

Dr. Saifi Izhar

Contact Information	Assistant Professor Department of Environmental Science and Engineering Indian Institute of Technology (Indian School of Mines) Dhanbad Dhanbad, 826004, Jharkhand, India Mobile No: +91-9935679065 Email: saifi@iitism.ac.in , saifiizhar5@gmail.com
Research Interests	Air Quality and its chemical and optical characterisation (BC and BrC) Source apportionment using statistical approach Atmospheric Processing of aerosols during episodic event like Fog-aerosol interactions Application of Low-cost sensors Personal exposure and Deposition modelling Aerosol effects on health
Education	Indian Institute of Technology Kanpur , Kanpur, India <i>Department of Civil Engineering</i> PhD, July 2016 - June 2021 <ul style="list-style-type: none">• Thesis Title: Aerosol-fog interaction in the rural Indo Gangetic Plain during winter time• Supervisors: Prof. Tarun Gupta and Dr. Arnico K. Panday• CPI: 8.0 Indian Institute of Technology Kanpur , Kanpur, India <i>Department of Environment Engineering & Management</i> MTech, July 2014 - June 2016) <ul style="list-style-type: none">• Thesis Title: Health risk assessment of submicron particle (PM1) and Evaluation of particle dose deposition in human lungs under varying microenvironments at IIT Kanpur• Supervisor: Prof. Anubha Goel• CPI: 7.75 Aligarh Muslim University , Aligarh, India <i>Department of Civil Engineering</i> BTech, July 2010 - June 2014) <ul style="list-style-type: none">• CPI: 9.25
Academic Achievements	International Travel Support fellowship by SERB, India 2019 Best Poster award in AGU JING meeting (AJM2018) held in Xian, China International Travel Support grant by IIT Kanpur 2018 ICIMOD 1-year PhD Fellowship 2017 PhD Scholarship from Ministry of Education for 5 years MTech. Scholarship from Ministry of Education for 2 years All India GATE rank 815 in Civil engineering 2014 Merit cum means scholarship 2013

**Research
Experience**

International Centre for Integrated Mountain Development (ICIMOD),
Kathmandu, Nepal, Atmospheric Division
Research Assistant, July 2017-June 2018
Supervisor: Dr. Arnico K. Panday

**Professional
Experience**

Indian Institute of Technology (ISM) Dhanbad, Jharkhand, India
Assistant Professor, Department of Environmental Science and Engineering
Aug 2021- Present

World Research Institute (WRI), Washington, U.S.A
Post-Doctoral Consultant, Clean Air Catalyst Project
Apr 2021- Aug 2021

Publications

Izhar, Saifi, Tarun Gupta, Adnan Mateen Qadri, and Arnico K. Panday. "Wintertime chemical characteristics of aerosol and their role in light extinction during clear and polluted days in rural Indo Gangetic plain." *Environmental Pollution* 282 (2021): 117034

Izhar, Saifi, Tarun Gupta, and Arnico K. Panday. "Improved method to apportion optical absorption by black and brown carbon under the influence of haze and fog at Lumbini, Nepal, on the Indo-Gangetic Plains." *Environmental Pollution* 263 (2020): 114640

Izhar, Saifi, Tarun Gupta, and Arnico K. Panday. "Scavenging efficiency of water soluble inorganic and organic aerosols by fog droplets in the Indo Gangetic Plain." *Atmospheric Research* 235 (2020): 104767

Izhar, Saifi, Tarun Gupta, Aliva P. Minz, Shantibhusan Senapati, and Arnico K. Panday. "Influence of regional and long range transport air masses on fog water composition, contribution and toxicological response at Indo Gangetic Plain." *Atmospheric Environment* (2019): 116888

Rajput, Prashant, **Saifi Izhar,** and Tarun Gupta. "Deposition modeling of ambient aerosols in human respiratory system: Health implication of fine particles penetration into pulmonary region." *Atmospheric Pollution Research* 10, no. 1 (2019): 334-343

Izhar, Saifi, Prashant Rajput, and Tarun Gupta. "Variation of particle number and mass concentration and associated mass deposition during Diwali festival." *Urban climate* 24 (2018): 1027-1036

Goel, Anubha, **Saifi Izhar,** and Tarun Gupta. "Study of environmental particle levels, its effects on lung deposition and relationship with human behaviour." In *Environmental Contaminants*, pp. 77-91. Springer, Singapore, 2018

Izhar, Saifi, Anubha Goel, Abhishek Chakraborty, and Tarun Gupta. "Annual trends in occurrence of submicron particles in ambient air and health risk posed by particle bound metals." *Chemosphere* 146 (2016): 582-590

Goel, Anubha, Pinki Bhandari, **Saifi Izhar**, Chhavi Sharma, P K Patanjali. "Effect of Spray Particle Size Distribution on Deposition in Human Respiratory Tract – Safety Evaluation." Journal of Scientific and Industrial Research 79 (2020)

Conferences

Izhar, Saifi, Tarun Gupta, and Arnico K. Panday (2019) "Impact of Visibility on Light Absorption by Atmospheric Aerosol Brown Carbon". EAC2019 (Gothenburg, Sweden) (Oral).

Izhar, Saifi, Tarun Gupta, and Arnico K. Panday (2018) "Understanding persistent winter fog impact on aerosol chemistry by evaluating day and night time particulate matter and their chemical species concentration at UNESCO World Heritage site Lumbini, Nepal" in AGU JING (Joint International Network in Geoscience) (AJM2018) (Xian, China) (Poster).

Izhar, Saifi, Tarun Gupta, and Arnico K. Panday (2018) "Impacts of air masses on fog water chemical composition and contribution in the Indo Gangetic Plain". Conference of Indian Aerosol Science & Technology Association-2018, (IIT Delhi) (Poster).

Izhar, Saifi, Tarun Gupta, and Arnico K. Panday (2018) "Fog scavenging of aerosol particles in the foothills of Himalayas". International Conference on Atmospheric Chemistry and Physics in Highly Polluted Environments, CIAAS 2019, (IIT Delhi) (Oral).

Izhar, Saifi, Siva Praveen Puppala, Maheswar Rupakheti, August Andersson, Örjan Gustafsson, Sujana Shrestha, Arnico K. Panday (2017) "Understanding the volatile compounds influence on absorbing properties of aerosol in the Kathmandu Valley". International workshop and science policy dialogue on Air Pollution, Climate and Health in Southern Asia and Hind Kush Himalaya-2017 (ICIMOD, Kathmandu) (Poster).