

the past fifty years of history that the Pakistani government and the Pakistani army are accountable to no one, not to the people of Pakistan and certainly not to a set of physicists.

The hypocrisy of the signatories is clear when one considers that the same persons were studiously silent when the US government denied a visa to R. Chidambaram, the Chairman of the Atomic Energy Commission, to attend a scientific meeting in USA. Such selective indignation cannot but cast doubts on the motives of the signatories. As for tensions, are India and Pakistan the only two countries in a state of conflict at present? Why do not these do-gooders try and organize such panel discussions about the stalled Palestinian peace process, or the continued barbaric treatment of Iraqi citizens by way of never-ending sanctions, all allegedly to protect them from their supposedly despotic leader? It is hard to escape the suspicion that the panel discussion was organized not so much with any real hope of 'alleviating tensions' but merely to draw attention to the participants and to keep their peace-mongering credentials in good orders with the powers that be. Otherwise it is obvious even to a child that physicists, *per se*, have no role at all to play in alleviating tensions be-

tween India and Pakistan. The recent intrusions into the Kargil area by Pakistani troops masquerading as 'mujahideen' should dispel any doubts on this point.

Also, it is not clear just how Jayaraman's academic freedom was violated by his having been denied permission to attend the meeting in Atlanta. Presumably, academic freedom refers to freedom to pursue one's academic activities without hindrance. It is necessary to distinguish between attending a meeting to present one's research findings or some such academic activity vs attending a policy-oriented (publicity-oriented?) panel discussion on a topic far removed from one's academic specialization. In what capacity would Jayaraman have attended the meeting? Was it in his individual capacity? As a faculty member of Matscience? As a representative of Indian foreign policy? Clearly it is not the third, so it comes down to either the first or the second. If the first, we would argue that anyone who is an employee of Matscience can never pretend to be acting in his individual capacity. Whether we like it or not, so long as we continue to be employees of our respective organizations, whatever we say will be interpreted as reflecting, at least in part, the official

position of our employers. The only way for some-one to say and do what he feels is to quit one's employment – not otherwise. So long as Jayaraman is a faculty member of Matscience, he is subject to the decisions taken by the Director. Ill-informed and ill-motivated criticisms of the Director's decision from self-righteous and far-flung groups of persons should be dismissed with the contempt they deserve.

Finally, it is not clear to us why *Current Science* is getting entangled with an issue that is neither current nor scientific. When all the ideological garb is stripped away, all that remains is a difference of opinion between Jayaraman and his Director. Surely, there are hundreds of scientists in our country who sometimes disagree with the decisions of their Director. We would hate to see *Current Science* degenerate into a forum where petty personal squabbles are pursued.

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## Debating Pokharan-II

Publication of a statement signed by some physicists along with Editors' note (*Curr. Sci.*, 1999, 77, 208) does not make it clear whether it has been published on the request of the signatories or solely at the Editors' initiative. Recalling the coverage of Pokharan-II event in *Nature* (UK) resembling a tabloid report, is *Current Science* on a campaign trial against India's efforts to acquire nuclear weapons following western opinion? It is indeed very unfortunate that Indian intelligentsia and elites excel in selling national interest for petty gains, and accolades emanating from the West.

Dissent is most welcome, and state policy is not necessarily representative of national interest. A serious effort to understand strategic aspects, R&D

aimed at defence, and long-term impacts of high-tech warfare should have been undertaken by concerned scientists, and scientific associations; which has sadly not been done. Moreover, this has to be done with responsibility, keeping national interest in mind. To campaign actively against nuclear policy of India, and at the same time enjoying privileges and facilities at a publicly-funded institution is unethical, and to justify it invoking 'academic freedom' is hypocrisy. Director of IMSc deserves support for performing his duty, and he is morally right.

I wish to comment on the assertion in the statement that 'We feel the present age compels us to think in global ... international peace'. To think global is fine but any physical activity is

constrained to localized space-time. It is not a compulsion of 'the present age', but enlightened perception of ancient Indian seers to think of the universe as one, and identify it with one-self. Only then, one is able to recite peace hymns of vedas, not just for international peace, but for universal peace. As regards 'academic freedom', the panel discussion was definitely not on a subject of physics, and had political and social aspects. Pursuit of knowledge naturally elevates one to freedom; and gradually one becomes least dependent on society. Only such a person can claim to be a 'world-citizen', and free to express his views irrespective of social or national boundaries. However, a person working for defence research or selling intellect for money doing re-

search in a business organization forfeits academic freedom; even the most liberal organization restricts the freedom. Jayaraman is certainly availing the academic freedom unthinkable in a similar US scientific organization, and

the signed statement smacks of a propaganda.

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*Editors' note: All correspondence in Current Science is submitted by the authors. The 'Editors' note' referred to above was to minimize a long explanatory preface on the origins of the signed statement.*

## Election fever versus scientists' anguish

In the past three weeks, the scientific community and laity have been agitated by the high-handed and difficult-to-understand behaviour of the union ministry of social justice and the animal welfare board in confiscating experimental monkeys at National Centre for Laboratory Animals (NCLAS), in Hyderabad. This centre works under the administrative control of the National Institute of Nutrition (NIN), a flagship laboratory of over 80 years standing under the Indian Council of Medical Research (ICMR). What is even worse is the delay in granting registration to this centre which is one of the best animal facilities in the country, and which has done a lot to promote laboratory animal science and laboratory animals welfare. As a person who was in charge of this centre and associated with its modernization process, I am greatly concerned, confused and anguished, about what is happening. Concerned, because animal experimentation is an important component in medical research, and NCLAS is a premier centre for supply of standardized, disease-free animals to government, university and private institutions all over the country. For the past two months the work of NCLAS has come to a grinding halt and with that, work at many other institutions which rely on NCLAS for supply of small laboratory animals. The loss in terms of money and under-utilization of human resource at NCLA and other research institutions and waste due to interrupted experiments, runs into crores. I am confused because, the number of smaller and less equipped animal facilities including those that applied for registration after NCLAS did, have been granted registration. NCLAS is being denied saying their application did not reach the ministry in time. This indeed in an unfortunate case of error of

omission rather than that of commission and that too not by NIN, but due to some administrative lapse at the level of ICMR (I am told) in New Delhi. The fact that several earlier applications from NCLAS in the format earlier stipulated are pending with the ministry is being forgotten. Rules keep changing and scientists do get confused and make errors. Strangely, at least one other Institution which applied after the last date has got the registration. In a bureaucracy-centred country, administrative lapses by government officials cannot be questioned but those by scientists must be punished in the most unreasonable way.

NCLAS also runs training programmes and publishes newsletters to ensure proper and humane use of laboratory animals for research and testing, and has struggled hard for the three 'Rs' – Refinement, Replacement and Reduction in animal science. Refinement at all levels in laboratory animal experimentation (housing, environment, and experimental techniques) results in more humane use of animals, more reliable results and reduction in the number of animals needed for research. Alongside is the attempt to replace laboratory animals with *in vitro* techniques. But the scope for this is limited because eventually trials and testing have to be at the level of whole animals before human beings.

The Department of Biotechnology Government of India, along with the Indian Council of Medical Research has spent large sums of money in the past 15 years to modernize the animal facility at NCLAS, and the staff of this centre is very knowledgeable and highly dedicated. Housing of animals meets strictly the internationally prescribed standards. I recall a symposium that NIN-NLASC (at that time known as

Laboratory Animals Service Centre) held jointly with Animal welfare board and Blue Cross in September 1993. My first question to them was: 'are you against all types of animal experimentation or want humane experimentation?' Their answer was, they are not against animal experimentation. They visited the facility and were basically satisfied and I recall feeling happy and satisfied after that symposium that some one was talking our language. The monkey facility was not up to the mark at that time but since then, a big cage for gang housing has been constructed and monkeys released for play and exercise in that. For conducting experiments, monkeys have to be kept in individual cages and those cages are of prescribed international standard. I also recall that at a subsequent international symposium held at NIN in September 1994, an expert in animal behaviour, J. M. Irwin from USA observed the monkeys in the gang cages as well as experimental cages and told me that they were remarkably well – physically and psychologically.

Yet for whatever reasons the animal activists have confiscated the monkeys. Assuming for a moment that some improvement is needed, is this an excuse to interrupt an important experiment involving a drug and stop all other activities involving smaller animals about which there is no complaint? For instance, will the Indian army stop fighting because it is not well-equipped and jawans are at greater threat of losing their lives? War against disease may not be as dramatic, but it is very important because disease kills innocent people who cannot fight the war against disease. It is true that multinational drug companies have better facilities and outwit Indian companies which are trying to help the nation by bringing out