

Publishing in Indian journals

This is in response to 'Publish in Indian journals' (*Curr. Sci.*, 2001, **81**, 627) by R. D. Goel. What he says is absolutely correct, but how far does one think globally in this context? Earlier many articles appeared in *Current Science* regarding the impact factor and the reasons to publish papers in foreign journals. International recognition is given to those papers published in high impact-factor journals. Naturally, scientists are eager to publish their work in these journals, which also enjoy a wide circulation. But it is also true that a number of good works are published in Indian journals with poor circulation and which have low impact factor. These authors never get due recognition and their work often goes unquoted. For instance, a number of special publications and brochures about fisheries' research remain unrecognized¹. But scientists who aim to publish in high impact-factor journals should also realize the other side of these journals. One

of us received a letter from the editor of an international journal in aquaculture, to review a research paper. The next week, he received another letter thanking him for the comments, though the manuscript never came!

One of our colleagues sent a manuscript to a (high impact factor) journal in pharmacology. The paper was rejected with the comment that the methodology followed was not correct and the author was asked to follow some other methods used for mammals. But the animal he worked on was an aquatic organism and hence the author replied to the editor with suitable references and a photocopy of the methods adopted, published in high impact-factor journals. The editor replied that once a decision is taken, they never change/revert it.

Regarding the benefits one accrues in publishing in Indian journals, it is heartening to note that along with the international publications, the CSIR

gives due weightage to Indian publications for the award of research fellowships. But now even CSIR categorizes the publications as national and international. Moreover, Indian journals that charge publications outnumber the refereed unpaid journals, especially in biology. Similarly, journals that charge payment are becoming common at the international level also. One of the paid journals published from Lucknow has an impact factor higher than a few non-paid refereed journals.

1. Vivekanandan, E., *Curr. Sci.*, 2001, **80**, 118–119.

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The role of nuclear power in sustainable development

The interview with Ambassador John Ritch, Director General, World Nuclear Association, as reported by Nirupa Sen¹, raises several interesting questions. According to the World Energy Council (WEC) Scenario A, which restricts the share of nuclear power to 24% of primary energy production in the year 2100, taking the then global energy demand as 42 Gtoe (giga tonnes oil equivalent), along with 40% as the fossil fuel share in primary energy production in 2100, the annual CO₂ emission from fossil fuels comes out still to be fairly large, being almost 1.8 times its value in 1990 (ref. 2).

In view of Ritch's recommendations it would be interesting now to study the global warming climate change in the year 2100, assuming that the world percentage of electricity from nuclear energy can be well over 24% as assumed above, being closer perhaps to the cur-

rent figure for France, which is 75%. It is very likely that with so little then left for fossil fuels to do, the result of CO₂ concentrations in the atmosphere would be even better than those for ecologically-driven Scenario C of WEC, without, at the same time, the latter's very high energy intensity reductions and suppressed overall energy demands. In this sense, nuclear power is no doubt a great candidate for future sustainable development scenarios along with, of course, solar, wind and other renewables.

Before the environmental problem of global warming assumed the importance that it has today, so that people started looking more closely at alternatives to fossil fuel burning for energy production, there was a great surge in worldwide interest for electricity generation in the construction of new nuclear reactors in the sixties. However, by a

worldwide slump soon afterwards but for a handful of countries, no country was willing to install any fresh nuclear reactors. At present, however, CO₂ emission from fossil-fuel burning is considered the major source of the enhanced greenhouse effect responsible for global warming. If left unchecked, it would lead to adverse effects like (a) increased incidence of floods and droughts, (b) rise in the sea level with the attendant drowning of coastal areas, (c) destruction of valuable biodiversity, (d) increased desertification of arid and semi-arid areas, (e) loss in agricultural productivity, and (f) increased probability of climatic disasters such as cyclones, to name but a few.

A question that arises in the new atmosphere of economic liberalization is with regard to the *modus operandi* for private companies in India, willing to install and/or own nuclear power plants

for electricity generation in a civilian environment. Also, the question may be asked as to whether select universities in India would be helped now to start UG or PG courses in nuclear reactor physics and technology or nuclear engineering, as the case may be, by agencies here and abroad, in view of anticipated demand at various levels for operation, if not design, of new nuclear power plants in the coming years.

A word of caution is also necessary. There is still some uncertainty about the true extent of global warming in the next hundred years, if only because our unified climate models are not quite

perfect, and also because not enough studies have been made to-date. Nor are our present-day satellite measurements of temperature, etc. sufficiently free from doubt³. Moreover, can one rush to revive global interest in nuclear power generation when the cost of solar energy, through the use of photovoltaic techniques, will one day soon become competitive, even if one goes along with Ritch in saying, as has been said repeatedly before, that nuclear reactors are being designed and built today to be 'safer than safe', and that the problem of nuclear wastes has been solved to everyone's general satisfaction?

1. Sen, N., *Curr. Sci.*, 2001, **81**, 1291–1294.
2. Houghton, J., *Global Warming – The Complete Briefing*, Cambridge University Press, UK, 1997, 2nd edn, pp. 193–194.
3. Majumdar, D., *Resonance*, 2001, **6**, 13–21; 43–52.

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AIDS may become India's next scourge

The article on HIV infection (*Curr. Sci.*, 2001, **81**, 1302–1307) outlines an alarming fact that India has more people infected with HIV, the AIDS causing virus. In the year 2000 alone, a total of 5.3 million people were infected with HIV worldwide¹. Since the epidemic started two decades ago, this immune-stripping disease has killed 22 million people globally. India, Indo-China, and the former Soviet republics have seen the most rapid raises in recent years. AIDS experts have raised alarm bells over its spread in the Asia-Pacific region and called for a united effort to control it. The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates between 3 and 5 million people in India alone are infected!

According to the Ministry of Health in Delhi, only 3% of Indians use condoms for birth control, since the tradition and culture dictate the women to undergo sterilization or to take pills. Prostitution plays a major role in spreading the disease among heterosexuals in urban areas. Although Mumbai appears to be the main focus for AIDS, rapid spread has occurred through other major cities as well². Mobility of people from cities to rural areas is so rapid that the disease may already be out of control in many areas.

The blood screening tests conducted at most hospitals in rural areas are not

adequate to confirm the virus, making blood transfusion no longer safe. The National AIDS Control Organization (NACO), the apex body for controlling AIDS in India has reported a high incidence (8.2%) of HIV positive among healthy blood donors in urban areas³. Moreover, used syringes are sometimes repacked and marketed for sale, which also threatens the transmission of contagious diseases, including AIDS.

AIDS is a sexually transmitted disease and as long as people are educated thoroughly and warned about the dangerous consequences of unsafe sex, there is less to fear. Unfortunately, the intervention programme launched by the NACO had very little impact in controlling the spread of the epidemic³. The current educational programmes are often restricted to the passive dissemination of information through posters, media and the display of safe-sex billboards behind automobiles. More aggressive efforts are therefore needed to reach out to each and every rural/urban community throughout India, to combat the spread of this disease. The state and central government agencies must build specialized shelters for the victims. More funds must be spent for effective AIDS awareness campaign, research, routine screening tests and treatment.

People from all walks of life must take an active role to promote AIDS

education. It is time for the regional and national celebrities to involve themselves in helping the victims and educating everyone, because it would certainly bring quicker awareness among the rural public. Remember, how the late Princess of Wales (Diana) reached out to the AIDS victims, shook hands to console them and also raised millions of pounds for their welfare? India has experienced and handled the outbreak of deadly diseases in the past⁴ and we hope that AIDS can also be controlled and eradicated eventually.

1. AIDS Epidemic Update, UNAIDS, Geneva, 2000.
2. Schgal, S., *Bull WHO*, 1998, **76**, 509–513.
3. Choudhury, N., Ayagiri, A. and Ray, V. L., *Transfusion Med.*, 2000, **10**, 1–4.
4. Karlen, A., *Man and Microbes. Disease and Plagues in History and Modern Times*, Simon & Schuster, New York, 1995.

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