IGCP 264 : REMOTE SENSING SPECTRAL PROPERTIES REPORT OF THE PUNE (INDIA) MEETING - 1991

The fifth annual meeting of the UNESCO - IUGS sponsored IGCP Project 264 [Remote Sensing Spectral Properties) was hosted by the Department of Geology, University of Poona between the 2nd and 12th December, 1991. The meeting convened under the theme 'Geological Applications of Remote Sensing, with emphasis on Spectral Properties', included a training workshop for Young Scientists from developing Nations and a seminar.

The training workshop covered various geological aspects of remote sensing. The major subjects covered included (a) Characters and attenuations of the EMR, (b) Spectral properties of minerals, rocks, soils and vegetation, (c) Field and laboratory measurement of the spectral properties, (d) Remote sensing platforms and sensors, (e) Spectral response variations [causes of + effects in the integrated response/data], (f) Thermal remote sensing, (g) Imaging spectrometry and its scope, (h) Principles of image enhancement and data manipulation, (i) Data integration and applications of GIS, and (j) Case histories and future sensor systems. The lecture series was coordinated by M. H. Podwysocki (Chairman, IGCP 264) between the 2nd and 7th December, 1991. The faculty of experts who conducted the lectures included (i) C. Elvidge [NEPA, U. S. A.], (ii) P. Hauff [Spectral Research, U. S. A.], (iii) F. Kruse [CSES, Univ. Colorado, U. S. A.]. (iv) H. Mollat [BGR, Germany], (v) T. Munday [CSIRO; Australia], (vi) S. D. Naik [SAC/ISRO India], (vii) S. N. Pandey [Univ. Sagar, India], (viii) A. V. Phadke [Univ. Poona, India], (ix) U. L. Pitale, [GSI, India], (x) M. H. Podwysocki [USGS, U. S. A.], (xi) C. V. S. Prakash [SAC/ISRO, India]. (xii) B. Sahai [SAC/ISRO, India], (xiii) V. Singhroy [CCRS, Canada], (xiv) V. Subramanyan [IIT (Bombay), India], (xv) P. Trefois [RMCA, Belgium], (xvi) Y. Yamaguchi [GSJ, Japan]. The program also included demonstrations of spectroradiometres and image processing systems. Visits to the Centre for Development of Advanced Computing (C-DAC) and the Ground Water Survey and Development Agency Headquarters were included in the Workshop program.

In all twenty-five trainees had been selected for this workshop, originating from 9 different nations, on the basis of the applications received on or before 30 June, 1991. However, the trainees from abroad were faced with severe limitations of support for travelling and unfortunately all except one (from China) could not make it to the workshop. The Indian trainees (15) were supported by funding from the US-India Fund and the Department of Science and Technology. The Indian trainees were drawn from various Indian Universities, IIT's and professional organisations such as the AMD, ISM, ONGC, etc. as well.

On the 8th December the participants went for a field trip to an area about 60 km west of Pune. A field-guide (co-authored by A. V. Phadke, H. C. Kulkarni and J. G. Mulay) was issued on this occasion. The field trip was designed to

demonstrate the effects of the variations in slope, vegetal and soil cover on the recorded responses of the same lithology (basaltic flows) in various types of remotely sensed images/data. The nature of signatures of intrusives and fracture zones (recorded on the aerospace images as lineaments) was highlighted. The measurement of field spectra was also demonstrated.

On the 9th December, the delegates visited the Space Applications Centre (I.S.R.O.) at Ahmedabad. The various activities of the Centre in the field of applied remote sensing were shown. The efficacy of the Indian Remote Sensing Satellites (IRS 1A and 1B) in various remote sensing activities was highlighted. The foreign delegates noted with satisfaction that India is perhaps the only developing nation which had realised the importance of this tool in several fields and had taken efforts to evolve and implement an indiginous program in this regard.

On the 11th and 12th December, the last part of the meeting was held at the Department of Geology, University of Poona. The seminar of invited and contributed research papers on the theme ' Geological Applications of Remote Sensing with emphasis on spectral properties ' was inaugurated by B. G. Deshpande, the former Head of the host Department. K. R. Gupta (Department of Science and Technology, Govt. of India) presided over this function. The abstract volume containing 44 accepted abstracts was released on this occasion. In all 30 papers were presented in oral and poster sessions, with contributions from Australia, Belgium Canada, China, Germany, India, Japan and the U. S. A. The Indian participants were drawn from several Indian Universities, Regional Remote Sensing Service Centres, I. I. T.'s, SAC/ISRO, and other professional organisations.

Through the 11 days of this meeting, in all 74 delegates (excluding the dignitaries, such as Mr. B. C. Poddar, Dr. P. P. Kale, Dr. Peter Hydemann (Science Consul. US Embassy), Mr. S. K. Dutt (US Embassy Science Office), Dr. K. R. Gupta, etc ; and the local delegates) registered either as experts for the Workshop, trainees, seminar participants or observers.

The enthusiastic assistance extended by the staff of the University of Poona, and particularly the staff and students of the Department of Geology, University of Poona was extremely gratifying.

V. V. PESHWA
(Convenor)

VIVEK S. KALE
(Organising Secretary)