

AIPSC 17: About the speakers:

A. Anil Kumar is a general and laproscopic surgeon, practising in Bagepalli in Chikkaballapur district of Karnataka, since 2010. Both his parents are physicians, who had decided to serve in an underdeveloped rural area like Bagepalli, father being a surgeon in the department of health, Government of Karnataka. This family of doctors, which now also includes Dr. Anil's wife who is a doctor, divide their time between Bagepalli and Chintamani taluks of Karnataka. At the time of the COVID waves, Dr. Anil Kumar launched, with peoples' participation, a "Citizens' Social Consolidation" initiative in Bagepalli, Gudibanda taluks of his district. This initiative is now directed at building people's co-operatives in health sector.

Aniket Sule is Associate Professor at Homi Bhabha Centre for Science Education (HBCSE-TIFR), Mumbai. He is general secretary of International Olympiad on Astronomy and Astrophysics (IOAA). He is also Chair of Public Outreach and Education Committee of Astronomical Society of India (ASI-POEC). He has edited multiple books on astronomical problems as well as on History of Astronomy in India.

Anshuman Das has significant experience in designing and offering/conducting/coordinating Programs and Courses. He teaches agroecology in University of Calcutta and part of many initiatives being undertaken on Agro-ecological approaches in India. He is director Welthungerhilfe, Kolkata, West Bengal.

Antarin Chakrabarty is with the Centre for Policy Research and is State Team Lead in the JAGA (Liveable Habitat) Mission of the Government of Odisha. Earlier, he was an adviser to the Odisha state government in planning and execution of Odisha urban planning and land rights initiative. During his M.Sc. and Ph.D. from the Norwegian University of Science and Technology, Antarin did extensive field work in Kolkata and Nepal and later taught at the Mekelle University, Mekelle, Ethiopia, where he also studied the Ethiopian affordable urban housing programme. A promoter of free software, Dr. Chakrabarty combines GIS open source spatial data with local field work and people's participatory initiatives.

M.C. Arunan is known for his Collaborative Undergraduate Biology Education (CUBE) project. He is currently a CUBE-CURE Kishore Bharati Fellow, Kishore Bharati, Mumbai. He was a former full-time Consultant and Visiting Scientist at Homi Bhabha Center for Science Education, TIFR. Earlier he was Head, Department of Life Sciences, Sophia College for Women, Mumbai. He was also a visiting Professor at BVI-BITS. His areas of interest include Biological Plasticities: Biological basis of Learning; regeneration; epigenetics; Developing Model Systems for Teaching-Learning in Neurosciences; Collaborative Undergraduate Research through College-Research Center Network: Establishing HomeLab Network using simple model systems and sophisticated research questions. He has actively participated in the March for Science rally in Mumbai.

Arvind is the Vice-Chancellor of Punjabi University, Patiala. A physicist, his research work focuses on various aspects of quantum physics. Arvind did his Ph.D. from the Indian Institute of Science. He subsequently taught at Guru Nanakdev University, Amritsar, IIT Madras and IISER Mohali. His first contacts with the People's Science Movement took place in the early 1990s, when he was a Ph.D. student at IISc.

Bharat Patankar is a leading activist (co-founder and President) of the Shramik Mukti Dal and of the peasant movement in Maharashtra. Bharat Patankar is an activist who has worked for almost 40 years in movements of workers, farmers, dam evictees, agricultural labourers, the drought eradication movement, alternative cultural movement, women's liberation movement, anti-SEZ and

coal-based power plant movement based on alternative energy proposals, rights of farmers on windmills, and radical anti-caste movements.

Bhargavi S Rao is Director (Research) Centre for Financial Responsibility and Senior Fellow & Trustee of ESG, Centre for Financial Accountability. Bangalore, Karnataka.

Dinesh C Sharma is an award-winning journalist, author and media trainer with over 35 years' experience in reporting on science and technology, health and environment for national and international media outlets. Sharma has been the Science Editor at *Mail Today* (India Today Group) from 2007 to 2014 and Founding Managing Editor at *India Science Wire* from 2017 to 2019. He is a regular contributor to the medical journal, *The Lancet*, among others. Under NIF Fellowship, he wrote *The Long Revolution: The Birth and Growth of India's IT industry* (HarperCollins India, 2009). An international edition of the book, *The Outsourcer*, was published by MIT Press, USA in 2015. The book was awarded the prestigious Computer History Museum Book Prize instituted by the American Society for History of Technology (SHOT) in 2016. In 2014, he wrote *Know Your Heart* (HarperCollins India) – a book on health policies. He has also penned a science travelogue – *Witness to the Meltdown* (Vigyan Prasar, 2015) – based on his climate change reportage from the Arctic in 2008. His latest book – *Indian Innovation, Not Jugaad* (Roli Books) – is about 100 innovations that have transformed India in the past 75 years. As the Jawaharlal Nehru Fellow (2020-2021), he is working on the evolution of Hyderabad as a technology cluster. The book is slated for publication in 2023. Dinesh's academic experience includes teaching a course in development journalism for MA students at Ateneo de Manila University, Philippines and being a teaching Fellow at the Jawaharlal Nehru University. He is a doctorate from Banaras Hindu University (BHU) and a post-graduate from Osmania University.

Faizan Mustafa is an academic in the field of law, an institution builder, public intellectual and author. Subsequent to his service at the Aligarh Muslim University, Professor Faizan Mustafa was the founding Vice-Chancellor of the National Law University, Odisha and is now the Vice-Chancellor of NALSAR, Hyderabad. Apart from writing several research papers on law, his lucid expositions in the "Legal Awareness Web" series have contributed to public awareness about law and Indian constitution.

D.Indumathi is a physicist working at The Institute of Mathematical Sciences, Chennai (IMSc) since 1988. After her PhD and her post-doctoral work at PRL Ahmadabad, University of Dortmund, Germany and Indian Institute of Science, Bengaluru she became a faculty member at Harish Chandra Research Institute, Allahabad before she joined IMSc. Her primary area of research is high energy physics phenomenology. She is an active member of the Indian Neutrino Observatory (INO) project since its inception. She has been the outreach coordinator and one of the spokespersons for the INO collaboration. She also coordinated a subgroup working on designing INO's proposed main detector. She is one of the Indian Scientists who has been vocal in the protests against the Indian Nuclear Tests. She has been an active member of the Tamil Nadu Science Forum. She is the editor of "Jantar Mantar" the childrens science magazine in english from TNSF. She has written many science popularisation articles for children.

KJ Joy is one of the founding members of Society for Promoting Participative Ecosystem Management (SOPPECOM). He has been an activist-researcher for more than 30 years. He was a full-time activist for about eight years with Mukti Sangharsh Movement, an organisation of rural toilers in South Maharashtra. He has worked with Bharat Gyan Vigyan Samithi (BGVS), New Delhi, in its watershed development and resource literacy programme. He was a Visiting Fellow with the Centre for Interdisciplinary Studies in Environment and Development (CISED), Bangalore (now part of ATREE) for a year and was a Fulbright Fellow with University of California at Berkeley. He has a special interest in people's institutions for natural resource management both at

the grassroots and policy levels. His other areas of interests include water conflicts, drought and drought proofing, participatory irrigation management, river basin management and multi-stakeholder processes, watershed-based development, resource literacy, right to water and sanitation, water ethics and people's movements. National level initiative on water conflicts; presently, he coordinates the national level initiative, Forum for Policy Dialogue on Water Conflicts in India, a network of about 600 individuals and organisations and anchored by SOPPECOM (www.waterconflictforum.org).

Kanchi Kohli started her career as a scholar-activist at Kalpavriksh, then at Toxic Links and is currently Senior Researcher at the Centre for Policy Research, New Delhi. She is a researcher, educator and communicator of environmental law and policy, covering the environment, forest, biodiversity regulation and governance in India. Her policy research and practice explores the links and gaps between law, development, sustainability and environmental justice. She has co-authored the coursebook *Development of Environmental Laws in India* (Cambridge Univ, 2021). She is co-editor of *Forest Case Update*, a public information service on forest and wildlife cases in the Supreme Court. She teaches environment law and development courses at various universities and government training institutes. She was awarded the Fulbright Fellowship in 2013 and was affiliated to the Boalt Law School, University of California, Berkeley.

Keshab Das is a professor at the Gujarat Institute of Development Research, Ahmedabad, India. He holds M.Phil (Applied Economics) and Ph.D (Economics) degrees from Jawaharlal Nehru University, New Delhi (through the Centre for Development Studies, Trivandrum). He also holds a Bachelor's degree in Journalism and Mass Communication and has briefly served as a journalist at The Indian Express. He is a recipient of the national VKRV Rao Prize in Social Sciences (Economics) awarded to the best young scholar below the age of 45. He is President of the Orissa Economic Association (2022-23) and the Executive Editor of the *Odisha Economic Journal*. He has been a visiting Faculty or Research Fellow at several Universities and Research Institutes in India and abroad, and ICCR Chair Professor in Economics (2015-16). He has undertaken research missions on SME competitiveness to the Netherlands, Italy and the UK. He has authored/co-authored/edited/co-edited 10 Books and around 110 articles on research studies and policy engagement in local and regional development, industrialisation strategies, the informal sector, MSMEs, industrial clusters and globalization, innovation, labour, infrastructure and politics of development.

Kirtee Shah Concerned that the 'architecture' he was learning at one of the best schools in the country, way back in the '60s, was not sufficiently oriented to the contemporary human settlements challenges, especially concerning the needs of the poor and the marginalized groups, Kirtee Shah set out to work with the homeless poor in the villages first and subsequently in the urban slums of Gujarat, India. The search for 'content and social relevance' in professional work, the desire to serve the 'alternative client' and an attitude to de-learn and re-learn in face of new challenges have shaped Kirtee Shah's 50 year long professional career in six parallel and overlapping streams that include architecture practice, grass roots work as an NGO, policy advocacy and development, disaster reconstruction, institution development and project consultancy. Besides studies, field projects, organization development and policy related work in rural, urban and tribal housing for the low income and other disadvantaged groups; he has worked extensively on large scale post disaster reconstruction projects in India and abroad. As a member of the Prime Minister appointed National Commission on Urbanization (NCU) in the mid 80's, he chaired a Working Group on Urban Poverty in India. Founder Director of Ahmadabad Study Action Group (ASAG; an NGO he set up with other likeminded colleagues and leads for the past 50 years) he was president of Habitat International Coalition (HIC; a global coalition of civic groups, activists and professionals working on the housing rights and the people centered urban development) for a decade in the mid '90s. He is founder president of India Habitat Forum (INHAF); founder chairman of Home Losers' Service

Association of Ahmadabad (HOLSAA; set up following the earthquake in Gujarat in 2001); president of Bangalore based Institute for Cultural Research and Action (ICRA) for the past 30 years; one of the founders of the Ashoka Innovator for the Public, which now has presence in more than 90 countries of the world and is engaged actively with the institutional development activities of Citynet and Asian Coalition for Housing Rights (ACHR). He has been on several committees set up by the Planning Commission of India (on housing, urban development and urban poverty matters), was on the Board of Directors of Housing and Urban Development Corporation (HUDCO) and has consulted with UN agencies, the World Bank, Cities Development Initiatives for Asia (CDIA), etc. He was an adviser to GoI's 50,000 houses project for the war victims in Sri Lanka and chaired a Committee for Rejuvenation and Strengthening of the Building Centres Network set up by Hudco. He is Chairman and Chief Architect of Ksa Design Planning Services Pvt Ltd., an Ahmadabad based firm of practicing architects, with projects in various parts of the country and outside.

Mayank Vahia recently retired from the Department of Astronomy and Astrophysics, Tata Institute of Fundamental Research (TIFR), Mumbai, India. At TIFR he worked on space-based telescopes that were flown on NASA's Space Shuttle, one Russian satellite and several Indian satellites. Later he pursued his interests in the history of astronomy and science in ancient civilisations. All through his career he was keen on student training and initiated the Astronomy Olympiad programme in India which has not only created and cultivated an interest in astronomy in young students, but the Indian teams have performed very well in international events. After his retirement, he set up an innovative undergraduate programme in Mathematical Sciences at the Narsee Monjee Institute of Management Studies in Mumbai. He has now retired from there and now pursues his interest in subjects of his personal interest.

GN Nagarjuna is a STEM (science, technology, engineering, and mathematics) educationist with roots in biology and philosophy. Seeking freedom, truth, and justice in diverse, decentralised, and distributed structures in codified and real life. Former Professor at HBCSE, TIFR. He is currently Secretary Kishore Bharati <https://www.kishorebharati.org>

Nagarjuna Gadiraju works in the Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research in Mumbai, India. His major research interests include Science Education, Cognitive Science, History and Philosophy of Science and Structure and Dynamics of Knowledge. As an activist he focuses on promoting free knowledge and free software and serves as the chairperson of Free Software Foundation of India.

Nidhi Singh is currently a Senior Policy Fellow (SPF) at DST's Centre for Policy Research-IISc Bangalore. She works on Biomedical Innovation System of the country with a special focus on Emerging Technological Innovation System to study the country's context specific issues related to healthcare diagnostics. Prior to joining, DST-CPR-IISc, she was holding a Scientist C position at Department of Health Research- (DHR) and Indian Council of Medical Research- (ICMR). Here, she became the member of COVID response team constituted at ICMR during the pandemic and also involved in the scientific evaluation and monitoring of institute's funded research projects. She has obtained her PhD degree from the Centre for studies in Science Policy, Jawaharlal Nehru University, New Delhi.

Parthiba Basu has a Ph.D. in Ecology and has research career spanning nearly thirty years. He has been a Smithsonian Fellow at the Smithsonian Tropical Research Institute, Panama; a post-doctoral fellow at Ecole Normale Supérieure, Paris and is a recipient of the Darwin Fellowship awarded by the Darwin Initiative, Govt. of UK. He teaches at the Department of Zoology and heads the Centre for Agroecology and Pollination Studies at the University of Calcutta. Status of ecosystem service providers in agroecosystem including pollinators and natural enemies of crop pests and drivers of

their decline are major areas of his research. An evolving theme in his research group is to assess how stressors like pesticides might impact the physiology and genetic mechanisms of the species providing key ecosystem services e.g. bees. He presently serves a Lead member of the IUCN Wild bee Specialist Group and has been part of the expert panel on pollinators and food systems for the UN-FAO.

Priya Hasan is an Asst Professor in Physics at the Maulana Azad National Urdu University, Hyderabad, India. She did her Integrated Masters from the Moscow State University, Moscow, Russia, PhD at Osmania University, Hyderabad in 2004 and post-doctoral research in France and IUCAA, Pune. She was awarded the Women Scientist Award by DST in 2006. She has presented her work in various conferences in India, Europe and US and in the United Nations, Vienna. Her research interests are in observational astronomy, star formation, star clusters and galaxies. She is actively involved in olympiads, public outreach and science popularisation programs and has worked on various projects with the IAU-OAD, US Consulate Hyderabad, etc. She is the co-Chair of the Women in Astronomy WG- IAU and member of the Public Outreach and Education Committee, Astronomical Society of India and ISDT-TMT.

N.Raghuram is the current Chair of the International Nitrogen Initiative and former Dean at the School of Biotechnology, Guru Gobind Singh Indraprastha University. A Best Teacher Awardee of his university and also at the national level, he is a molecular biologist by training. He currently specializes in functional genomics of plant G-protein signalling and nitrogen use efficiency in rice. He is a member of the National Nitrogen Steering Committee of the Indian Government, as well as the International Steering Committee of the Global Partnership for Nutrient Management (GPNM) under the UN Environment Programme. He has also been on the UNEP-FAO-WHO consultative committee on the health and environmental impacts of fertilizers and pesticides. He co-founded the Indian Nitrogen Group and Sustainable India Trust, co-edited the first ever Indian Nitrogen Assessment and is currently co-leading the South Asian Nitrogen Assessment for the GEF-UNEP project on International Nitrogen Management System. He also co-drafted and co-negotiated the first ever India-led UN resolution on 'Sustainable Nitrogen Management' in the 4th UN Environment Assembly in 2019. Before joining as a university faculty 25 years ago, he had brief stints in industrial R&D and science journalism (as a correspondent for Down to Earth magazine) He is currently the Editor-in-Chief of the Springer nature journal, Physiology and Molecular Biology of Plants, apart from being guest editor for Frontiers in Plant Science, Environment Research Letters and Environmental Research Communications.

Rajesh Joshi is a Hindi writer, poet, journalist, and playwright. A recipient of the Sahitya Academy Award in Hindi, his writings have been translated into many Indian and foreign languages, like English, German, Russian etc. Rajesh Joshi is a member of the Janwadi Lekhak Sangh. He is a champion of secularism, scientific temper, freedom of speech and expression.

R.Ramanujam popularly known as Jam got his BE (Hons) in Electrical and Electronics Engineering from BITS Pilani and his PhD in Computer Science from Tata Institute of Fundamental Research, Mumbai. After postdoctoral research at the City University of New York, he was at the Institute of Mathematical Sciences, Chennai where he recently retired as Professor. He is currently a visiting Professor at Azim Premji University, Bengaluru. His research interests are in mathematical logic and theory of computation, and their applications to theory of distributed systems, game theory and security theory. He has been actively involved in mathematics education for children and teachers. Ramanujam has been associated with the Tamil Nadu Science Forum since 1990, active in its involvement in science popularization and school education. He is editor of Thulir, a monthly science magazine for children. He was a member of the Yash Pal Committee that formulated the National Curriculum Framework 2005, and chaired the National Focus Group on Teaching of

Mathematics, NCERT. He is now part of panel appointed by the TN Government to form a State Education Policy.

Ravinder Banyal is a research scientist at the Indian Institute of Astrophysics (IIA), Bangalore. He completed his PhD from IIA, Bangalore in the year 2005 and then spent two years as a postdoctoral fellow in Northeastern University, Boston, USA. Since 2008, Ravinder is a faculty member at IIA and continues to teach, guide and do research in astronomical instrumentation and extrasolar planets. His research involves studying the properties of the planet hosting stars to understand the origin, diversity and architecture of the exoplanetary systems. During 2013-2014, Ravinder has also spent a year as a visiting scientist at the University of Gottingen, Germany. Apart from regular teaching and research, he is also deeply passionate about public outreach and science education.

P.Sainath is a journalist who has specialised in reporting “not for shareholders” but about people who are left behind. His reporting about rural India, with detailed documentation about poverty, economic and social inequalities, and caste discrimination are windows to a world about which the print and visual media have chosen to ignore. P.Sainath is thus described by Amartya Sen as “one of the world’s great experts on famine and hunger.” His recent project, “ People’s Archive of Rural India” is a unique repository of many aspects of the field. P.Sainath’s volume of work continues to expose systemic brutalities that lie at the core of neoliberal globalization.

Satyaki Roy is currently Associate Professor at the Institute for Studies in Industrial Development. He has worked and published extensively on industrial clusters in India, political economy of informality and employment and currently working on political economy of industrialisation and global value chains. His recent book is *Contours of Value Capture: India's Neoliberal Path of Industrial Development* published by Cambridge University Press, 2020.

K.K.Shailaja is the former health minister (2016-2021) of Kerala and was described by the media as a “Covid Slayer” for her leadership in combating the pandemic in her state. For Kerala’s success in this field, she was honoured by the United Nations in 2020 and was amongst the few world leaders who were invited to speak at the United Nations Public Service Day. Her leadership in Kerala’s challenge to the Nipah virus in 2018 was also recognised world over. A science graduate, K.K. Shailaja had served first as a physics teacher in a school for several years and is referred to as Shailaja teacher. She is also a writer and has authored two books in Malayalam.

Sonajharia Minz is the Vice-Chancellor of Sido Kanhu Murmu University, Dumka in Jharkhand, since 2020. After her school education in Jharkhand, she had her college education in Bengaluru and Chennai, specialising in mathematics for her M.Sc. Following her Ph.D. in Computer science from the Jawaharlal Nehru University, she taught in Barkatullah University in Bhopal and in Madurai Kamaraj University. Subsequently she returned to her alma mater, JNU and taught in the School of Computer and System Sciences, since 1992. Born in a tribal family, she is active in challenging social discrimination and upholding citizens’ rights and equality. She served for one term as the President of the JNU Teachers’ Union and was recently invited by the UNESCO to speak on “Indigenous Perspective: Advancing Change in Higher Education.”

Sudesh Bhaskar Ghoderao is Associate Professor of Chemistry in RNC Arts, JDB Commerce and NSC Science College, Nashik, Maharashtra with educational qualifications as M.Sc, M.Phil., Ph.D. (Chemistry) and teaching experience (UG/PG) of 30 Years. He is the National General Secretary, Federation of Indian Rationalist Associations (FIRA) since 2019 and prior to that Secretary of FIRA for more than 6 years Secretary, National and International Coordination of Maharashtra Andhashraddha Nirmulan Samiti (MANS). He participated and represented MANS in Asian Humanism Conference organised at Kaohsiung, Taiwan during 28 to 30 Dec 2018, He was coordinator of the International Conference on ‘Rationalism for Humanity’ organised on 9 Aug

2019 at Mumbai on the occasion of 30th year of MANS. Activist of MANS since 32 years and worked on various posts such as District organising secretary, District Executive President of MANS. His field of interest: Superstition Eradication, Development of scientific temper, Anti-witch-craft activities, Science Communication, and Chemistry Education. Research study leading to Ph.D. degree was carried on the topic 'Development of interest in Chemistry through miraculous demonstrations and eradication of superstitions'. He has exposed many Godmen who were cheating common people and exposed miracles which were performed by Godmen by exploiting common people.

Tejal Kanitkar holds BE (Mech Engg) from IIT Mumbai, MEngg from Univ of Amherst, USA, and PhD from IIT Mumbai, specializing in Energy Studies and Modeling. She has worked as Research Associate at Parayas Energy Group, Pune, and, after a stint as Programme Manager at the Centre for Science, Technology & Society, TISS, Mumbai, was Chairperson of the Centre for Climate Change and Sustainability Studies, TISS Mumbai (2012-19). She is currently Associate Professor at National Institute of Advanced Studies, Bangalore where she teaches a course on energy modeling. Her academic focus has been on integrating scientific, technological and social scientific perspectives to study the inter-related areas of energy, development and climate policy. She has published widely respected and cited papers in India and abroad on international climate policy and equity, examining positions at and outcomes from successive Climate Summits. While at TISS, she was part of the team that worked closely with the Delhi Science Forum, *inter alia* to jointly prepare a model for assessing equity aspects of burden sharing between countries while accounting for historical emissions. Along with co-authors and collaborators, she was largely instrumental in strongly advocating the use of cumulative emissions and carbon budgets as key metrics in assessing equity between nations and adequacy of emission reduction targets of different countries. The annual Climate Conferences organized at TISS during that period brought together policy planners, scholars and activists in a highly creative partnership to understand the different aspects of climate change and helped to advance advocacy on India's policy stance at international summits. She continues to span the space between scholarship, policy advocacy and activism with regard to energy studies and climate change.

Venkat Nadella is a DST-Science, Technology and Innovation Postdoctoral Fellow at the Centre for Policy Research, Indian Institute of Science (DST-CPR at IISc), Bengaluru. His research interests are in examining the role of governments, markets, and institutions in dealing with issues related to economic, political, and social development, particularly entrepreneurship and innovation. Prior to joining IISc, Venkat completed his doctoral training in public affairs at the school of public and environmental affairs (SPEA), Indiana University, Bloomington, with field concentrations in policy analysis and public management. He also holds dual doctoral minors in Entrepreneurship and Strategic Management from the Kelley School of Business at Indiana University, Bloomington. Venkat's research at DST-CPR at IISc examines the role of the state in sponsoring early-stage science and technology entrepreneurship and technology acceleration programs. His ongoing research is at the intersection of three interrelated topics: a) financing innovation, b) science and technology driven entrepreneurship, and c) evaluation of science, technology, and innovation policies.