

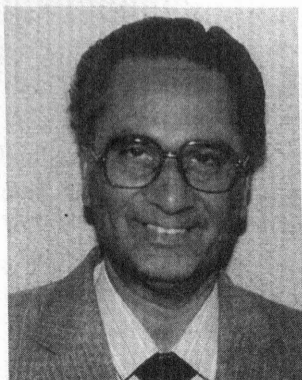
Presentation of Awards

Presentation of Awards in recognition of good work is an important part of the Annual General Meeting. The Society presented four awards – B. Rama Rao Birth Centenary Award, JGSI Radhakrishna Prize, H.S. Pareek Award and N.N. Chatterjee Award.

Bellur Rama Rao Centenary Award

This is the highest award which the Society is in a position to bestow to a geologist who has made outstanding contribution to the Precambrian Geology of India as a result of life time study. The Council of the Geological Society of India has selected Prof. Ashit Baran Roy, Professor of Geology, Mohanlal Sukhadia University, Rajasthan in recognition of his contributions to our knowledge of the geology of Rajasthan. In presenting the award to Prof. Roy the President of the Society said:

Prof. A.B. Roy is known for his significant contributions to the Geology of Rajasthan. He has served the Department of Geology, M.L. Sukhadia University in various capacities and retired as Professor of Geology in 1998. He is presently an Emeritus Scientist. The Council of the Society, taking note of his notable contributions to the Geology of Rajasthan, has decided to confer the Bellur Rama Rao Birth Centenary Award to Dr. Roy.



S.V. Srikantia, Secretary of the Society read out the following citation listing Dr. Roy's contribution to our knowledge of Geology of Rajasthan.

Dr. Ashit Baran Roy had his higher education in Jadavpur University obtaining M.Sc. in Applied Geology in 1961 and Ph.D. in Geology in 1965. Prof. Roy served in different capacities in the Department of Geology, University of Rajasthan up to 1988, and in Mohanlal Sukhadia University, Udaipur from 1988 to 1998 and

presently Emeritus Scientist, Indian National Science Academy. He carried out post-doctoral research on the evolution of slaty cleavage in 1975-76 as Alexander Von Humboldt Fellow at Ruhr University, Germany.

Professor Roy is involved in studies on different aspects of Precambrian geology of the Aravalli mountains for the last three decades. His contributions to our understanding of the evolution of one of the most ancient mountain chains in India are significant. An important aspect of his study is his elucidation of the basement-cover relationship. He led a group of research workers who not only confirmed the presence of an unconformity marking the Archaean-Proterozoic boundary pointing to its presence in regions affected by extensive tectono-thermal events. He has proposed a model of evolution of Palaeoproterozoic Aravalli basin which has provided a new insight into the exploration of phosphorite deposits in the region. Professor Roy has also proposed tectonic models for the evolution of nepheline syenite bodies of Kishangarh, one of the oldest known alkaline bodies in the Precambrian, and a model for the exhumation of the Early Proterozoic granulites (Sandmata granulites) in the Archaean basement rocks as thrust-bound sheets.

Replying to the felicitation Prof. Roy said:

I feel greatly honoured, more so because the award is instituted in the name of an earth scientist who was one of the earliest to understand the importance of sedimentary structures in erecting stratigraphic sequence of some of the oldest rocks that occur in Dharwar region. I could not check up the earliest dates when the presence of sedimentary structure was recognised as the basis of erection of stratigraphic succession in India. But then, there is a possibility that this was done in our country even before the early thirties when E.B. Bailey was informed by Tanton about the importance of the sedimentary structures in the interpretation of the well-known structure in the Scottish Highlands, the Ben Lui Syncline.

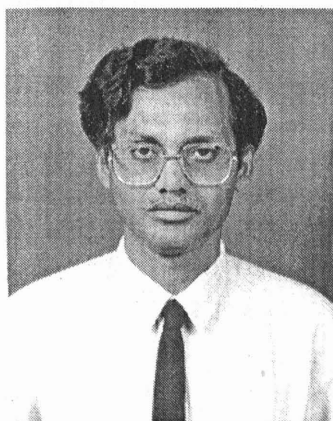
The last four decades have witnessed a remarkable progress in our understanding of the nature and evolution of the Precambrian crust, primarily due to the interpretation of data generated in different branches of earth science

including isotope geology, geochemistry and geophysics as well as planetary geology. Nevertheless, field mapping and the relationship between the different rocks remains the mainstay of our understanding of these ancient rocks. I learnt this very fact from my long association with some of the most ancient rocks of the world. My natural advice to the young generation, therefore, is "spend more time with rocks; you will develop an intimate association with them. You will soon become aware how the silent and insensible rocks start talking to you. Once you are able to develop a dialogue, you will find how profusely this helps to enhance your understanding of the rocks".

N.N. Chatterjee Award

This award was instituted in the year 1996 and is to be given once in two years to the authors of the best paper in the field of energy resources. The first award was made in 1997. The Council of the Society has selected Dr. Ganti Narayana Rao, Deputy Director General (Geology), Oil and Natural Gas Corporation Ltd., Chennai for the award. In presenting the award the President of the Society said:

Dr. G. Narayana Rao has had an excellent academic record with a doctorate degree for his work on Krishna-Godavari basin in search for hydrocarbon resources. He is credited with the standardization of the lithostratigraphy of the Krishan-Godavari basin. He has estimated hydrocarbon resources of both Krishna-Godavari and Andaman Islands in association with Soviet experts. He



has widely travelled in Latin America, Middle East, Russia and Kazakhstan. In recognition of his outstanding contribution to the knowledge of hydrocarbon exploration the N.N. Chatterjee Award for the year 2001 has been bestowed on him.

Accepting the award Dr. Narayana Rao said:

At the outset I want to express my thanks to the Council members of the Society for selecting me for the award. I also express my gratitude to my teachers D.L. Satyanarayana of MR College, Vizianagaram, Prof. R. Vaidyanadhan of Andhra University and Prof. D. Mukhopadhyay, formerly of the Indain School of Mines, for making me worthy enough to stand before all of you today. We the geologists of Oil and Natural Gas Corporation have the task of locating both structural and stratigraphic features below surface upto a depth of 5 km. For this task geophysical data are the main source of information. My teacher for the study of these aspects was A.N. Dutta. The help and support, provided by P.K. Chandra, former Vice Chairman of ONGC and Mr. Y.B. Sinha, Director, Exploration, ONGC in all my endeavours is thankfully acknowledged. The guidance provided by Dr. K. Satyanarayana and Dr. C. Kanpathi in shaping the work is gratefully acknowledged. I am also thankful to the Editorial board of the American Association of Petroleum Geologists Bulletin who have not only accepted the work for the September 2001 issue but also made K.G. Basin known worldwide by picturing the basin on the cover page of the journal.

H.S. Pareek Award

This award was instituted in the year 1997 and is to be given annually to the author or authors of the best paper in coal science published in the Journal of the Geological Society of India. The award was presented for the year 2000 to Dr. Manoj Shukla of the Birbal Sahni Institute of Palaeobotany at Lucknow and his coworkers G.P. Srivastava, Mahav Kumar, Anand Prakash and Prabhat Kumar for the paper 'Recent Embedded Insects and other Organic Remains from Warkalli Formation, Kerala Coast, India' published in JGSI, v.56, pp.315-319. In making the award to Dr. Manoj Shukla, President of the Society said:

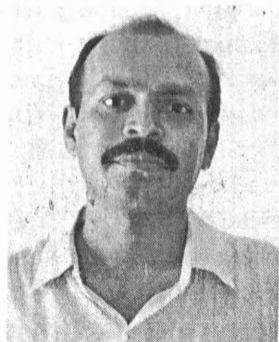
Coal forms the most important mineral resources of India. It was unfortunate that research papers on coal hardly get published in the Journal of the Soccity. In order to give a fillip to the study of coal, this award has been instituted. The Council has selected the paper by Manoj Shukla and coworkers. The paper describing plant resins in lignite beds of Warkalli is an original contribution recording the occurrence of *Culex* mosquito beetle larvae and *Ambrosia* beetle in the lignite beds of Warkalli, Kerala for the first time. This is an important discovery.



Manoj Shukla



G.P. Srivastava



Madhav Kumar



Anand Prakash



Prabhat Kumar

Dr. Manoj Shukla was born in 1951. He had his education at Lucknow and graduated in geology from Lucknow University in 1973. He started his scientific career with a study of the palynostratigraphy of Hutar coalfield and Permian palynology. He was later drafted for study of Precambrian palaeobiology. During the last few years he renewed his interest on the study of coaliferous sediments and has contributed to the organic matter characterization from lignites.

In acknowledging the award Dr. Shukla said:

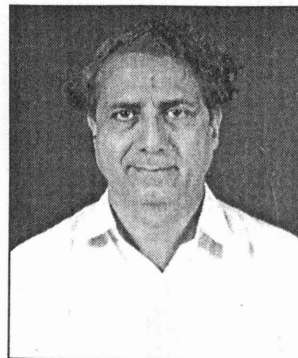
We are honoured at receiving the H.S. Pareek Award. Dr. Pareek is an eminent worker of coal sciences in the country. It is my privilege to express sincere thanks, on my own behalf and also on behalf of the other authors of the paper, Prabhat Kumar, Anand Prakash, G.P. Srivastava and

Madhav Kumar, to H.S. Pareek, Dr. B.P. Radhakrishna and the Council Members of the Geological Society of India for this recognition. Sir, we all feel delighted to receive this award which will provide us incentive to work with more vigour in the years to come.

At this moment I recall the brain storming session on palaeo-biochemical studies organized by Prof. Ashok Sahni at Chandigarh in December, 1993. Anand Prakash and I were delegates at this workshop. It was during this workshop that the first thought came to us to initiate this type of work at BSIP. Since then we have interacted with a number of workers to identify the right type of material for the study of ancient DNA. We had to look for the least degraded material preserved in conditions which could save the organic entities from changes that occur due to various processes in nature viz., hydrolysis and oxidation. Almost all these conditions are met with in the resin-embedded material often found associated with the brown coals.

JGSI Radhakrishna Prize

This prize was instituted in 1995 is to be given to the authors of the best paper published in the Journal of the Geological Society of India during the calendar year. The Council, after considering carefully the nominations received, selected Dr. Upendra Raval and Koppireddi Veeraswamy of the National Geophysical Research Institute for their paper entitled "Radial and Linear Modes of Interaction between Mantle Plume and Continental Lithosphere" published in the Journal of the Geological Society India, v.56, pp.525-536.



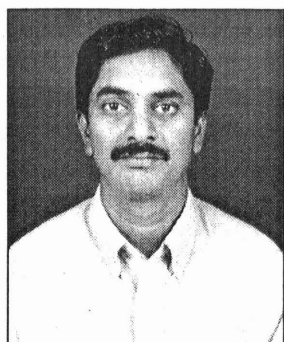
In making the award to Dr. Raval, President of the Society said:

Dr. U. Raval who hails from Gujarat joined NGRI in 1964 as a research fellow to work on the problem of theoretical geoelectromagnetics. He secured the doctorate degree in 1971. Since 1980 he has been engaged in studies

on geodynamical aspects of the Indian lithosphere with special emphasis on mantle plume activity. He has also attempted a synthesis of various datasets and constructed evolutionary models. Special interest of the paper lies in (i) plume-lithospheric interaction and consequent modification of geophysical state and structure, (ii) vulnerability of super-continental stability due to the combination of mobile belts and plumes, (iii) difference in physico-chemical characteristics of the crust, thickness of cratonic and mobile belt lithospheres and their response to resultant variation and consequent thermomagmatic effects, (iv) seismicity of the stable continental region and Himalayan convergent boundary. He has published about 50 research papers.

Dr. Raval is a very shy person and always prefers to be in the background. He is a well read man and extremely helpful in providing guidance to research workers. For the third time in succession, the prize goes to a scientist from NGRI, which emphasizes research activity at the Institute in the field of geology characterized by a steady formulation of new ideas.

Koppireddi Veeraswamy, the co-author, was born in 1957 at Kakinada and is working in National Geophysical Research Institute for the past 20 years. He acquired M.Sc. (Tech) degree from Andhra University in Geophysics and Ph.D. from the Osmania University for the thesis



entitled "Modelling of Electrical Structure Beneath Saurashtra Peninsula (Kathiawar) and its Adjoining Regions". His main areas of work are: (i) Acquisition, processing and interpretation of different geophysical data sets and (ii) Numerical modelling of electromagnetic induction and magnetotelluric studies.

Replying on behalf of himself and Veeraswamy, U. Raval said:

We express our deep sense of gratitude to the Society for this encouragement. This is probably the first

recognition of geophysical efforts and thus suggests that a much-needed and holistic integration of various facets of earth sciences (although bridging the gulf between them is somewhat presumptuous at present, according to Richard Kerr) has commenced right in the beginning of the millennium. Its association with the name of Dr. B.P. Radhakrishna, makes it a very special and lifelong fulfillment. Dr. B.P. Radhakrishna has directly and indirectly inspired and encouraged more than one generation of geoscientists working in different parts of the country.

This award is actually a recognition by one of the most prestigious scientific institutions in the country – of the concept of mantle plumes and the key role it may play in geology, geophysics and geosystems (G³). This emerging subject apparently complements the plate tectonic framework such that both together are able to explain most of the geochemical, geological and geophysical observations. Even in the earliest life of the earth, when because of hotter mantle plate tectonics had not commenced, the plume process appears to have been responsible for emergence of both the 'first crust' and 'first life' on the earth. Their episodicity during geological time matches with the vertical growth of the crust. This study has tried to draw attention to various geophysical, tectonic and geochemical inferences available on the western parts of the subcontinent and shows as to how these may be integrated in terms of interaction between continental lithosphere and mantle plume. Alternatively, in addition to plate tectonics, plume tectonics provides us with an additional process for synthesis of multi-parametric geodata sets. We hope that studies over the Indian lithosphere would be evaluated and assessed by keeping in mind the consequences of plume-lithosphere interaction also.

One of us has been fortunate to receive the constant encouragement and support from Dr. Hari Narain, the architect of the NGRI. Interest and importance of concept-based studies has been kindled by Dr. J.G. Negi, a research guide for one of us (UR). Dr. S.M. Naqvi, has been an important influence and lighthouse for this academic voyage as it helped us to recognise that all the deep-seated processes have to be finally constrained by the surface geology, since that is the directly 'seen' part of the earth. Combining the deep-seated process with geological field data, therefore becomes a very challenging and exciting task, particularly in this era when boundaries between litho-, hydro-, bio- and atmospheres are getting more closely interlinked towards better comprehension of the evolution and dynamics of the Mother Earth.