

## PRESENTATION OF AWARDS

The presentation of awards in recognition of significant contributions to Earth Science is an important part of the Proceedings of the Annual General Meeting of the Geological Society of India and during 2003 the following awards were presented: L. Rama Rao Birth Centenary Award, S. Narayanaswamy Award, *JGS* Radhakrishna Prize and H.S. Pareek Award.

### **L. Rama Rao Birth Centenary Award**

Presenting the award to Dr. G.V.R. Prasad the Vice-President said:

Dr. G.V.R. Prasad, born in 1958, had an excellent academic record and obtained his Ph.D. from Panjab University, Chandigarh and served a\ international post-doctoral Fellowships. He is presently Professor in the Department of Geology, University of Jammu. He is the recipient of the National Mineral Award for the year 1994 and Shanti Swarup Bhatnagar Award-2003. Dr. Prasad has twenty years research experience in the field of micro-



vertebrate palaeontology and stratigraphy specifically taxonomy, diversity, palaeoecology, taphonomy, and palaeobiogeography of Mesozoic microvertebrates, especially mammals. His report of first late Cretaceous tribosphenic (palaeoryctoid) mammals from India can be considered as a landmark discovery which changed the prevailing views on the biogeographic origins of early mammals and favoured the Indian subcontinent as the centre of origin for archontans (including tree shrews, flying lemurs and early primates).

In selecting Dr. Prasad for L. Rama Rao Birth Centenary Award, the Council took note of his outstanding contributions to Indian Palaeontology.

In acknowledging the Award Dr. Prasad said:

I deem it a great honor to receive the L. Rama Rao Birth

Centenary Award-2003. For an Indian palaeontologist, this award represents the ultimate recognition of his/her work. I am extremely thankful to the Council of the Geological Society of India, particularly Dr. B.P. Radhakrishna, for considering me worthy of this award. I shall strive hard to live up to the expectations of the Society.

Late Dr. S. Subba Rao of Vikram University, Ujjain, was instrumental in my selection of Geology as a subject at the graduation level. I am deeply indebted to my teacher Prof. Ashok Sahni for imparting basic training in Vertebrate Palaeontology and for his constant encouragement and guidance over the years. I started my research work with the Deccan intertrappean biota. Later on, I have extended my studies to the vertebrate fauna of the Upper Gondwana formations of Pranhita-Godavari valley. The discovery of Late Cretaceous mammals of Laurasian affinity from the Deccan intertrappean beds of India in 1988 is the most important finding of my research career. Subsequently many new taxa of various vertebrate groups, such as amphibians, snakes, lizards, rhynchocephalians, and mammals, have been documented from the Deccan volcanic province and the Upper Gondwana deposits, which have changed many of the established concepts on the origin and biogeographic distribution of a number of Mesozoic vertebrate groups. Whatever little I could contribute to our current understanding of the diversity, intercontinental affinities, and evolution of Mesozoic vertebrates of India was due to active co-operation of a number of colleagues from India and abroad and my students. Therefore, I regard this award as an appreciation of our collective work.

I wish to acknowledge the unstinted support extended by my wife all through these years in my research endeavours.

It is a matter of gratification that four of my research students were recipients of L. Rama Rao research grants in the last four years. I once again thank the Society for bestowing this honour on me.

### **S. Narayanaswamy Award**

This award instituted in the memory well-known

economic geologist Shri S. Narayanaswamy of Geological Survey of India, is given to any Earth Scientist whose work has resulted in important contribution in the area of economic geology.

Presenting the award to Dr.R.Dhana Raju the Vice-President said:

Dr. R. Dhana Raju was born in 1942 and obtained his M.Sc. and Ph.D. from Andhra University. After serving as a CSIR Pool Officer attached to Andhra University, he joined Atomic Minerals Directorate for Exploration and Research in 1973 as a scientific officer. He superannuated as Associate Director of AMDER in 2002. The major contributions of Dr. Dhana Raju include petromineralogical data base needed for scientific assessment of uranium and thorium mineral



deposits and occurrences, and in proving the reserves of beach sands along the coast of Orissa and Andhra Pradesh. His description of deposits of uranium in a wide variety of geological environments has helped in understanding the genesis of the deposits investigated by the AMD. Dr. Dhana Raju has received the National Mineral Award - 2002.

In recognition of his contributions Dr. R. Dhana Raju has been selected for the S.Narayanaswamy Award-2003.

Receiving the award Dr. Dhana Raju expressed:

I express my gratitude to the President, Dr. Radhakrishna garu and Members of the Council of the Geological Society of India for selecting me to the prestigious 'S. Narayanaswami Award' in the field of Economic Geology for the year, 2003.

This honour belongs more to our Organisation, namely the Atomic Minerals Directorate (AMD) for Exploration and Research of the Department of Atomic Energy and its team-work in exploration for atomic minerals in India, rather to me as an individual. AMD is a remarkable,

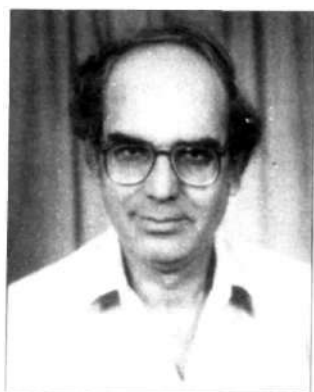
multidisciplinary organization, known as a family of like-minded scientists involved in multistage field and laboratory exploration activities, the spectrum of these covers from the front-end of literature-search and remote-sensing and aerial surveys for selection of target-areas through numerous exploratory stages to the rear-end of establishing a mineral deposit by pilot-scale demonstration of its cost-effective extraction of U and others like Rare Metals (Nb-Ta, Li, Be, Sn etc.) and Rare Earths (RMRE), besides heavy minerals in sands, all of which constitute the raw material for many hi-tech industries like nuclear, special steels and alloys, electronics, telecommunications, defence etc.

Now it is my pleasant duty to express my grateful thanks to numerous persons for their valuable contributions and help at different stages of my work. My nearly three decades of work in AMD (April, 1973 - Dec. 2002), providing petromineralogical, including ore petrological support to the exploration activities for U and RMRE, resource-evaluation of heavy minerals in sands, supervision of the work in the Laboratories of Petrology, XRD, XRF, Spectrograph, Electron Microprobe and Biogeochemistry, training a few second-generation scientists and related research work was possible mainly due to unstinted support and encouragement that I have received from my numerous colleagues in AMD to whom I am thankful. Amongst these, I must mention S/Shri G.S. Udas, T.M. Mahadevan, A.C. Saraswat, S. Viswanathan, G. Prabhakar Rao, T.K. Bhattacharya, B.S. Negi, K.B. Rao and H.M.Verma, who impressed me greatly. Before joining AMD, I was initiated into the subject of Geology, first at the Govt. Arts College, Rajahmundry and later at the Geology Department, Andhra University, Waltair by many teachers including late Prof. C.S. Pichamuthu and Prof R.Vaidyanadhan. Of these, Prof. J.S.R. Krishna Rao, as my Ph.D. guide was mainly instrumental in inducting me into various aspects of research. I am grateful to Dr. Andre Pacquest formerly of COGEMA, France for training me in Lab. Studies in exploration for U. My Guru, late Shri Pilla Rama Rao garu, who, besides teaching me English up to degree-level, instilled in me the necessity of having ideals of high integrity, honesty and character, all of which make a good human being, I owe a deep sense of gratitude. Furthermore, I thank my Ph.D. students, scientist-friends in many national organizations, teacher-friends in many Universities and Editors of some leading Earth Science Journals for enabling me to upgrade my knowledge through research-supervision, discussion, adjudication of theses and review of scientific papers. Last, but not the least, I heartily thank my parents, my wife, Manikyamba, who is here, and other family members for their support.

### JGSI - Radhakrishna Prize

While presenting the prize to Dr. K.S. Misra, the Vice-President said:

Dr. K.S. Misra presently Director, Geological Survey of India, Pune obtained his M.Sc. from Vikram University. He was awarded Ph.D. by the University of Manitoba in 1983. He joined the Geological Survey of India in 1971 and worked in Saurashtra Region of Gujarat on Quaternary Miliolite Limestone and Deccan Volcanics till 1974. He was trained in photogeology and remote sensing at the Indian



Institute of Remote Sensing, Dehra Dun. At various times he was on deputation to Centres of Study like I.I.T., Mumbai, M.P. Council of Science and Technology. He worked in Canada on a Fellowship and has specialized in analyzing remote sensing data and has carried out extensive work in physical volcanology of Deccan Trap. The prize has been given for his paper on "Arterial System of Lava Tubes and Channels within Deccan Volcanics of Western India" published in the Journal of the Geological Society of India, v.59, pp.116-124.

Accepting the prize Dr. Misra said:

It is a great honour for me, to be selected for the JGSI Radhakrishna prize. I will always cherish this prize bearing the name of Dr. B.P. Radhakrishna. I accept to do more significant research on Deccan Volcanics in the coming years.

This prize, I take it, is given in recognition of remote sensing techniques which are normally not applied in the study of large flood basalt province. Recognition of physical volcanological features have so far not been given due importance over geochemistry, petrography and radiometric dating. This prize is also recognition of Pune office of GSI, located in the heart of Deccan Volcanic Province

which provided congenial atmosphere for laboratory and field investigation, and interaction of experts on volcanology.

It was during the 1993 AGM and Seminar at Vadodara, Dr.B.P. Radhakrishnan acknowledged my reporting of interesting geological features from the Deccan Volcanic Province and encouraged me to report and publish in the journal of the society. Since then I have been looking for such physical volcanological features in various areas of Deccan Volcanics and reported them in subsequent AGM's and Seminars at Mangalore, Chennai, Kochi, Bhopal, Varanasi, Chandigarh and now at Goa.

On this occasion I would like to acknowledge the efforts of my father Dr.K.S. Misra (Senior), a Professor of English. I had unique opportunity to learn Geology at very many universities and institutes. To start with, I would like to mention the name of Prof. S.B.Misra, who was my first teacher of Geology during B.Sc. course and developed in me interest in the subject. I learnt Igneous Petrology from great teachers, Prof. S.C.Chatterjee, Dr.S.Subbarao and Prof. A.C.Chatterjee of Vikram University during M.Sc. programme.

During Ph.D research Prof. S.S. Merh of M.S. University of Baroda taught me Structural Geology and Tectonics. At Indian photo-interpretation Institute, Dehra Dun; Prof. B.N. Raina, Prof. R.P. Sharma taught me the science of image interpretation and Prof. D.P. Rao supervised the geomorphological project work. At I.I.T. Bombay I learnt Igneous Petrology from Dr.S. Vishwanathan and Prof. K.V Subbarao. Ph.D. advisory committee at the University of Manitoba, Winnipeg, comprising Prof. Don Anderson, Prof. D.H. Hall and Dr. Cris Anderson taught me courses in applied and exploration Geophysics, Structural Geology and Remote Sensing.

During my stay in Canada, Mr. V Roy Slaney of Geological Survey of Canada and Canadian Radarsat Project were largely responsible to develop my understanding of microwave remote sensing, basement tectonics, oil exploration in Western Sedimentary Province and regional tectonics of Sudbury area in Ontario. Further I learnt a lot of Geology from some of the finest geologists of GSI whom I had chance to know personally. Shri S.Narayanswami, Shri Y.G.K.Murthy, Dr.M. V.N.Murthy, Dr.M.Ramakrishnan and Dr.Anupendu Gupta provided excellent guidance and supervision. Prof. Peter Hooper, Prof. Ronald Greeley and Prof. Alan Hoffman read manuscripts and provided valuable suggestions. My colleagues from GSI particularly Shri A.B. Sabale, Dr.S. Vaddadi, Dr. R. Bhutani and Prof. A.V. Phadke of Pune University have participated in lively discussions both during laboratory and field studies. The

favourable atmosphere for research at home, provided by my wife Neela has been the main force to keep the work going.

### U.S. Pareek Award

This award was instituted in 1998 by Dr.H.S. Pareek, formerly of the Geological Survey of India, to be given to the best paper published in the Journal of the Geological Society of India on coal science in a calendar year. The Council adjudged the paper by Dr. (Mrs.) Alpana Singh titled "Rank Assessment of Panandhro Lignite Deposit, Kutch Basin, Guajrat" in the Journal of the Geological Society of India, v.59, pp.69-77 as the best paper on Coal Science.

Presenting the Award to Dr. (Mrs.) Alpana Singh in absentia (it was received on her behalf by Prof Anshu K. Sinha, Director, Birbal Sahni Institute of Palaeobotany, Lucknow), the Vice-President said:

Dr. (Mrs.) Alpana Singh was born in 1955. She obtained her M.Sc. in Botony from Lucknow University and received



Ph.D. in 1989 for her thesis on Palynology and Maturation studies of Neyveli Lignite, South India. She joined the Coal Department of Birbal Sahni Institute of Palaeobotony, Lucknow in 1981 and presently working as Scientist-C. She has experience in pursuing research in the fields of Tertiary

Palynology, Lignite and Coal petrology and dispersed organic matter studies.

In her reply, communicated, Dr. (Mrs.) Alpana Singh expressed:

I express my thanks to Council members of the Geological Society of India, especially to the President Dr.B.P. Radhakrishna, for selecting my paper for this award. I feel greatly honoured at this recognition because the award is after the eminent pioneer coal petrologist of the country. This award is an incentive to my scientific pursuits. It will always boost my scientific zeal and inspire me to work hard.

I started my scientific carrier at the Birbal Sahni Institute of Palaeobotany, Lucknow in 1981, as Junior Scientific Assistant. I was awarded Ph.D. Degree in 1989 for multi-disciplinary research work on Neyveli Lignite, Tamil Nadu that included Palynology, Petrology and Dispersed Organic Matter studies. Later, I concentrated on petrological studies of Indian Permian Gondwana coals and Tertiary lignites. The investigations under normal incident light and blue light excitation (fluorescence mode) of coal/ lignite macerals have helped to understand the problems related to its genesis, deposition, maturation, CBM potentiality, etc.

The paper provided detailed rank (maturation) data on Panandhro lignite in time and space in relation to its utilization potential. It was concluded that the sub-bituminous C stage lignites can form a good base for high quality products of upgrading. The paper provided good evidence for the suitable characteristics of lignite for briquetting and carbonization processes. The work indicated that more mature lignites may be expected in Block 4 towards northeast of the Block 1, investigated presently.

I am thankful to the Department of Science and Technology (Govt, of India) and BSIP for necessary help and facilities to carry out the research work. I express my gratitude to my parents for their constant support and guidance that made me work to be successful in all spheres of life.