

17th Indian Science Communication Congress (ISSC-2017)

Chairing the inaugural session of the 17th Indian Science Communication Congress (ISSC-2017), noted particle physicist turned science communicator and UNESCO Kalinga Prize Winner for Science Popularization Dr Narender K. Sehgal said that coverage of science in Indian media is dismal and has been declining over the years; though, science coverage in mass media is generally proportionate to science awareness and can be considered as an indicator to the scientific inclusion of the society, he said.

The 17th Indian Science Communication Congress was held on 21-22 December 2017 at New Delhi. CSIR-National Institute of Science Communication and Information Resources (CSIR-NISCAIR) and the Indian Institute of Mass Communication (IIMC) were the lead organizers of the well-attended two-day event. Scholarly societies and bodies involved in science communication including the Indian Science Writers' Association (ISWA), Society for Information Science (SIS), Indian Science Communication Society (ISCOS) and Vigyan Bharati (VIBHA) also partnered with CSIR-NISCAIR and IIMC in organising the 17th edition of the Indian Science Communication Congress.

Some 200 delegates including science communicators, scientists, researchers, science fiction writers, science enthusiasts, science journalists and students participated in the Congress which had the theme 'Communicating India's Scientific Wisdom: Changing Paradigms'.



Dr Manoj Kumar Patairiya, Director, CSIR-NISCAIR giving his opening remarks



Prof. K.G. Suresh, Director-General, Indian Institute of Mass Communication giving his opening remarks



Dr Narender K. Sehgal, Former Adviser, Govt. of India delivering the inaugural address



Dignitaries on the dais. From Right: Dr Manoj Kumar Patairiya, Director, CSIR-NISCAIR; Mr Kamal Kishore, Member, National Disaster Management Authority, Dr Narender K. Sehgal, Former Adviser, Govt. of India; Dr R.S. Sangwan, Director, Academy of Scientific and Innovative Research (AcSIR); Dr R.K. Bhandari, former Director, CSIR-CBRI and Prof. K.G. Suresh, Director-General, Indian Institute of Mass Communication

Prof. K.G. Suresh, Director-General, Indian Institute of Mass Communication delivered the keynote address. He said that to reach the masses, scientists have to be communicators as well. Welcoming the gathering Prof. Manoj Kumar Patairiya, Director, CSIR-NISCAIR said that the Indian Science Communication Congress has over the years emerged as a platform for brainstorming and engaging in discussions on various facets of science communication with pan India presence of the delegates. Dr R.S. Sangwan, Director, Academy of Scientific and Innovative Research (AcSIR) who was the Chief Guest said that science communication should evoke a lot more scientific interest among the masses. Mr Kamal Kishore, Member, National Disaster Management Authority who was the Guest of Honour said that the science of disaster should be communicated to the common man so that losses owing to disasters can be reduced.

A popular science book *Disasters: Short Stories, Essays & Anecdote* authored by Dr R.K. Bhandari and published by the National Book Trust India was released at the inaugural function.

Spread across 10 parallel scientific sessions including a poster session, nearly 100 presentations and talks were given by the experts and delegates on the various facets of science communication focusing on India's scientific wisdom.

Panel discussion on Emerging Worldview on India's Scientific Wisdom

The panel discussion was chaired by Dr Narender K. Sehgal. During the course of the discussion, Prof. M. Sai Baba of the National Institute of Advanced Studies, Bengaluru said that while coverage of science in traditional media is lower, there is an increased coverage of science in the social media. However, he added that with the prevalence of fake news on social media, one needs to be diligent when following science news on the social media.

Dr Dinesh Kumar, Former Director, Institute of S&T Communication, University of Lucknow said that language should not be a barrier to science communication and that science communication in vernacular languages should be promoted. Dr G.P. Pandey of Assam Central University also emphasized that scientific research being carried out in India should find more visibility in regional language mass media. Dr U.P. Pandey of *Dainik Tribune* called upon the science communicators to focus on regional languages. Mr V.P. Singh, President, Indian Science Communication Society shared his view that the rich scientific wisdom in Indian villages needs to be communicated widely. Mr Nimish Kapoor of Vigyan Prasar stated that we need to brand our ancient science and popularize it better. He was also of the view that there is a need to translate ancient Indian scientific works in foreign languages. Dr Daljeet Sachdeva of IGNOU highlighted the important role that community radio can play in popularising Indian science. That there is an urgent need to bridge the gap between journalists and scientists was articulated by Dr Surabi Dahiya of Indian Institute of Mass Communication. The panel gave impetus to communication for shaping the emerging worldview on our ancient scientific wisdom and indigenous scientific knowledge.

Mass Media & Science Communication

Dr Rajiv Sharma, Secretary, Science and Engineering Research Board chaired a session and shared his concern that it has become difficult to differentiate between real and fake news. Dr P. Iyamperumal, Executive Director of Tamil Nadu Science and Technology Centre detailed the science communication efforts of the Centre that included organizing science exhibitions

that had virtual exhibits, creating innovation hubs, providing trainings in the area of robotics and special programmes for differently-abled children.

Speaking on the role of media in communicating S&T to the masses, Dr M. A. Ansari, Professor (Communications), G B Pant University of Agriculture and Technology said that media should set the agenda for public discourse, thereby shaping opinion for and against scientific issues that concern the masses. The talk by Dr Ajitabh focused on the role of social media in science communication and how social media can be a game changer in communicating India's scientific knowledge.

Drawing on several initiatives taken by the CSIR-Central Building Research Institute's youth centric programmes, Dr A.K. Agarwal of CBRI, Roorkee underscored the need for building scientific temperament in young minds. Prof. H.P.S. Kalra, Professor, Punjabi University, Patiala shared science related aspects mentioned in the Punjabi language scripture, Sri Guru Granth Sahib.

A study about the role of social media in creating awareness about reproductive health among Indian women found that though most of the women in the study were using social media, a majority were not receiving reproductive health related information through social media.

Challenges in science communication in India, motivating school children to study science, communicating S&T policy issues, science communication through radio including internet radio were also topics of discussion that gave emphasis on increasing the effectiveness of science communication through various ways and means.

Mr V.P. Singh, President, Indian Science Communication Society in his lecture said that there is a great demand for science communicators in the country. He said that the many courses on science communication should strive to not only train but should also assist in placing such trained people in suitable jobs related to science communication and science journalism.

Public Health Communication

Promoting and enhancing awareness about public health was the

focus of most presentations of a session on health communication. The role of Anna University in community radio as a medium of social responsibility by broadcasting information regarding women health was highlighted. An assessment of national dailies on reportage of health news showed that some newspapers focussed on visual depiction and some others on news story format. Another study showed that while the coverage of health news and reports in mass media is growing, there is scope for further increasing the coverage of health news. Health awareness among Baiga tribal community in Madhya Pradesh was also discussed. Dr Arvind Dubey, Paediatrician and Science Writer delved on how to write a popular science health article.

Facets of Agriculture Communication

The media does not adequately cover agriculture, noted Mr Pallava Bagla, Science Editor, NDTV who was a lead speaker of the session on agriculture communication. Through a few recorded videos of agriculture related news stories, Mr Bagla highlighted the role that the audio-visual media can play in reporting important news. Dr Anubhuti Yadav of IIMC said that the farmers need to be made digitally literate and that more science content is required in regional languages. The role of community radio in agriculture communication was highlighted in this session.

Ms Arupa Lahkar, Assistant Professor from Gauhati University reported that while the reach of television continues to be limited, the radio has better reach and interactive two-way communication programming is a must in today's scenario. Use of ICT for agriculture information sharing by the government through its many programmes was chronicled and discussed. The increasing use of social media for agriculture communication and many potential uses of social media was presented by Dr M. A. Ansari, Professor of Communication of GB Pant University of Agriculture and Technology. Social media platforms can be used to enable farmers and agribusinesses to meet and network with other farmers, agribusinesses and consumers domestically and globally. An AgriChat model along the lines used in other developed countries can be introduced in India too.

Agriculture extension services have been pivotal in transferring new skills and knowledge to farmers and have been

carried out by public funded institutions. A GB Pant Agricultural University study reported that agriculture extension is evolving into advisory services with fulfilling client oriented and demand led needs and involvement of NGOs, farmer organizations and private sector for helping farmers.

Trends in Environment and Risk Communication

That science tourism can be an effective communication tool for promoting scientific heritage was put forward by Dr Lalit Kumar Sharma of Vigyan Setu Foundation. Many archaeological sites, science museums, science cities, science parks, observatories, R&D institutions and universities can be potential science tourism sites. Based on a study on the coverage of climate change in major English dailies of India, Ms. Nisa Askari of Aligarh Muslim University reported that the political takes on climate change issues were predominantly covered in the dailies followed by reportage on disaster and risk, awareness and climate change developmental issues.

Vigyan Prasar recently made 13-episode video programmes on the science and technology behind Indian architectural sites. Mr Navneet Kumar Gupta of Vigyan Prasar briefly gave a narrative about some of them such as evolution and advantages of constructing buildings with bricks, ancient water conservation and water harvesting technologies and so on.

Round table on India's Scientific Wisdom: Communication Strategies

A round table discussion on 'India's Scientific Wisdom: Communication Strategies' had many experts including Prof. K.G. Suresh, Prof. Manoj Kumar Patariya, Prof. Krishan Lal, Dr C.M. Nautiyal and many other noted science communicators brainstorming on various communication strategies for spreading India's scientific wisdom. Prof. V.K. Malhotra, Member-Secretary, Indian Council of Social Science Research was the chief guest. Mr Declan Kirrane, Managing Director, ISC Intelligence in Science who joined the panel discussion over Skype from Brussels, Belgium said that there is a unique need to communicating science with policymakers as well as international collaborations.

Highlights

Science based entertainment or Scientainment was a unique highlight of ISCC-2017. The programme that included magic and puppet shows in the evening on both the days saw the delegates and the general audience enjoying and understanding many scientific concepts.

Summing-up the event during its conclusion, Prof. Manoj Kumar Patariya, Director, CSIR-NISCAIR highlighted various recommendations that emerged during the deliberations such as promoting science communication research and academics including training and cross cultural studies. He said that many interesting papers were read at the Science Communication Congress, notable among them being the study by Dr Manoj Mishra and his team under the guidance of Prof. Raja Ram Yadav, Vice Chancellor of VBS Purvanchal University on how science communication has played an important role in lowering the instances of casualties caused by snake-bites in the region.

Prof. V.K. Malhotra, Member Secretary, Indian Council of Social Science Research was the Chief Guest at the valedictory session who emphasized on value and respect for inter-disciplinarity while dealing with subjects like science communication. Co-Chair of IAP for Science and Former President INSA Prof. Krishan Lal highlighted the significance of academies in promoting science communication and said the institutions like NISCAIR and IIMC are well placed to play major role in professional enrichment with global competitiveness in science communication.