

## Why India needs world-class science communication\*

Einstein believed that if you can explain a scientific topic to your grandmother in a manner that is engaging without diluting its meaning, you have mastered the art of science communication. Good science journalism is about taking science to non-experts, such that it generates an appetite for knowledge, satisfies the thirst for entertainment, and prevents the spread of misinformation.

T. V. Padma (science communicator), who was a part of the panel discussing why India needs world-class science communication emphasized that science communication in the country has to be rigorous, evidence-based and unbiased. In addition to popular areas such as space and nuclear technology, 'science journalists must also take up issues that are *uncool* and *non-buzzing*, such as public health'. While it is important to bring to light mega science projects, it is equally necessary to make sure that local issues are not swept under the carpet, she said. Dinesh C. Sharma (Managing Editor, India Science Wire, New Delhi) talked of how science communication in India is gradually flourishing. 'There is a tectonic shift in the way we are generating science news and the way it is shaped and spread now', he said. According to him, science writing has to go beyond journalists simplifying research articles for the general public. It should become more analytical. Scientists must also move out of their labs and engage with the public, he said.

Sarah Iqbal (Wellcome Trust DBT-India Alliance, New Delhi, India) agreed with Sharma. The organization that she

works for is a UK-based charity that funds biomedical research in several countries including India. 'To encourage scientists to engage with the community, we insist that they furnish a layman summary with their project report.' This helps them to make the community science-literate with time, she said. A dedicated team of science writers in India helps accomplish this task. Expanding the pool of science writers in the country will aid the public to understand the impact and importance of science in the society. To promote science communication in India, we must also train scientists to communicate their findings to the public, she said. Rajeshwari Raina (Shiv Nadar University, Greater Noida, Uttar Pradesh) mentioned what the other panelists said. She said that science communication is vital for the society as it helps stakeholders choose the right policy instruments, to mould a public opinion around it, and to encourage debates for good governance, in addition to educating the public about recent scientific developments. She cited the example of China, where municipal science commissioners are authorized to set up institutes and consult scientists to address problems of the local people. 'This is also covered under the realm of science communication and we need agencies to finance a similar programme in India', she said.

To enable India meet global standards of science communication, universities can play a huge role. 'But the role of universities, at present, is marginal', said Balakrishna Pisupati (Transdisciplinary University (TDU), Bengaluru). In addition to what science journalist communicate, the *when* and *how* of it also matters. Nanotechnology was not talked about much when it began; as a result, the community remained unaware that nanotechnology was all around us – in

toothpastes, computers and in our satellites. Similarly, scientists did not educate the public about the field of synthetic biology when it was first announced. As a result, it continues to be an alien topic to many, to date. A lot of it also has to do with the way Indian universities are architecturally designed. 'There is a separate building for humanities and engineering, and a separate block for mechanical and chemical engineering; and people in these two never greet', Jairam Ramesh (former minister) said, remembering his undergraduate days at the Indian Institute of Technology Bombay. He emphasized that there is a need to build centres for interdisciplinary and transdisciplinary research in India, in areas including science communication.

To promote science journalism in the country, *Nature India* and TDU jointly launched media fellowships for science journalism in New Delhi. The fellowship will support four selected science journalists to research and write on topics such as pure and applied sciences, environment, health and biodiversity. The fellows will receive an amount of 1 lakh rupees and the opportunity to build upon the expertise of TDU and *Nature India*. Subhra Priyadarshini (Editor, *Nature India*) said that 'the fellows will be able to access the best at *Nature* research and receive active mentoring during their reportage to create a body of good quality of work'. She signed the Memorandum of Understanding with Pisupati at the launch of the first fellowship for science journalism in India.

**Bhavya Khullar**, India Science Wire, Vigyan Prasar, Department of Science and Technology, C-24, Qutub Inst. Area, New Delhi 110 016, India.  
e-mail: bhavyakhullar.mail@gmail.com

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