monsoon-dominated regions such as the Indian sub-continent, Southeast Asia and Australia during the modern, historical and the late Quaternary period. The behaviour of the rivers to natural and human-induced changes also formed the theme of some papers. Some papers dealt with the analysis of the evidences of extreme hydrological events such as floods and techniques of reconstruction of palaeodischarges. The remaining papers were concerned with the palaeohydrological and the modern hydrological conditions in Brazil, Spain, Siberia and Namib desert. A special lecture on recent water-related activity on Mars was also presented.

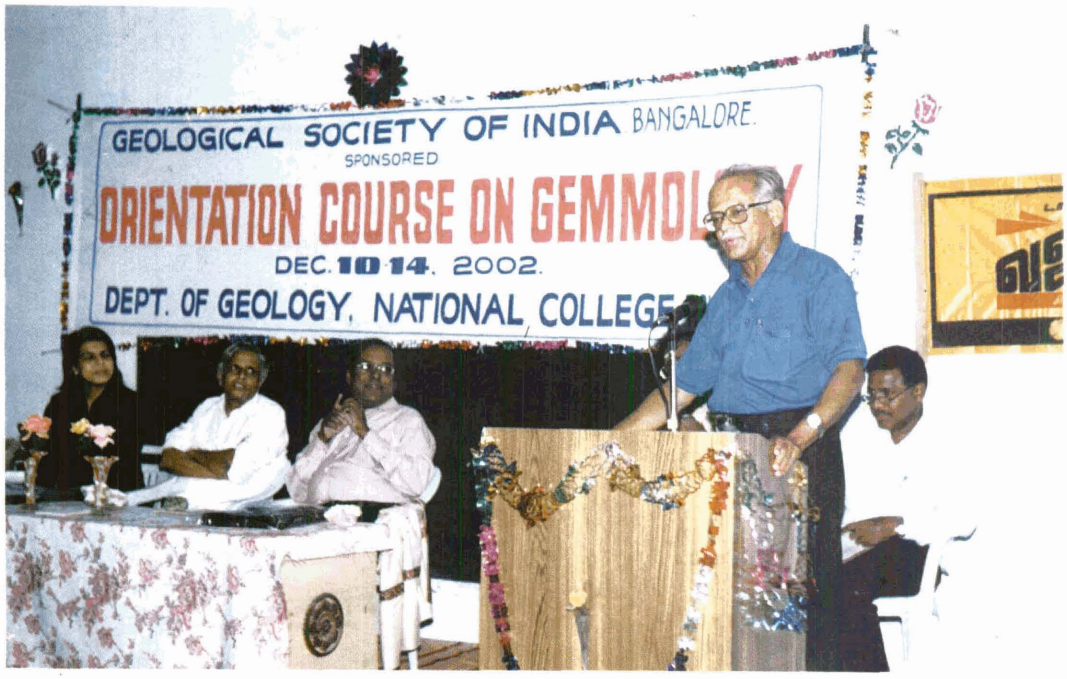
The three-day post-conference field trip included visits to late Quaternary alluvial deposits and Toba ash deposits near Morgaon, colluvial deposits near Wai, the laterites and Ghat escarpment in Mahabaleshwar and coastal features and laterites in Goa. Thirty-two participants, including twelve foreign participants, attended the field trip.

Dr. Vishwas S. Kale with his vast experience and unique ability of organization, made the proceedings extremely smooth and flawless all through.

Department of Geography VEENA JOSHI
S. P. College, Pune - 411 030

REPORT ON THE GEMMOLOGY COURSE AT TRICHY

An orientation course on Gemmology co-sponsored by the Geological Society of India, Bangalore was conducted in the Department of Geology, National College, Tiruchirapalli during 10-14 December, 2002. Students, researchers, teachers, traders and businessmen from different states participated in the course. The inaugural function was presided over by Dr. N. Seshadri, Principal, National College, Tiruchirapalli who appreciated the inclusion of dealers and traders as participants in the course. In his inaugural address, Dr. Muthiah Mariappan, Vice-Chancellor, Bharathidasan University, Tiruchirapalli stressed the importance of the scientific approach in the study of gems. He made a suggestion to start a Certificate Course in Gemmology which can later on be upgraded to a Diploma level course. The Course Director, Professor R.V. Karanth of the Geology Department, M.S. University, Vadodara, Gujarat in his well-illustrated introductory address spoke about the role of geologists in locating new gem deposits and value enhancement of gemstones. The salient features of the potential of export of gems, trade opportunities,



Prof. R.V. Karanth, Course Director addressing the participants.

procedures and the subsidies extended by the Government were explained in a special lecture delivered by Mr. Ruben Hobday, Deputy Director, The Gem and Jewellery Export Promotion Council, Chennai. Dr. K. Ramamoorthy, Principal, Pavender Bharathidasan College of Arts and Science, Tiruchirapalli and K.C. Subhash Chandra, Asst. Secretary, Geological Society of India, Bangalore offered their felicitations. Earlier, the Organising Secretary of the course, Dr. K. Anbarasu, Reader, Department of Geology welcomed the gathering and Dr. S. Sathyamoorthy, Head, Department of Geology proposed the vote of thanks.

After the inaugural session Dr. R.V. Karanth gave a lecture on "Gem Materials, Gem and Jewellery Industry". He highlighted the importance of gems in the jewel industry. The various properties of gems were illustratively explained by Dr. Pravin Henriques with many examples. There was a session on Gemmological instruments by Dr. Pravin Henriques - the advantages and the practices that are adopted were explained in detail. Synthetic aspects of gems and the procedures were explained lucidly by Dr. R.V. Karanth. On the same day there were two practical sessions for imparting knowledge on the properties of gems and the design and working practices of gemmological instruments.

On the second day there were four lectures. Three lectures by the course Director – one on 'Gem Enhancement' in which he dealt in detail various methods by which the value of gems could be increased. This included heat treatment, irradiation, making of doublets etc. In another lecture on 'Diamond', identification, cleaving, cutting and polishing and grading, value addition, distribution, mode of occurrence and origin were explained. In a subsequent lecture entitled 'Corundum, Beryl, Chrysoberyl' – their varieties, significance, occurrence and origin were highlighted. Ashok D. Gandhi, Joint Secretary, All India Synthetic Gem Manufacturers and Dealers Association gave a vivid lecture on lapidary processes which was of immense benefit to the participants as he took care to explain slicing, performing, cutting and polishing of facets and the tools and machineries used. The practical sessions were devoted to the study and identification of diamonds and other important gemstones and also the grading of diamonds. The sessions were handled by Dr. Pravin Henriques and Dr. R.V. Karanth.

On the subsequent day, the participants were exposed to the varieties of quartz, topaz, zircon, garnet, iolite, sphene etc. – their identification, properties and value addition – in the lecture on 'Less Important Gemstones' by the Course Director. All other kinds of gems of organic origin inclusive of shark tooth, ivory, antlers, horns, tortoise shell etc. apart from pearl, coral, amber and the process of culturing of pearls were dealt with in a lecture by Dr. Pravin Henriques on 'Organic and Miscellaneous Gems'. The geological aspects of gemstones, especially the process of formation were explained in detail by Dr. R.V. Karanth in a lecture on 'Geological Milieu of Gemstones'. In the practical session, the same authors gave instructions about the identification of gems which was a continuation of the second day's programme.

On the fourth day, participants were taken to field. Places of gem interest nearer to Tiruchirapalli namely, Keeranur (Ruby), Panjappatti (Iolite), Unjalur (Garnet), Sittampundi (Ruby), on the way to Kabilar malai (rock crystal and moonstone) were shown to them. Participants had a chance to see the rock types and mining. They enjoyed visiting the collections and interaction with the local gem collectors.

On the final day, the participants were given a practical exposure to gem cutting and polishing. A visit was arranged to see the machineries and other instruments nearer to the National College, Tiruchirapalli, in a cutting and polishing unit owned by Ms. Celin Selvi. It was followed by a lecture on 'Jewellery Design' by Maryada Sharma, Business Development Manager, Signity Middle East FZE, Mumbai who enlightened the participants on the history, patterns, techniques, and uses of gem stones, especially the value addition of gems when set in jewellery.

The valedictory function of the course was held on the evening of 14th December 2002. The chief guest at the function, Dr. SM. Ramasamy, Director, Centre for Remote Sensing, Bharathidasan University, Tiruchirapalli stressed the need for popularizing geology and called upon the government of Tamil Nadu to introduce geology as one of the subjects in school education. Dr. R.V. Karanth made an appeal to the manufacturers and traders of the city to modernize the cutting and polishing industries pointing out the growing competition from China, Korea, Switzerland etc., in the international gem trading. The Geological Society of India prepared certificates of participation, and an aluminium gemstone collection box were given individually to all participants by Ms. Maryada Sharma. Major Dr. P.R. Srinivasan, Deputy Head, Department of Geology, National College, earlier welcomed the gathering and the vote of thanks was given by the Organising Secretary, Dr. K. Anbarasu. All the arrangements for the course were carried out by the students of the Department in co-ordination with Professors, P.R. Srinivasan, R. Bhaskaran, V. Kumar and D. Srinivasan.

Department of Geology K. ANBARASU
National College
Tiruchirapalli - 620 001