRDO)
- 2010 MTG / Joint IIT- Environment energy and climate change education and research (Industrial Research and Consultancy Centre, IIT Bombay)

- 2010 Design and Development of Vacuum Pyrolysis Plant to Process Various Agricultural and Agro-Industrial Biomass to Demonstrate its Technical and Economic Feasibility (MNRE)
- 2012 Evaluation of Micro-gasifier cookstove performance with region specific fuels and assessment of deployment potential (IRCC)
- 2013 Newcastle and Mumbai Partnership on Sustainability and Environment Research (NAMPSER), (UKIERI)
- 2018 Clean coal utilization of Indian coals: carbon capture and pollution control (DST)
- 2025 Dust Mitigation Strategies in Shivaji Park, Mumbai (Invited) (BMC)

## ■ PATENTS

**2008**

US-20080030730-A1 Water contamination measurement apparatus  
(During Post-Doc at USEPA)

### **Patents Presently under Preparation:**

- Virus-sized particle filtration from air streams
- Automobile horn design for noise pollution control
- Thermophoretic particle removal from gas streams

## ■ REFEREED JOURNALS PUBLICATIONS

**2024**

Ranka, P., Sethi, V., and Contractor, A.Q., (2024), “Direct Imaging of Charge/Dopant Distribution in PANI/PSS Thin Films Using Advanced Frequency Modulation Electrostatic Force Microscopy”, *Langmuir*, **40** (42), 21995-22005

Saxena, A., Krishna Rao, K. V., and Sethi, V., (2024), “Assessing the Effect of Negative Externalities of Urban Transport on Travel Satisfaction for Work Trips”, *Transportation Research Record*, 0(0), <https://doi.org/10.1177/03611981241279306>

Saxena, A., Krishna Rao, K. V., and Sethi, V., (2024), “Congestion Pricing as a Travel Demand Management strategy to improve metro ridership in a Developing Economy”, *Transport Policy* (*Under Review*)

## **2019**

Parihar, A. K. S., Sethi, V. and Banerjee, R., (2019), “Sizing of biomass-based distributed hybrid powergeneration systems in India”, *Renewable Energy*, **134**, pp 1400-1422

Madav, V., Das, D., Kumar, M., Surwade, M., Parikh, P.P., and Sethi, V., (2019), “Studies for removal of tar from producer gas in small scale biomass gasifiers using biodiesel”, *Biomass and Bioenergy*, **123** pp123-133

Das, D., Bhandarkar, U.V., and Sethi, V. “Influence of the Inclusion of Ignition Stage Emissions in the Development of Emission Factors for Coal Cookstoves Used in India”, *Environmental Science & Technology* **53** (6), 3149-3156

Das, D., Dutta, S., Bhandarkar, U.V., and Sethi, V. (2019) “Assessment of carbonization of coal as a potential strategy to reduce emissions for domestic applications”, *Atmospheric Pollution Research* **10** (6), 1745-1754

Sekharan, S., Samal, D.R., Phuleria, H.C., Chandel, M.K., Gedam, S., Kumar, R., Sethi, V., Supate, A.R., and Karmakar, S. (2022) “River pollution monitoring over an industrial catchment in urban ecosystem: Challenges and proposed geospatial framework”, *Environmental Challenges*, Volume 7, 100496, ISSN 2667-0100, <https://doi.org/10.1016/j.envc.2022.100496>.

## **2018**

Ranka, P., Sethi, V., and Contractor, A. Q., (2018), “One-step electrodeposition of composite of PANI-PSS tubules with TiO<sub>2</sub> nanoparticles and application as electronic sensor device”, *Sensors and Actuators B: Chemical*, Volume 261, 15 May 2018, Pages 11-21

## **2017**

Bhusnoor, S.S., Bhandarkar, U.V., Sethi, V., Parikh, P.P., (2017) “Thermophoresis deposition studies for NaCl and diesel exhaust particulate matter under laminar flow”, *Journal of Aerosol Science*, **105**, 2017, Pages 84-93, ISSN 0021-8502, <https://doi.org/10.1016/j.jaerosci.2016.11.011>

## **2016**

Ranka, P., Sethi, V., Contractor, A.Q., (2016), “Characterizing the oxidation level of polyaniline (PANI) at the interface of PANI/TiO<sub>2</sub> nanoparticles under white light illumination”, *Thin Solid Films*, Volume **615**, Pages 44-55, ISSN 0040-6090, <https://doi.org/10.1016/j.tsf.2016.06.053>

## **2014**

Kanawade, V.P., Tripathi, S.N., Singh, D., Gautam, A.S., Srivastava, A.K., Kamra, A.K., Soni, V.K., and Sethi, V. (2014) “Observations of new particle formation at two distinct Indian subcontinental urban locations, *Atmospheric Environment*, Volume **96**, Pages 370-379, ISSN 1352-2310, <https://doi.org/10.1016/j.atmosenv.2014.08.001>

## **2013**

Patil, R.S., Kumar, R., Menon, R., Shah, M.K., and Sethi, V., (2013) “Development of particulate matter speciation profiles for major sources in six cities in India”, *Atmospheric Research*, Volumes **132-133**, October -November 2013, Pages 1-11

Panchratna, D., Sethi, V., and Mukherji, S., (2013), "Sorption of Simulated Biomass Gasification Wastewater on Rice Husk Char and Activated Carbon", *International Journal of Environmental Engineering and Management*, Volume 4, Number 5, pp. 489-496

## **2012**

Sonawane, N., Patil, R.S., and Sethi, V., (2012), "Health benefit modeling and optimization of vehicular pollution control strategies", *Atmospheric Environment*, Vol 60, pp 193-212, 2012

Dash, D.K. and Sethi, V., (2012), "Assessment of Fugitive Emissions from Aluminum Smelter Pot Rooms", *International Journal of Sustainable Development and Green Economics*, ISSN.No.2315-4721, Vol-1 Iss-1, 2012

## **2011**

S. Basak, V. Tiwari, J. Fan, S. Achilefu, V. Sethi, and P. Biswas, (2011), "Single step aerosol synthesis of nanocomposites by aerosol routes  $\gamma\text{-Fe}_2\text{O}_3/\text{SiO}_2$  and their functionalization", *Journal of Materials Research*, 26 (10), 1225-1233, 2011

Parihar, A. S., Sethi, V., Parikh, P.P., Radhakrishna, D., Hashmi, K., Gupta, A., and Dar, F., (2011) "Physical characterization of particulate emissions from compression ignition engine operating on diesel and biodiesel fuels", No. 2011-26-0026. *SAE Technical Paper*

## **2008**

Tiwari, V., Jiang, J., Sethi, V., and Biswas, P., (2008) "One-step synthesis of noble metal titanium dioxide nanocomposites in a flame aerosol reactor", *Applied Catalysis A: General* 345 (2), 241-246

## **2006**

Goyal, N., Selvakumar, N., Patil, R. S., Sethi V., (2006) Design, Development, Calibration and Field Evaluation of an indigenous PM<sub>2.5</sub> Sampler", *Current Science*, Vol 90, No.2, 151-157

S. Mehta, R.S. Patil, and V. Sethi (2006), "An Emission Model for Heterogeneous Vehicular Fleet in India", *Indian Journal of Air Pollution Control*, New Delhi, September 2006

## **2004**

Venkataraman, C., Joshi, P., Sethi, V., Ravi, M.R., and Kohli, S., (2004) "Aerosol and Carbon Monoxide Emissions from Low-Temperature Combustion in a Sawdust Packed-Bed Stove", *Aerosol Science and Technology*, 38:50-61

## **2002**

Clark, R.M., Sivaganesan, M., Selvakumar, A., and Sethi, V., (2002) "Cost Models for Water Supply Distribution Systems", *J. Water Resour. Plann. Manage.* 28:312-321

## **1998**

Clark, R.M., Adams, J.Q., Sethi, V., and Sivaganesan, M., (1998) "Control of Microbial Contaminants and Disinfection By-products for Drinking Water in the US: Cost and Performance", *J. Water Supply: Research and Technology-Aqua*, Vol. 47, No. 6, pp 255-65

Sethi, V., and Clark, R.M., (1998), "Cost Estimation Models for Drinking Water Treatment Unit Processes", *Indian Journal of Engineering & Materials Sciences*, Vol **5**, pp 223-235

### **1997**

Sethi, V., Patnaik, P., Biswas, P., Clark R.M., and Rice, E.W. (1997), "Evaluation of Optical Detection Methods for Waterborne Suspensions", *Journal of the American Water Works Association*, **89** (2): 98-112

### **1993**

Sethi, V. and John, W., (1993), "Particle Impaction Patterns from a Circular Jet", *Aerosol Science & Technology*, **18** :1-10

John, W., and Sethi, V., (1993), "Breakup of Latex Doublets by Impaction", *Aerosol Science & Technology*, **19**:57-68

John, W, and Sethi, V., (1993), "Threshold for Resuspension by Particle Impaction", *Aerosol Science & Technology*, **19** :60-79

### **1992**

Lin, W. Y., Sethi, V., and Biswas, P., (1992), "Multicomponent Aerosol Dynamics of the Pb-O<sub>2</sub> System in a Bench-Scale Flame Incinerator", *Aerosol Science & Technology*, **17**: 199-133

### **1990**

Sethi, V., and Biswas, P., (1990), "Modeling of Particle Formation and Dynamics in a Flame Incinerator", *Journal of Air & Waste Management Association*, **40**: 42-46

## **Manuscripts under Preparation**

Parihar, A.K.S., Sethi, V. and Banerjee, R., "Life cycle energy and environmental analysis of biomass gasifier and solar-based distributed power generation systems in India", (*Manuscript under Preparation*)

Parihar, A.K.S., Sethi, V. and Banerjee, R., "A system dynamics approach for social impact assessment of village electrification using renewable-based distributed power generation systems", (*Manuscript under Preparation*)

Parihar, A.K.S., Sethi, V. and Banerjee, R., "A system dynamics approach to assess the impact of distributed renewable energy (DRE) based rural electrification on village economy", (*Manuscript under Preparation*)

Parihar, A.K.S., Sethi, V. and Banerjee, R., "Sustainability assessment of small-scale biomass gasifier and hybrid distributed power generation systems in India", (*Manuscript under Preparation*)

Mehta, U., Botlaguduru, V., Bose, M. and Sethi, V., "Development of a CFD Framework for Quantification and Mitigation of Dust Resuspension from Stockpiles" (*Manuscript under*

### *Preparation)*

Mehta, U., Botlaguduru, V., Bose, M. and Sethi, V., “Influence of terrain and meteorology on the effectiveness of dust resuspension from stockpiles using windscreens in a port” (*Manuscript under Preparation*)

Mehta, U., Goyal, N., George, K.V., Motghare, V.M., and Sethi, V., “Historical trends and source apportionment study for particulate matter in Mumbai” (*Manuscript under Preparation*)

Tiwari, V., Sethi, V., Bellare, J., and Biswas, P., “One step synthesis of nanosized calcium phosphate bio-ceramics (Hydroxyapatite and bi-calcium phosphate) by spray pyrolysis”, (*Manuscript under Preparation*)

Rasma, K., Goyal, N., Gadhavi, H., and Sethi, V., “Study of Influence of Handling of Dusty Cargo on Particulate Matter Levels in a Port City” (*Manuscript under Preparation*)

Rasma, K., Menon, R., Kumar, R., Gadhavi H. and Sethi V., “Multi-Sensory Data Analyses to Assess the Potential Influence of Regional Stubble Burning on Winter Pollution Episodes in Delhi National Capital Region”, (*Manuscript under Preparation*)

Chaudhari, R., Gadhavi, H., Bell, M., Namdeo, A., and Sethi, V., “Comparison of Ground Air Pollution data with Satellite data in the UK and India” (*Manuscript under Preparation*)

Koppaka, R.H., Bhandarkar, U.V., Sethi, V., and Axelbaum, R.L., “Single Particle Combustion of Wood in a Reducing-to-Oxidising Gas Environment" (*Manuscript under Preparation*)

Naik, G., Singh, R., Hate, S., More, P., and Sethi, V., “Studies for comparison of PSD and elemental compositions of PM emissions for Indian and Imported coal”, (*Manuscript under Preparation*)

Naik, G., Singh, R., Hate, S., More, P., and Sethi, V., “Studies on Ash Resistivity for Coals used in Indian Power Plants”, (*Manuscript under Preparation*)

Bhusnoor, S.S., Naik, G, and Sethi, V., “Simulation of time-temperature history to study the removal of volatile metal species in coal power plants” (*Manuscript under Preparation*)

Arigela, R., Kannan, S., Jejurkar, R., Sethi, V., Sinha, K.S., Balasubramanian, S., “Assessment of ventilation metrics and infection probability under multiple ventilation and occupancy conditions in a typical classroom in India” (*Manuscript under Preparation*)

## **■ CONTRIBUTIONS TO HANDBOOKS**

- Member, Standard Methods Committee and Joint Task Group, Standard Methods for Examination of Water and Wastewater, APHA, 20<sup>th</sup> Edition (1998)
- Co-author, Chapter on Drinking Water in Handbook of Environmental Engineering, Ed. Robert Corbitt, McGraw Hill, 1999



## ■ CONFERENCE PRESENTATIONS

### 2024

Mehta, U., Botlaguduru, V., Bose, M. and Sethi, V., (2024). Studies on Dust Resuspension from Free Fall of Bulk Materials using a Mechanistic Approach. IASTA 2024, 17-20 December 2024, Doon University. Dehradun, India

Mehta, U., Botlaguduru, V., Bose, M. and Sethi, V., (2024). Bench-Scale Study for Control of Dust Resuspension from Playgrounds and Material Stockpiles using Dust Suppressants IICAQM 2024, 17-20 December 2024, IIT Madras, Chennai, India

Mehta, U., Botlaguduru, V., Bose, M. and Sethi, V., (2024). Experimental and field studies to control resuspension of dust from roads, open grounds, and material handling. India Clean Air Summit (ICAS) 2024. 26-30 Aug, 2024. Bengaluru, India

Mehta, U., Botlaguduru, V., Bose, M. and Sethi, V., (2024). Evaluation of efficiency of windbreaks to control resuspension of dust from stockpiles. 4th National Environment Conference (NEC-2024), 15-17 Feb, 2024. IIT Bombay, India

Srinidhi Balasubramanian, Ravinder Arigela, Sathish Kannan, Pranjal Jejurkar, Virendra Sethi, and Krishnendu Sinha, "Establishing Infection Risk from Airborne Diseases in Classrooms through Real-Time CO2 Monitoring", Poster ID: 24IA01013, IASTA 2024, Dehra Dun

Saxena, A., Krishna Rao, K. V., and Sethi, V. Analyzing the Impact of Metro System and Congestion Pricing on Mode Choice for Work Trip: A Latent Class Random Parameter Model with Classical and Bayesian Estimation Procedure, International Conference on Advanced Systems in Public Transport and Transit Data 2025, July 1-4, 2025, Kyoto, Japan  
(*Under Review*)

### 2023

Mehta, U., Botlaguduru, V., Bose, M. and Sethi, V., (2023) Study of the influence of wind conditions on resuspension and dispersion of fugitive dust from stockpiles. Proceedings of 8th Indian International Conference on Air Quality Management (IICAQM 2023), 4th – 8th Dec 2023. Indian Institute of Science, Bengaluru, India

Mehta, U., Botlaguduru, V., Bose, M. and Sethi, V., (2023) Studies for Mitigation Measures for Dust Resuspension from Stockpiles. Proceedings of the 9th World Congress on New Technologies (NewTech'23) Brunel University, London, United Kingdom - August 09-11, 2023 Paper No. ICEPR 123 DOI: 10.11159/icepr23.123

### 2022

Mehta, U., Goyal, N., and Sethi, V., (2022) Source Apportionment Studies in Mumbai: Historical Pattern of Particulate Matter Pollution Sources. Proceedings of International Conference on Environmental Science and Engineering. IIT Bombay, Mumbai, India Jan 20–22, 2022

## **2021**

Mehta, U.; K. Rasma, Botlaguduru, V., Bose M., & Sethi., V (2021). CFD Studies on Potential Mitigation Measures for Particulate Pollutants from Stockpiles of Dusty Cargo, A&WMA Conference on Freight & Environment: Ports of Entry, Oakland, CA (Accepted)

Rasma, K., Mehta U. and Sethi., V (2021) Studies for Influence of Dusty Cargo Handling on Air Pollution in a Port City in India, A&WMA Conference on Freight & Environment: Ports of Entry, Oakland, CA (Accepted)

## **2019**

Rasma K., Ratish Menon, Harish Gadhavi, and Virendra Sethi, Assessment of AOD Product from INSAT-3D Imager Paper # 594255, AWMA Annual Conference, Quebec, June 25-28, 2019

Rasma K., Ratish Menon, Harish Gadhavi, Virendra Sethi, and Rakesh Kumar, Study of the Extent of Contribution of Regional Stubble Burning to the Air Pollution in Delhi-National Capital Region Paper# 594032, AWMA Annual Conference, Quebec

## **2018**

Rasma K., Harish Gadhavi and Virendra Sethi, 'Investigations on the AOD datasets from INSAT 3D Imager Impact of Geographical Area and Seasonal Variation on the Quality of AOD Retrieval', Poster Presentation at Workshop on Introduction to Earth Observation Techniques: Application to the Land and Atmosphere' held at IIT Kanpur, March 26-28, 2018

## **2016**

D. Das, S. Kedare, U. Bhandarkar, V. Sethi, Development of Emission Factors for Coal Cook Stoves Used in India, AGU Fall Meeting, (2016), San Francisco

Parihar, A.K.S., Virendra Sethi, Rangan Banerjee (2016). Sustainability Assessment of Biomass Gasification Based Distributed Power Generation in India. In: Kumar, S., Khanal, S., Yadav, Y. (eds) Proceedings of the First International Conference on Recent Advances in Bioenergy Research. Springer Proceedings in Energy. Springer, New Delhi.  
[https://doi.org/10.1007/978-81-322-2773-1\\_16](https://doi.org/10.1007/978-81-322-2773-1_16)

## **2014**

Chaudhari, R.H., Menon, R., Kumar, R., and Sethi, V., Air Quality Monitoring at Regional and Local Scales in India with Satellite Observations of Columnar Aerosol Optical Thickness and Tropospheric NO<sub>2</sub> Density, 5<sup>th</sup> GEOBIA, Held during 21-23 May 2014, Thessaloniki, Greece

Bojjagani, S., R. H. Chaudhari, R. Menon, V.M. Motghare, R.S. Patil, R. Kumar, V. Sethi, "Development of approaches for air quality management in coal mining areas", International Symposium on Environmental Management and Current Practices in Mining and Allied Industries (EMPM-2014), BHU Indian Institute of Technology, Varanasi. held on February 13-15, 2014

## **2013**

Bhusnoor, S.S., Bhandarkar, U.V., and Sethi, V., "Study of Thermophoretic Deposition of Engine Emissions in a Pipe flow", 24th International Symposium on Transport Phenomena, Tokyo University of Science, Japan held on November 1-5, 2013

Menon, R., Husar, R. B., Sethi, V., and Westphal, D. L., Dust pattern over Indian subcontinent based on NAAPS model, satellite and surface observations, American Geophysical Union, Fall Meeting 2013, abstract #A41G-0162

## **2012**

Vasudev M., Bhusnoor S. S., Bhandarkar U.V. and Sethi, V., "Hot gas clean up studies in small scale low temperature down-draft gasifier", 5th International Freiberg conference on IGCC and XIL Technologies held on May 21-24, 2012

Ratish Menon, Rudolf B. Husar and Virendra Sethi, An iterative fitting algorithm for matching aerosol size distributions to spectral extinction data, Aerosol and Atmospheric Optics: Visibility and Air Pollution Specialty Conference, Whitefish, Montana, USA 25-28 September 2012

Ruchi Sharma, Nitin M. Deodhar, Rashmi S. Patil, Virendra Sethi, "Ventilation Design for Indoor Air Quality Management as per Indian Climatic Conditions", 10th International Healthy Buildings Conference 2012, Brisbane held during July 8-12, 2012

Husar, R. B., Hoijarvi, K., Westphal, D. L., Scheffe, R., Keating, T., Frank, N., Poirot, R., DuBois, D. W., Bleiweiss, M. P., Eberhard, W. L., Menon, R., Sethi, V., Deshpande, A., "Applications of Satellite Observations to Aerosol Analyses and Forecasting using the NAAPS Model and the DataFed Distributed Data System" American Geophysical Union, Fall Meeting 2012, Abstract id. A14B-05

## **2010**

R Menon, V Tiwari, AQ Contractor, V Sethi, P Biswas, "Development of metal-oxide/polymer nano-composite sensors for detection of gas pollutants", International Conference on Environment and Health held on March 15-17, 2010

## **2009**

V. Tiwari, and V. Sethi, P. Biswas, "One Step Flame Synthesis of TiO<sub>2</sub>/CeO<sub>2</sub> Nanocomposite with Controlled Properties for VOC Photooxidation" International Perspectives on Environmental Nanotechnology Applications and Implications Conference Proceedings Volume 1 - Applications October 7-9, 2008 Chicago, Illinois, Superfund Division EPA 905R09032 November 2009

## **2007**

S. Basak, V. Tiwari, V. Sethi, P. Biswas, "One Step Aerosol Route Synthesis of Silica Coated  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> Nanoparticles for Biomedical Applications" Proc. 5th Asian Aerosol Conference, Kaohsiung, Taiwan, August 26-29, 2007

S Basak, V Tiwari, J Fan, S Achilefu, V Sethi, P. Biswas., Aerosol Route Synthesis of Core-Shell  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub> Nanocomposite Functionalized with Cypate-II for Biomedical Applications", 2<sup>nd</sup> Annual Nanotechnology and the Life Sciences Symposium, USA

## **2006**

Athalye V., Patil R.S., Sethi V., "Modelling and Mapping of Air Pollution Health Benefits for an Urban Region", All India Seminar on Air Pollution and Health Impacts, IIT Roorkee held on February 1, 2006 [*Best Paper Award*]

## **2005**

Goyal, N., Rakesh Kumar, R., Patil. R. S., and Sethi. V., "Mass Distributions and Size-resolved Chemical Composition of ambient Aerosols at a Commercial Location in Mumbai, India", Asian Aerosol Conference, Mumbai held on December 13, 2005

Keoti. R. S., Parikh. P. P., and Sethi. V., "Effect on Fuel injection Rates and Fuel Viscosities on Droplet Sizes in Diesel Engine Injection Sprays", Asian Aerosol Conference, Mumbai held on December 13, 2005

Selvakumar. N, Parikh. P. P., and Sethi. V., "Particle Size Distributions in Producer gas from Thermochemical biomass Gasifiers ", European Aerosol Conference 2005, Ghent, Belgium held on August 28, 2005

Selvakumar. N, Parikh. P. P., and Sethi. V., "Field experiments for measurement of particle size distributions in producer gas generated from biomass gasifiers used for electric power generation ", Asian Aerosol Conference, Mumbai held on December 13-16, 2005

Selvakumar N, Chaudhary, A.K., Vinay Tiwari, and Sethi, V. (2005), "Modelling of particle growth and tar vapors removal in the design of cooling-biomass waste, Presented at the Asian Aerosol Conference, Mumbai, December 13-16, 2005

Namjoshi, A., Selvakumar, N., and Sethi, V. (2005), "Performance evaluation of an electrostatic Precipitator in the sub-micrometer particle size range for a captive power plant", Presented at the Asian Aerosol Conference, Mumbai, December 13-16, 2005

Patil R.S., Sethi V., Mehta S., "Modeling impact of vehicular emission management strategies on air quality", Atmospheric Sciences and Air Quality Conferences, 19 April 2005

## **2004**

Chaudhary, A.K. and Sethi, V., "Effect of Nucleation, Condensation and Coagulation on Particle Size Distributions in IC Engine Tailpipes, IIT Bombay National Conference on Advances in Environmental Science and Engineering, December 8-9, 2004, Mumbai

Chaudhary, A.K., Parikh, P.P., and Sethi, V., "Implications of Aerosol Dynamics with Varying Time-Temperature history on the positioning of Particulate Control Devices in IC Engine Tailpipes", Technical Paper, Proceedings of International Conference on Aerosols, Clouds and Indian Monsoon, organized by IASTA, IIT-Kanpur, November 15-17, 2004

Goyal, N., Selvakumar, N., Parikh, P.P., and Sethi, V., "Comparison of Performance of Sampling Devices: MOUDI and Single Stage Impactor for PM<sub>2.5</sub> in Producer Gas from Thermal Biomass Gasifiers", Technical Paper, Proceedings of International Conference on Aerosols, Clouds and Indian Monsoon, organized by IASTA, IIT-Kanpur, November 15-17, 2004

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