

Opening Panel: Discuss the current situation and perspectives; ask what is the common future we want; create a vision that brings all groups together

Moderator: Dr. Pratima Singh, CSTEP

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Dr. Pratima Singh is a Research Scientist and leads the Air Pollution domain at CSTEP. She holds a Ph.D. in Natural Resources (Energy and Environment) from TERI University, New Delhi. She completed her M.Sc. (Tech) in Geotechnology from Maharaja Sayajirao University (Vadodara), and B.Sc. in Chemistry from South Gujarat University. Pratima previously worked as a Resource Scientist with Compusense Automation (Ahmedabad) and as Project Manager with Gujarat Council of Science and Technology (GUJCOST). She received the Senior Research Fellowship from the Ministry of New and Renewable Energy (MNRE) for her doctoral research and is an honorary Senior Research Fellow at the University of Birmingham, U.K. Her research areas include air pollution studies, source apportionment, emission inventory, measurement and monitoring of air pollution sources, renewable energy (solar PV), sustainable development policies, and the energy-water-carbon nexus of water and wastewater infrastructure.

Dr. Zoe Chafe, C40 Cities

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Zoë Chafe is Technical Lead for Air Quality at C40. In this role, Zoë provides technical guidance on air quality across C40 and its 97 member cities. She leads C40's program on the integration of air quality, climate change, and health (CAP-AQ), manages urban air quality health impact analyses, and advises C40's African Cities for Clean Air initiative. Previously, Zoë served as a chapter scientist for the IPCC, a lead author of the Global Energy Assessment, and a consultant for the World Health Organization on the air quality and health impacts of home heating with wood and coal. She began her environmental health career with the Worldwatch Institute in Washington, DC.

Zoë holds a PhD (Energy and Resources) and MPH from UC Berkeley, as well as a bachelor's degree from Stanford University. She is a recipient of the National Science Foundation Graduate Research Fellowship and the Atkinson Postdoctoral Fellowship in Sustainability at Cornell University.

Mrs. Bhavreen Kandhari, Warrior Moms

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Ms Bhavreen Kandhari is a citizen/concerned parent working towards clean air for over two decades, spearheading several public movements in Delhi and India generally that bring desperate attention and call for action on environmental justice issues. She has facilitated the rise and management of social movement campaigns like the #MyRightToBreathe, #DelhiTreesSOS and recently #WarriorMoms with mothers joining hands all over the country to bring back Clean Air.

Mr. Vasu Kilaru, US EPA

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Vasu Kilaru is a Physical Scientist in EPA's Office of Research and Development (ORD) and has been working in Air sensors for the last 11 years. His current interest is in data and metadata standards, ontologies, and knowledge representation technologies to enable data level interoperability and adherence to FAIR principles.

Session 1A: Data Modeling & Analytics

Moderator: Dr Saumya Singh, UC Berkeley

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Dr. Saumya Singh is currently working as postdoctoral researcher at the University of California, Berkeley, USA. She is leading multiple efforts towards augmenting India's air quality monitoring network using low-cost sensors. She holds a Ph.D. in Environmental Sciences from the Jawaharlal Nehru University, Delhi. Her research focuses on understanding the sources and processes that drive rural and urban air pollution in India.

Dr. Priyanka deSouza, University of Colorado, Denver

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Priyanka deSouza is an assistant professor at the Department of Urban and Regional Planning at the University of Colorado Denver. She has a PhD in Urban Studies and Planning from MIT, an MSc in Environmental Change and Management and an MBA from the University of Oxford where she studied as a Rhodes Scholar, and a Bachelor and Master of Technology in Energy Engineering from the Indian Institute of Technology Bombay. Priyanka has also served as a consultant for UN Environment and the WHO.

Mr. Sean Khan, UNEP

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Sean Khan is the Global Environment Monitoring System Program Manager at the UN Environment

Mr. Zeel Patel, IIT Gandhinagar

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I am a PhD student at IIT Gandhinagar advised by Prof. Nipun Batra. My research area of interest is Gaussian processes and their applications to air quality inference and active station deployment.

Session 1B: Choosing & evaluating a Sensor; co-location & calibration

Moderator: Mr. Ankit Bhargava, Sensing Local

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Ankit is an architect and urban planner with 8 years of experience in projects in relating to spatial planning, urban governance, system design, and architecture. His core interest is understanding how do we disrupt the trajectory of development of Indian cities that is set up in a way to invariably perpetuate environmental exploitation and stresses that deepen social and economic inequalities and hinder chances of increasing quality of life for all. He is also deeply interested in using systems thinking and participatory processes to unpack complex problems and shape new perspectives to drive systemic change. He has completed his Masters in Urbanism from TU Delft, Netherlands.

Dr. Sreekanth Vakacherla, CSTEP

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Dr Sreekanth Vakacherla is a Senior Research Scientist at CSTEP. He completed his PhD and MSc from the Department of Physics, Andhra University. He previously worked with the University of Washington as a Project Manager, IIT Bombay as a Post-Doctoral Fellow, CMR Institute of Technology as an Assistant Professor, and Vikram Sarabhai Space Centre-ISRO as a Scientist. His areas of interest include air quality and atmospheric aerosol monitoring, aerosol remote sensing, and aerosol instrumentation.

Ms. Meenakshi Kushwaha, ILK Labs

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Meenakshi Kushwaha is an air quality and environmental health consultant based in Taiwan. She co-founded ILK Labs in 2017, a women-owned research and education consulting organization. She has worked on both stationary and mobile air quality monitoring projects for more than 5 years and her work on pollution inequities has been featured in The New York Times. Meenakshi graduated with an MPH (Environmental and Occupational Health) from University of Washington, Seattle.

Mr. Vasudev Malyan, Indian Institute of Technology Bombay

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I am a doctoral student working at the Aerosol and Nanoparticle Technology Laboratory, Environmental Science and Engineering Department, Indian Institute of Technology Bombay, Mumbai, India. I have completed my Master of Science degree in Environmental Science and Engineering from Environmental Science and Engineering Department, Indian Institute of Technology Bombay. The key areas of my research work are development and calibration of low-cost sensors.

Session 2A: Data Assimilation, Sharing & Harmonization

Moderator: Dr. Tanushree Ganguly, CEEW

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Tanushree is an air quality researcher who is working on developing a data-driven approach towards clean air policy making in India. At The Council, her work focuses on assessing the potential of alternative methods of monitoring air quality and understanding and addressing the current regulatory hurdles in effective implementation of clean air policies.

Prior to joining The Council, she worked with the Centre for Science and Environment where she helped develop clean air action plans for the non-attainment cities of Andhra Pradesh. During her brief professional stint as an air quality consultant for an environmental consulting firm in California, she estimated the potential health risk stemming from construction and operation of over 20 proposed land use development projects.

Tanushree has a Masters in Environmental Engineering from Georgia Institute of Technology and is a certified Engineer-in-training under California law.

Mr. Vasu Kilaru, US EPA

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Vasu Kilaru is a Physical Scientist in EPA's Office of Research and Development (ORD) and has been working in Air sensors for the last 11 years. His current interest is in data and metadata standards, ontologies, and knowledge representation technologies to enable data level interoperability and adherence to FAIR principles.

Mr. Ayyan Karmakar, Oizom

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Ayyan Karmakar is an experienced professional in the field of environmental technologies. With an experience of around 10 years, he has developed solutions with novel technologies for the benefit of the environment. He is also an ISO14001 EMS lead auditor and improves environmental management systems for organizations. Currently, Ayyan is involved with Oizom in promoting IoT driven Smart & Affordable air quality monitors to almost 50 countries across the globe.

Ms. Swagata Dey, Environmental Defense Fund

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Swagata is a Delhi based researcher working on air quality management, emission inventory and sensors. She leads the Hyperlocal Hotspot Identification work for EDF in India. Previously, she was the Deputy Program Manager at Centre for Science and Environment, & was involved in developing Clean Air Action Plans for cities under NCAP along with ways to reduce on-road emissions. She holds a research-based MS from The Ohio State University, and an MSc in Environment Sciences from TERI University

Session 2B: Network Design & Operations

Moderator: Ms. Devaja Shah, Google

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Devaja Shah is a Program Manager at Google. She manages the Geo for Good - India program for the Earth Outreach team. She works closely with external partners in the development sector to use Google's mapping technology for Good.

Dr. Saumya Singh, UC Berkeley

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Dr. Saumya Singh is currently working as postdoctoral researcher at the University of California, Berkeley, USA. She is leading multiple efforts towards augmenting India's air quality monitoring network using low-cost sensors. She holds a Ph.D. in Environmental Sciences from the Jawaharlal Nehru University, Delhi. Her research focuses on understanding the sources and processes that drive rural and urban air pollution in India.

Mr. Ronak Sutaria, Respirer Living Sciences

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Ronak Sutaria is the Founder and CEO of Mumbai-based start-up Respirer Living Sciences. In December 2015, Ronak was amongst the earliest technology researchers to build and deploy the first ever low-cost air quality sensor network across the country. Ronak collaborated with India's foremost research organizations including IIT Kanpur and Microsoft Research India in an effort to bring unparalleled scientific rigor to his work.

Prof. S.N. Tripathi, IIT-Kanpur

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Sachchida Nand Tripathi is Professor of Civil Engineering at IIT-Kanpur. His research focuses on air quality, climate change. Prof Tripathi is National Coordinator, National Knowledge Network, National Clean Air Program and a member of Steering Committee of NCAP.

Session 3: Performance Targets & Sensor Calibration; regulation; sharing data

Moderator Ms. Namita Gupta, Airveda

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Namita Gupta is the Founder of Airveda, an air quality monitoring startup with a mission to help people breathe well and live well. Prior to founding Airveda, Namita was the Chief Product Officer at Zomato where she led product development. Before Namita's return to India, she spent 13 years in the US, 6 at Facebook in Silicon Valley, and 7 years at Microsoft. Namita has a Bachelors and Masters in Technology from the Indian Institute of Technology, Delhi.

Dr. R. Subramanian, QEERI

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R Subramanian is a Senior Scientist at the Environment and Sustainability Center (ESC) of the Qatar Environment & Energy Research Institute (QEERI), where he leads QEERI's research on sensors for air quality and climate. He is also a research fellow at the Kigali Collaborative Research Centre (Kigali, Rwanda), a visiting researcher at OSU-Efluve/CNRS (Creteil, France), and an adjunct faculty member in the Department of Mechanical Engineering at Carnegie Mellon University (Pittsburgh, PA, USA).

Mr. Adeel Khan, Council on Energy Environment and Water (CEEW)

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Adeel is a researcher in the air quality team at CEEW. His work at the council revolved around analyzing data from monitoring stations, satellite retrievals, and model outputs, to recommend policy-making decisions. His research interests lie around data analysis and sustainable resource management. He holds a master's degree in environmental science and resource management from TERI School of Advanced Studies and a bachelor's degree in chemistry from St Stephen's college, Delhi.

Session 4: Real World Sensor Applications

Moderated by: Dr. Pratima Singh, CSTEP

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Dr. Pratima Singh is a Research Scientist and leads the Air Pollution domain at CSTEP. She holds a Ph.D. in Natural Resources (Energy and Environment) from TERI University, New Delhi. She completed her M.Sc. (Tech) in Geotechnology from Maharaja Sayajirao University (Vadodara), and B.Sc. in Chemistry from South Gujarat University. Pratima previously worked as a Resource Scientist with Compusense Automation (Ahmedabad) and as Project Manager with Gujarat Council of Science and Technology (GUJCOST). She received the Senior Research Fellowship from the Ministry of New and Renewable Energy (MNRE) for her doctoral research and is an honorary Senior Research Fellow at the University of Birmingham, U.K. Her research areas include air pollution studies, source apportionment, emission inventory, measurement and monitoring of air pollution sources, renewable energy (solar PV), sustainable development policies, and the energy-water-carbon nexus of water and wastewater infrastructure.

Dr Naveen Puttaswamy, Sri Ramachandra University, Chennai

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Naveen Puttaswamy works as Assistant Professor in the Faculty of Public Health at Sri Ramachandra University, Chennai. He has over 8 years of experience working on household air pollution, exposure assessment and biomonitoring approaches in 5 mother-child cohorts across the country. His research aims at applying novel exposure assessment techniques, biomonitoring approaches and the use of affordable sensing technologies for long-term monitoring of exposures to particulate matter.

Dr. Damodar Bachani, John Snow India Private Limited, New Delhi

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Former Deputy Commissioner in the Ministry of Health and Family Welfare, Government of India (2013-17) and focal point for Air Pollution and Health Effects Presently working as Deputy Project Director for USAID funded Building Healthy Cities Project (2017-22) implemented in 4 Asian Cities including Indore. The Project addressed social determinants of health. We installed 20 low-cost sensors and engaged clean air guides to identify sources of air pollution and take measures to control it.

Ms. Everlyn Gayle Tamayo, Clean Air Asia

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Everlyn Tamayo is Clean Air Asia's Air Quality Specialist and has 8 years of combined experience in air pollution monitoring, emissions inventory, health impact assessment, and use of data analysis and capacity building to inform policy development towards improved air quality. Everlyn plays a key role in the development, implementation and review of air quality activities and projects of Clean Air Asia by providing technical guidance in current and emerging air quality issues in the region.

Closing Panel: How to create consensus and move towards standardization to influence improved air quality

Moderator: Dr. Vignesh Prabhu, CSTEP

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Dr Vignesh Prabhu S is Senior Associate in the Air Pollution team at CSTEP. He has a Master's in Environmental Management from Forest Research Institute, Dehradun and a Bachelor's in Industrial Biotechnology from Government College of Technology, Coimbatore. He received his PhD in Environmental Science from Doon University, Dehradun. Prior to joining CSTEP, he

worked as a Lecturer at Baba Farid Institute of Technology, Dehradun. His areas of interest include air pollution monitoring, source apportionment, chemical characterisation, exposure assessment, and data analysis.

Mr Avijit Michael, Jhatkaa

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Avijit Michael has worked at the intersection of campaigning and digital technology for the past decade. He currently leads Jhatkaa.org, with a mission to build the tools that will enable citizen engagement in democracy and increase government accountability.

He worked with the team at Greenpeace that pioneered online petitions and digital mobilisation in India. At Change.org as Country Director to set up their India operations and at a Global level where he built strategy for user engagement.

Mr. Chetan Bhattachaj, NDTV

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Dr. Sarita Ahlawat, IIT Delhi

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Dr Sarita Ahlawat is the head of Living Science Group, a science communication platform that she started with the help of research scholar at IIT D and ICGEB/, New Delhi in 2014, and is also the founding director of Phase Laboratories Pvt. Ltd. In January 2019 she also co-founded Aerogram Pvt. Ltd. a start-up for building personal and network air pollution monitoring devices. From February 2013 to December 2013, she was a research associate at the Malaria Group in ICGEB, New Delhi.

Prior to that from March 2010 to August 2012 she was a post-doctoral scholar at the Wadsworth Centre, Department of Health, Albany, NY. Sarita holds a PhD from the University of Illinois at Chicago in Microbiology (2010) and MS from University of Rochester, New York (2004). Her interests lie in developing smart and sensitive diagnostic tools, science communication, and building of monitoring devices that can help in pollution management.

Ms. Farah Kazi, Respirer Living Sciences

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A former Biotechnologist and Data Visualiser, Farah has 7 years of experience in communications. Presently, she works at Respirer Living Sciences as a Strategic and Technical Communications Consultant. As an OpenAQ Ambassador (2021 cohort), she communicated the importance of open AQ data and conducted sessions within communities on how to use it. She

was previously the Director of Campaigns at Waatavaran where she led Waatavaran Mitr - A Clean Air Fellowship Program