

## GEOLOGICAL EXHIBITION

As a part of Prof. William Dixon West Centenary Celebrations, the Department of Applied Geology, Dr. H.S. Gour University, Sagar organized a Geological Exhibition from 27<sup>th</sup> to 30<sup>th</sup> November. Prof. K.B. Powar, the Secretary General, Association of Indian Universities, New Delhi was the Chief Guest. The main theme of this exhibition was to create awareness about geosciences among school children, college students and the general public. The University is striving to introduce geology in schools in order to upgrade the syllabus in graduate and post-graduate levels.

Prof. P.O. Alexander played main role in organizing the

exhibition. Prof. S.N. Pandey furnished satellite imageries and aerial photographs of different terrains. A computer-CD named A to Z in Structural Geology, by P.P. Roday became a highlight for our exhibition. Informative paintings, working models and gemstone collection proved to be important attractions.

*Department of Applied Geology,*

*Dr. H.S. Gour University,*

*Sagar, M.P.*

*Email: pvenumanohar@lovelmail.com*

P. VENU MANOHAR

## DISCUSSION

**CHEMISTRY OF ECLOGITIC GARNETS FROM BAHRADIH KIMBERLITE, RAIPUR DISTRICT, MADHYA PRADESH** by Abhijeet Mukherjee, Amitabh Tripathi, Prakash K. Singh and E.V.S.S.K. Babu, Jour. Geol. Soc. India, October 2000, v.56, pp.425-430.

S. Viswanathan, 10, Bapuji Apts., Rajendra Prasad Road, Dmobiqli (E) - 421 201 comments:

The paper has some basic irregularities which can be avoided by the authors in future. My comments on the paper are the following:

- (1) The garnets analysed are not from the kimberlite. According to petrographic description the rock is a garnet-bearing mica peridotite where the pyroxene is mentioned as enstatite (p.427). How then are the garnets described as eclogitic garnets in the title of paper?
- (2) All the relevant references cited and described in the paper on Na<sub>2</sub>O abundances pertain only to eclogitic inclusions in diamond or the enclosing eclogitic host rocks. Only five out of fifty garnets analysed show Na<sub>2</sub>O ≥ 0.07. Therefore Na<sub>2</sub>O in garnets is no valid indicator of diamond in so far as Bahradih kimberlite is concerned.
- (3) The significance of the TiO<sub>2</sub> vs Na<sub>2</sub>O diagram (Fig.3) is not brought out in the text.

Abhijeet Mukherjee, National Mineral Development

Corporation Ltd., Khanij Bhavan, Masab Tank, Hyderabad - 500 028 replies:

The reply by co-authors and myself to the points raised by S. Viswanathan is as follows:

- (1) We have not indicated in the petrographic description that the host rock is a "garnet-bearing mica peridotite". We have observed the presence of suspected enstatite, which needs confirmation by electron microprobe, as also the rock nomenclature of kimberlite/lamproite. Garnets described in this study belong to the eclogitic xenoliths from host kimberlite/lamproite.
- (2) In spite of the presence of Na<sub>2</sub>O ≥ 0.07 only in a limited number of samples, still it is a good indication of diamondiferous nature of the host rock, as used for target selection in diamond exploration the world over. The Na<sub>2</sub>O content of 0.07 cutoff is selected only as an indicator and not as a confirmatory benchmark.
- (3) TiO<sub>2</sub> vs Na<sub>2</sub>O diagram only highlights the minor substitutions in garnet structure. We accept the inadvertent mistake in missing the description. We will be happy to offer further clarifications and exchange ideas with S. Viswanathan.