

**COURSE ON
'PRINCIPLES AND PRACTICES IN MINERAL EXPLORATION'**

Initiated by the Geological Society of India and sponsored by the Department of Science and Technology, a course on 'Principles and Practices in Mineral Exploration' was organised during 24th to 29th March, 1986 in the premises of the Geology Department of Andhra University, Visakhapatnam. The main aim of this course was to share on-the-ground knowledge in Mineral Exploration techniques with professional geologists and teachers teaching Economic Geology. Six official participants took part in the course. The faculty members, research scholars and final year M.Sc. students of Andhra University availed themselves of the opportunity of attending this course and the general daily attendance, on an average, was around 40.

The main themes that were covered under this course are :

- 1) Panorama of Indian Mineral Deposits (Dr. B. P. Radhakrishna).
- 2) Basic principles and existing practices in Mineral Exploration (Dr. P. K. Ramam).
- 3) Surface and sub-surface studies in Mineral Exploration (Dr. P. K. Ramam).
- 4) Remote Sensing and Photo Geology in Mineral Exploration (Dr. K. L. V. Ramanarao).
- 5) Geomorphology in Mineral Exploration (Prof. R. Vaidyanadhan).
- 6) Sampling techniques (Dr. P. K. Ramam).
- 7) Reserve estimation (Mr. K. T. Shasikumar).
- 8) Synthesis of exploration data and report writing (Dr. P. K. Ramam).

Special lectures on the Indian Manganese (Prof. J. S. R. Krishna Rao), Indian Bauxite (Dr. P. K. Ramam), Marine mineral resources (Dr. B. L. Narasayya), Basic concepts in nuclear geology (Prof. A. V. R. K. Sastry) and role of Micro-Palaeontology in oil exploration (Prof. M. V. Subbarao) were also included.

Since the thrust was on mineral exploration, the participants were also introduced to the different types of plans that are required to be prepared in a Mineral Exploration Project. Practical exercises covering the principles and methodology of preparation of assay histograms, isopach and stratum contour plans were also covered. The intricacies in weighted average calculations and their relevance in mine planning and quality control were elucidated at length. Eventually, the course ended with a concluding lecture on synthesis of exploration data and report writing.

The participants, when asked for their opinion on the course inputs, opined that the duration of the course should be more and practical exercises given more weightage.

P. K. RAMAM
Course Leader