

Science in Indian Media: A Blueprint for the New Millennium. Dilip M. Salwi. Vigyan Prasar, C-24 Qutab Institutional Area, New Delhi 110 016. 2002. 174 pp. Price: Rs 200.

The book under review purports to look at science coverage in the Indian media, diagnose its ills, if any, and prescribe some remedial measures. By any reckoning, a tough task indeed. Dilip Salwi has excellent credentials; he had spent almost his entire career in a CSIR institute devoted to science communication. The book is essentially based on a K. K. Birla Foundation Media Fellowship. Salwi's conversations during the tenure of the fellowship with a cross-section of scientists, science communicators and policy makers have been loosely put together as a book, with some suggestions as to how the media in India should handle science coverage.

The communication of science to public is complex with print, audio-visual (radio and TV) and the non-formal means. The language of communication depends upon the audience (literate, illiterate) and is location-specific (rural, urban). Even within the print media, there are newspapers, news magazines and science magazines with their own peculiarities. With such a plethora of media, languages and varying literacy levels, neither generalizations about science popularization nor a set of recommendations as to how the media should cover science is going to be valid. Salwi makes too many generalizations without appropriate focus, which I think is a serious drawback of the book. His lack of clear understanding of the Indian media, especially the so-called mainstream media – newspapers and news magazines which together take care of a large share of the scientific information, needs of the urban people and the verbiage to put across his views cloud his arguments. Debatable though, in India it is the mainstream English media that virtually decides what is newsworthy and who ought to be in the limelight. Any serious attempt toward science awareness or science popularization among the Indian populace cannot be successful without their active participation. Obviously, in the action plan proposed, these chinks show up.

The disadvantage of being a long-standing science communicator is that one develops lot of presumptions, biases

and strong opinions about the media. This author is no exception. The first chapter starts with plenty of these. He thinks Indian 'masses' (a word used repeatedly throughout the book to describe Indian people, perhaps those not 'very literate' or 'illiterate') need to be 'educated' about science ('Awareness' about science and not education is perhaps more appropriate). Salwi thinks that science is a powerful tool for the mental growth of the masses. Liberalization policies of the Indian Government have helped science enter into the lives of every urban Indian in a big way, but little of it has reached the Indian masses. (He is actually confusing science with technology. How can new gadgets like cell phones or frost-free refrigerators inculcate science literacy or scientific temper among city-dwellers?) That is not all. Sweeping generalizations are made, like Indian media persons hardly give any importance to the coverage of science (The management decides what should appear in their papers – politics, pictures of page-3 people or science). It is widely believed that in some Delhi newspapers, advertisements are inserted first and the space leftover is allocated to news stories). But there are welcome exceptions. Papers like *The Hindu*, *Deccan Chronicle*, *The Telegraph*, and some regional papers have successfully run science pages/supplements. There are also instances where science is unceremoniously dumped. The top management of *The Economic Times* just decided a few years ago to discontinue what was possibly one of the best science and technology pages in the Indian newspapers. Salwi says that there are hardly any trained and 'committed' science communicators in India. (As a matter of fact, we now have more PhDs full time into science journalism; there are a few engineers and doctors as well). Salwi does not spare scientists either. He accuses Indian scientists of being as indifferent to science communication as they are to any other issues facing the country. I suspect the author's perception of science and science communication in India is clearly flawed.

With such strong prejudices, it is difficult to expect an objective critique of the issue of science coverage in Indian media. Unlike in the developed West, over two-thirds of Indian science is done in government laboratories, where scientists are not expected to talk to the media.

And the Indian press is constantly on the lookout for 'breakthroughs'; not many occur in India. Not surprisingly, most Indian papers choose to carry stories from *The New York Times*, *Washington Post* or foreign news agencies. A key issue that the author could have addressed is the reason(s) as to why the good science (whatever little) done in India hardly gets media coverage. Are there any inherent flaws in the system? There is certainly no formal system by which new developments in science reach the media in the university sector. Is the media liaison in the government bureaucratic? After all, the ministries of the government (including scientific departments) have to depend upon the so-called Press Information Bureau (PIB) of the Ministry of Information and Broadcasting manned by Indian Information Service Officers (IOs). Some of the best-known Delhi-based scientific departments like DST and DBT do not have a public relations/scientific information officer to interact with the media, but have to function through their respective IOs. Thus, there is little direct 'communication' between science journalists and the scientists. Media persons are often starved of authentic information, as they are unable to talk to scientists. This could be frustrating when a sensitive or controversial issue is being reported. Journalists routinely complain about lack of authentic information beyond the ubiquitous PIB handout. Autonomous scientific agencies like the CSIR or ICMR are better off as they maintain separate offices for media liaison, with personnel qualified in science. These issues should have been highlighted in the book.

Close to half of the book is devoted to so-called viewpoints, problems and proposals, describing the conversations that the author had with a cross-section of people associated with science communication in India. This section is poorly written, disjointed and replete with quotes that do not enhance the value of the book. Some samples: '...opinion from a short, bearded, dreamy-eyed activist', 'Science popularization is a side (sic) activity of our society', 'short, stout and bespectacled person opines...', 'there are several sciences which have today been reduced to orphan status' another opinion from a 'freelancer speaking at his nifty bungalow...', 'Indian media houses don't have a consistent policy for

BOOK REVIEWS

science and technology. The result is that anything concerning science in the media houses is not taken seriously'. In addition, there are headings like 'Offhand treatment in science', 'No conception of science', 'Outdated editors', 'Science needs to be diluted', etc. Some tight copy-editing could have helped. There is just too much of verbiage.

In the section on 'A blueprint for more science in the media', Salwi calls for a lofty and impractical infrastructure. His wish-list includes a Media Resource Centre encompassing Science Media Resources Centre, Science Audio-Visual Resources Centre with posts like Director, Assistant Director, etc.; a Science in the Media Fund to be collected from research laboratories/institutes, corporate houses, trusts, etc. to be given to media persons for sponsored columns. Also, three-month foreign jaunts for science communicators. Salwi admits that the demands are impractical.

There is a section containing 40 pages of recommendations about how to improve science communication status in the country. These are too many for anybody to pay serious attention. Science coverage is demand-driven. The media barons would probably be interested in science, if there are more indigenous success stories. Launching of Indian satellites, for instance, gets tremendous coverage, more so, if we put a satellite of a developed country into orbit. The SARS issue got good coverage as well. More indigenous science will engage science journalists full time, thus helping them skip the occasional non-science beat the paper assigns to keep them busy. Science coverage in developed countries like the US has flourished because of the huge amount of science done and harmony among the generators of information – scientists, scientific agencies, universities, industry and the media. What is more, academic bodies take interest. The US National Academy of Sciences has been consistently encouraging scientist-media interactions, promoting science coverage in the press, as also by providing expert panels to journalists for ready consultation. Not surprisingly, there are enough news-breaks to engage even freelance science writers. And there is fierce competition to file exclusive stories. Science writers are well-organized (there is even a cancer writers' forum) and strong enough to influence policy.

The coverage of science in Indian media needs more indigenous R&D and a culture of innovation-driven research by Indian scientists, as more home-grown discoveries would generate interest in everyone associated with science and media. Increased support to the public-funded laboratories and R&D in industry, and more media-friendliness through cutting a bit of the red tape by the government would help. Hopefully, newspapers would consider science as important as, say, the death of a Hollywood hero of yesteryears. Coverage of science is hard grind and there is a clear need for serious science scribes who should look beyond the handouts. For example, despite the erratic weather predictions there is hardly any serious scientific analysis as to why the meteorological agencies are consistently off the mark in their predictions. Or the recent CAG report on the non-commercialization of IPR and new technologies generated in the Indian laboratories. Salwi's prescription of more of everything, including sops by government will just not work unless science coverage becomes more professional. That there is not even a vibrant forum of science communicators in India speaks volumes of the dismal state of affairs. Salwi has some key messages that unfortunately get lost in the verbiage. Perhaps, the next edition would take care of that.

K. SATYANARAYANA

*Indian Council of Medical Research,
Ansari Nagar,
New Delhi 110 029, India
e-mail: kanikaram_s@yahoo.com*



Einstein from B to Z. John Stachel. Birkhauser-Verlag, P.O. Box 133, CH 4010, Basel, Switzerland. 2002. 556 pp. Price not stated.

This is a collection of 37 published and unpublished articles on Albert Einstein

and his works by John Stachel and his collaborators. Stachel is currently the Director of the Boston University Center for Einstein Studies. The book is a sequel to eight earlier volumes published by the Center, under the editorship of Don Howard and John Stachel.

The volume covering 556 pages is presented in eight parts, depicting different aspects of Einstein's colourful personality, his outstanding scientific works, and his interaction with and opinion on other scientists. In the introduction itself Stachel says, 'From the mists of obscurity and myth, there starts to emerge the portrait of a human being, of his strengths and weaknesses and of his often-contradictory strivings (for example, defiance of authority in physics co-existed with a longing for recognition of his work), who is a thousand times more interesting than the saintly figure of the legend'. And there is also emerging a much cleaner picture of the development of his ideas about relativity, both special and general theory, and about quantum theory – his greatest contribution to 'modern physics'. The book does not present the articles in a chronological series as they appeared; they are grouped thematically. Also some of the articles have contents which are partially repetitive.

Part I deals with the human side of Einstein and portrays his early life, his Jewish identity, his very early scientific work, his religiosity, social views and his response and reaction to fame. When Einstein was 70, he summed up his feelings about fame in a letter to a relative, 'It is a curious thing to see how one appears from perspective of others. It was my fate that my accomplishments have been overvalued beyond all bounds for incomprehensible reasons. Humanity needs a few romantic idols as spots of light in the drab field of earthly existence. I have been turned into such a spot of light. The particular choice of person is inexplicable and unimportant'.

The answer to one of the articles in the popular press that created some confusion recently, is available in the article entitled 'Albert Einstein and Mileva Marie: A collaboration that failed to develop'. Mileva was a co-student of Einstein at Heidelberg. Learning physics and mathematics and working together as partners in the laboratories of Henrich Friedrich Weber, they fell in love with each other and much against the wishes of their parents, got married in 1903. By