

Gupta's fossils may be Himalayan fakes, says GSI

The accusation of fraud against V. J. Gupta in the Himalayan fossil controversy has been jolted back into prominence by a recent investigation. The Geological Society of India (GSI) has carried out a detailed evaluation of papers published by V. J. Gupta in the *Journal of the Geological Society of India* between 1969 and 1988. GSI did this on a direction from its council. The evaluation was done with the help of stratigraphers and palaeontologists with experience in Himalayan geology. The report of the evaluation appears in the January 1991 issue of GSI's journal.

Gupta, of Panjab University's Centre for Advanced Study in Geology, was accused of giving false data, vague and misleading information about the location of his fossil finds, and plagiarism. According to the GSI report, the most

glaring deficiency noticed in nearly all of Gupta's papers in the GSI's journal is the absence of precise locality information. Expressing concern that papers lacking essential locality and stratigraphic data were published, the report states that the fact that most of the papers were short, one-page or two-page notes may have made both referee and editor pass them for publication as preliminary notes. This phenomenon is, of course, not restricted to palaeontology or GSI's journal.

Gupta has thus far not answered the charges satisfactorily and has failed to confirm the genuineness of his fossil collections. 'It is obvious', says the report, 'that the fossil finds of V. J. Gupta are not reliable, that there are internal inconsistencies, that the data are incomplete, bordering on disinformation.

The fossil records should, therefore, be ignored till such time when more reliable and reproducible evidence is forthcoming.'

The GSI's report gives assessments of 19 papers of Gupta. Most of the comments say that the papers must be viewed with suspicion. In several cases, other palaeontologists have asserted that Gupta has actually reported gifted or stolen specimens as Himalayan fossils.

The report was circulated among members of GSI's council and leading palaeontologists and stratigraphers, of whom only two did not express approval of the report's recommendation. It was even sent to Gupta himself before publication, to give him 'one more opportunity'. The report states that Gupta did not respond.

Meeting reveals changing face of organic chemistry in India

Scientists who have visited North America would be well aware of the Gordon Conferences, informal get-togethers of specialists, in secluded (but comfortable) locations. Not surprisingly, the concept of such meetings has become attractive here too. The National Organic Symposium Trust (NOST) conducted such a symposium in organic chemistry at Hassan in 1988, and has followed it up with a second NOST symposium at Aurangabad in December 1990.

The second symposium was dedicated to the memory of Professor Biman Bihari Dey, of Presidency College, Madras (see accompanying biographical note)—a pioneer (whose birth centenary apparently went uncelebrated in 1989) who had trained trail-blazers like T. R. Seshadri, K. Venkataraman and T. R. Govindachari. A carefully chosen group of old and young chemists from various academic institutions in the country, as well as a few from industrial R&D establishments and representatives from CSIR and DST had been invited. There were 34 presentations in all, packed in

morning and late evening sessions. The afternoons were left entirely free for personal exchange of ideas and for marvelling at our cultural heritage in Ajanta and Ellora. Chemistry was presumably conceived in the caves, even as the bard would like to see 'books in running brooks'.

The Hassan meeting has asymmetric synthesis as its focal theme. At Aurangabad, the emphasis was on bio-organic chemistry. Full-length presentations reviewing the state of the art in this frontier area were impressive. The participants were exposed to the methodology of protein design and engineering, the use of abzymes, and to recent success stories across the world in the design of molecular receptors. A talk by M. Nagarajan (University of Hyderabad) on the mechanism of action of enediyne antitumour antibiotics (e.g. neocarzinostatin) aroused all-round interest, in terms of structure, postulated intermediates, biological activity, and targets for synthesis.

The review lectures were followed up with numerous presentations on work

going on in India on various aspects of bio-organic chemistry. Talks ranged from the use of enzymes in synthesis to simulation of enzymatic action and biochemical cycles by means of simple molecules and reagents. A modest beginning seems to have been made in the area of host-guest chemistry, both in the design of specific receptors and in chemical applications. In line with the general trend of the symposium, a talk on classical synthetic approaches to oligosaccharides was placed in the context of the larger theme of synthesis of artificial antigens and leprosy vaccines.

The terminology, pace, enthusiasm and colour slides of the bio-organic chemists did have an intimidating effect on 'conventional' synthetic chemists, who routinely assume the spotlight in organic chemistry meetings. It was, however, evident that the latter continue to be a busy lot. The development and use of many new organic, inorganic, and organometallic reagents that do work in India were discussed. The periodic table was covered from hydrogen through boron, carbon, flu-