

slot for them in INSA. It is a well-known fact that the discipline of molecular biology was created due to the pioneering efforts of physicists, both experimental and theoretical. There is an overlap of basic science, applied science and technology in all disciplines and due weightage must be given for inter-disciplinary research.

INSA plans to involve itself in popularization and promotion of science education at all levels. A beginning has been made at the school level by recommend-

ing new curriculum in science subjects to the NCERT. INSA is also involved in promotion of history and philosophy of science (Virk, H. S., *Curr. Sci.*, 2000, **79**, 1514). In fact, it is the only organization doing its bit in this inter-disciplinary area. It is my earnest desire that INSA should recognize the contribution of scientists engaged in promotion of science education in India by electing them as its fellows. To cite an example: B. L. Saraf (formerly of Rajasthan University, Jaipur) at the Institute for Laboratory Education,

Indore had involved himself in promotion of physics-laboratory education in the country for the last 30 years and has achieved tremendous success, but INSA never bothered to elect him a fellow.

H. S. VIRK

*Department of Physics,  
Guru Nanak Dev University,  
Amritsar 143 005, India  
e-mail: virkhs@yahoo.com*

## Jyotir-vigyan

P. Balaram's editorial in *Current Science* (2000, **79**, 1139) drew my attention to the UGC proposal of introducing Vedic Astrology in Universities, though it was not clear whether this subject was to be included in the science faculty. A news report says that Patna University plans to create a Vedic Astrology Department, that will not be in the science faculty. If this course is not a part of science faculty, the campaign by scientists against it is misplaced. K. N. Ganeshaiyah (*Curr. Sci.*, **80**, 2001, 719–720) has quite convincingly refuted Balaram's alarmist editorial. Media reports show how a serious matter pertaining to knowledge is being scandalized by the so-called eminent scientists from premier institutions (see *The Hindu*, 19 April 2001 and *Hindustan Times*, 25 April 2001). A statement is quoted ending with 'astrological charlatans', but then science philosopher Paul Feyerabend made the statement 'Leading intellectuals with their zeal for objectivity. . . are criminals, not the liberators of mankind', and 'Scientists are every bit the equal of ancient myth-tellers, troubadours and court jesters' (*Sci. Am.*, May 1993, p. 36). A letter from IUCAA, Pune claims that the UGC move will take us backwards to medieval times. Even if we accept this claim, do they have any evidence to prove that modern society is more enlightened than the medieval one? Ganeshaiyah observes that these scientists reject any idea originating from Hindu heritage, but cite erroneous views of Greek philosophers (though he is unnecessarily apologetic using the word Hindu). In contrast, Misner and Wheeler cite the Indian Vedas to have propounded the ideas related to 'physics is geometry' (*Ann. Phys.*, 1957, p. 535–536). Why is it

so? I think the main reason is that most of the leading scientists in India are imitators of West, lack original thoughts, and they neither understand philosophy of science nor ancient Indian wisdom. Media is obsessed with the eminent people, and in this case, Narlikar spearheading the crusade against 'Vedic astrology' has become the authority on this.

In his recent interview (*Times of India*, 3 May 2001), Narlikar has misinterpreted Vigyan as science. Vigyan is an ancient word and translating it as 'science' and then objecting to 'jyotir-vigyan' shows either lack of understanding or ill intention. He says that no astrologer could predict any event with certainty. If no physicist can prove an established law, does that invalidate the physical law or show the incompetence of the physicists? Reading the interview, it becomes clear that 'jyotir-vigyan' for Narlikar means 'what the stars foretell'/horoscopes, which are a few of its applications only.

Returning to science, Narlikar says that, 'There are no controlled tests to prove astrological predictions right'. Is there any such test for cosmological models? Is cosmology science? Why does he believe in the steady state theory disproved by 'observational evidence as defined by science establishment?' Big-bang cosmology and early universe scenario do not differ from mythological stories, yet scientists continue demanding huge funds for their so-called scientific predictions combining cosmology with high energy physics. The standard model of particle physics has as many as 19 or 20 (!) adjustable parameters; 'The history of super-symmetry' is exceptional. In the past, virtually all major conceptual break-

throughs have occurred because physicists were trying to understand some established aspect of nature. In contrast, the discovery of super-symmetry in the early 1970s was a purely intellectual achievement, driven by the logic of theoretical development rather than by the pressure of existing data' (see *CERN Courier*, March 2001, p. 19); there is no testable prediction of super string theory – a pure speculation. There are many eminent scientists in the premier institutions working on such speculations made by western scientists; real science is being strained, and meagre public resources are being misused for such fantasies. Today big science is suppressing new ideas. If the tyranny of the orthodox science establishment is not challenged, we are sure to enter the age of darkness. Narlikar and crusaders against jyotir-vigyan would do well to address the problems on philosophy, methods and limitations of science rather than indulging in misleading propaganda diverting public attention from their failures.

Finally a remark on the UGC move: I do not think that either the HRD Minister or the UGC Chairman also understands 'jyotir-vigyan'. In an article I read that 'exporting this knowledge' also figures in UGC circular. It may be true because nowadays there is a brand of Indian heritage that is aimed at being marketed for 'dollars', and why not! NRIs have proved marketability of 'yoga', 'ayurveda', etc! The real danger to 'jyotir-vigyan' is from such people, not from Narlikar & Co.

S. C. TIWARI

*1, Kusum Kutir,  
Mahamanapuri,  
Varanasi 221 005, India*