

## Presentation of Awards

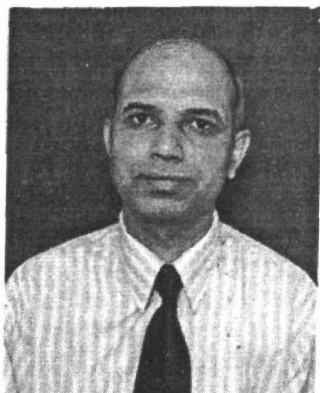
Presentation of Awards in recognition of good work is an important part of the Annual General Meetings and this year, the Geological Society of India presented the following five awards: JGSI Radhakrishna Prize, H.S. Pareek Award, K. Naha Award, S.S. Merh Award and M.R. Srinivasa Rao Award.

### JGSI Radhakrishna Prize

This prize was instituted in 1995 to be given to the author/authors of the best paper published in the Journal of the Geological Society of India during the calendar year. The Council selected Dr. Deepak C. Srivastava of the Department of Earth Sciences, Indian Institute of Technology, Roorkee for his paper "Deformation Pattern in the Precambrian Basement around Masuda, Central Rajasthan" published in the Journal of the Geological Society of India, v.57, pp.197-222.

While presenting the award to Dr. Srivastava, the Vice-President said:

Dr. D.C. Srivastava was born in 1956. He has had an excellent academic record and obtained his Ph.D. from I.S.M. Dhanbad. His thesis was highly commended by the external examiner – Prof B.E. Hopps of Australia. Dr. Srivastava is Professor in I.I.T, Roorkee. He received "Marie Curie" Award of European Communities for post-doctoral research and National Mineral Award 2000 of Government of India.



Dr. Srivastava's contributions cover a wide range of research areas, such as the palaeostress analysis by mathematical inversion of geological data, numerical simulation of folds, mechanism of thrust-related folding and structural evolution of Precambrian terranes in the Indian Shield.

This prize is given to Dr. Deepak Srivastava in recognition of his contribution and excellence of publication.

Accepting the award Dr. Srivastava said:

At the outset, I pray the Almighty for the speedy recovery and a very healthy, active and long life to Dr. B.P. Radhakrishna, who, despite having travelled all the way from Bangalore to Chandigarh, could not come to this meeting because of an accidental injury.

This prize is a very special honour to me because it is instituted in the name of Padamshree Dr. B.P. Radhakrishna, who is widely recognized as the doyen of Indian Geology. I have consistently been inspired and educated by his erudite and lucid descriptions of various facets of Indian Geology, ever since my student days.

I am grateful to Dr. V. Rajamani and Dr. S. Balakrishnan for enthusing me to take up structural studies in the Banded Genesis Complex; Dr. S.K. Tandon, Dr. K.R. Gupta and Dr. A. Mohan for consistent encouragement and the Department of Science and Technology for generous funding through the Deep Continental Studies program.

This prize is also in recognition of the Department of Earth Sciences at IIT, Roorkee, which has provided me a very congenial atmosphere for research during the last two decades. In particular, I am grateful to my students Shri Akshya Pradhan, Shri Sanjoy Nag and Shri J. Sahoo for their help during the fieldwork and, my colleagues Dr. S. Balakrishnan, now at Pondicherry University, and Dr. Dilip Mukhopadhyay for numerous, 'on the outcrop' discussions. My friends and colleagues, Dr. A.K. Sen and Dr. Dilip Mukhopadhyay readily helped me by entertaining numerous discussions on the complicated problems related to the geology of Masuda, of course over numerous cups of tea.

My work on the BGC around Masuda could have never taken a final shape without untiring support from my wife, Amita, my daughter Shruti and my son, Shubh; and the kind blessings of my parents. As the communication, regarding the prize reached me through Shri Srikantia's letter, I informed this to my mother. Friends, this was the last real good news that I could give to my mother before she breathed

her last on Sept. 27th, 2002. Truly, this prize is most precious to me in more than one sense!

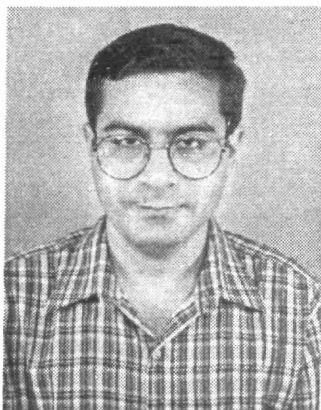
Finally, I thank the Council members for selecting my paper as the best paper and accept the prize with humbleness and humility. I know, it means a commitment to work harder and publish better papers in the Journal of the Geological Society of India, and I promise I will!

### K. Naha Award

Instituted in the year 1997 in the memory of the well-known structural geologist Prof. Khitindramohan Naha, the award is to be made once in two years to a young scientist below 40 years for significant contribution in the field of structural geology.

Presenting the award to Dr. Manish Atmaprakash Mamtani the Vice-President said:

Dr. Manish Mamtani is a young earth scientist of great promise and is only 32 years old. Dr. Mamtani has been carrying out research on the southern parts of Aravalli Mountain Belt since 1993. He started his research on the area as a doctoral student at the M.S. University of Baroda. He pursued a part of his Ph.D. research at the University of Heidelberg under Prof. R.O. Greiling. Dr. Mamtani has carried out structural, geological and metamorphic



investigations on the Lunavada Group of rocks in Gujarat. He has unravelled the superposed fold history of parts of the Lunavada Group. His work has revealed variations in grade of metamorphism within the southern Aravallis and exhumation of the region. The results from field, microstructural and Anisotropy of Magnetic Susceptibility (AMS) studies have furthered our understanding of the structure of the area. On the basis of the AMS studies, he demonstrated the presence of a third deformation in the

Lunavada Group of rocks, although mesoscopic scale evidences for the same were not preserved. Through his paper "Are crenulation cleavage mylonites on the microscale?" he has contributed to the field of structural geology by working on crenulation cleavages developed in schists of the Lunavada Group; this work revealed that deformation mechanisms keep varying at different stages of crenulation cleavage development. Presently, Dr. Mamtani is continuing his work on the region by concentrating on the granitoids of the southern Aravalli terrain. This work has provided information about the polyphase deformational history and kinematics of the gneisses. He is an Assistant Professor in the Department of Geology and Geophysics, Indian Institute of Technology, Kharagpur.

In selecting Dr. Mamtani for the K. Naha Award, the Council took note of his promise and as an incentive for further work.

Receiving the award Dr. Mamtani expressed:

I feel extremely honoured to receive the K. Naha Award of the Geological Society of India. Over the past several years, my research activities have mainly been concentrated on solving structural mysteries of the southern parts of the Aravalli Mountain Belt. I do not know whether I have done enough work to be worthy of this award, but the effort that has gone into the research has been sincere. Therefore, I accept the K. Naha Award in all humility and thank the Council of the Geological Society of India for selecting me for this award. During the course of my career in Geology, both as a student and as a researcher, my association with several senior scientists and colleagues has benefited me. I would like to take this opportunity to thank them.

I must thank Professor S.S. Merh (Vadodara) who has always motivated me to continue my research activities. Professor R.V. Karanth (Vadodara) and Professor R.O. Greiling (Heidelberg, Germany) supervised my doctoral research and have always provided me with proper guidance and encouraged me to think independently; I am grateful to them for their continued support over the years. I have learnt a lot through my association with Dr. Ronald Bakker (Leoben, Austria), Professor A.B. Roy (Udaipur) and Professor Cees Passchier (Mainz, Germany) and I thank all of them. I am grateful to Dr. S.P. Sychanthavong (Vadodara) who introduced me to the southern Aravalli terrain. I would also like to thank Professor M.P. Patel (Vadodara) who was my first teacher of structural geology and Professor A.K. Chaudhuri (Kharagpur) in whose association I presently continue to fine-tune my understanding of the subject. Finally, I must express a deep

sense of gratitude towards my parents, wife, Mona, my son, Saksham and all my family members for their moral support.

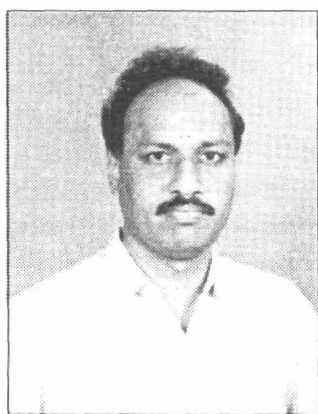
Over the past several years, my research on the southern Aravallis has been funded by the Council of Scientific and Industrial Research (CSIR, New Delhi), the German Academic Exchange Service (DAAD, Bonn) and the Department of Science and Technology (DST, New Delhi). I am grateful to all of them for their financial support to my academic endeavours. This award will motivate me to continue working hard and further my research activities.

### S.S. Merh Award

The award, instituted in the name of Prof S.S. Merh in the year 1996, is to be given once in two years to a scientist below the age of 45 years for significant contributions in the field of Quaternary Geology. The Council of the Society has selected Dr. Pothuri Divakar Naidu of National Institute of Oceanography for this award for the year 2002. In presenting the award the Vice-President said:

Dr. Diwakar Naidu, born in 1958, is a scientist EII in the National Institute of Oceanography, Goa. He obtained his Ph.D. from Gothenburg University, Sweden.

Dr. Diwakar Naidu carried out extensive studies on the variability of southwest monsoon during Late Quaternary period. These studies have brought out 2200 years cyclicality of the southwest monsoon system and onset of arid climate



around 3500 years in the tropics. He introduced a new concept on the changes of atmospheric  $^{14}\text{C}$  and a link between the atmospheric  $^{14}\text{C}$  and the southwest monsoon through the deep oceanic circulation changes. This provides a new insight in the understanding of the driving mechanisms

of the southwest monsoon and abrupt shifts in the climate during the Quaternary Period on the Global scale, an aspect which has a great relevance in the Indian context. Dr. Naidu has worked on the planktonic foraminifera along the west coast of India and also on Quaternary calcium carbonate fluctuations in the Indian Ocean.

Dr. Diwakar Naidu received Krishnan Gold Medal in 1997 and National Mineral Award in 1997.

In acknowledging the award Dr. Diwakar Naidu said:

Thank you very much for your generous words Dr. R. Vaidyanadhan, which mean a lot to me. I feel very honored to receive the S.S. Merh Award. I thank Dr. B.P. Radhakrishna, President and the Council members of the Geological Society of India for conferring this award on me. I am delighted to be here to express my thanks to those who have inspired, guided, encouraged and supported during my studies and later in the research. To start with, I owe a lot to the faculty of Applied Geology and Geology Departments of S.V. University, Tirupati for teaching me various branches of Geology in a methodical way.

Dr. Arrhenius's pioneering work on calcium carbonate vs. productivity of oceans has greatly inspired me to take up the Quaternary carbonate studies in the Indian Ocean. My interaction with Dr. Eric Olausson of Gothenburg University helped me to steer the problem in right direction. Prof. Bjorn Malgren my Ph.D. supervisor taught me many quantitative techniques such as spectral analysis, moving time series analysis and many more and now he is trying to drag me to the neural network techniques, all these have a great impact on my research. My post doctoral years at the Shizuoka University in Japan gave me good opportunity to work with Dr. Niitsuma, a meticulous researcher, from whom I learned a lot in obtaining precise stable isotope data with a minute quantity of sample.

At NIO, Dr. Desa, Director has been a great source of encouragement, I also would like to thank all my colleagues at NIO for their support in one way or other and Dr. Rajiv Nigam for nominating me for this award. I respect the support and encouragement rendered to me by various leading academicians in this country, I will single out just a few; Drs. M.S. Srinivasan, B.L.K. Somayajulu, K.V. Subbarao, K.S. Valdiya, H.K. Gupta and V.K. Gaur. I appreciate the financial support of the Department of Ocean Development for my research projects.

I want to end by thanking my wife Sridevi and our two children Neeharika and Vighna for their all round support. I thank you all very much. What a great feeling I have! Thank you again.

### M.R. Srinivasa Rao Award

The award instituted in 1982 in the name of Prof M.R. Srinivasa Rao, is to be given once in two years to an Indian Scientist who has made significant contributions in the field of Petrology. The Council of the Society has selected Dr. Padmanabhan Krishnamurthy for this award for the year 2002. In presenting the award to Dr. P. Krishnamurthy the Vice-President said:

Dr. P. Krishnamurthy, born in 1943, is the Regional Director of Atomic Minerals Directorate for Exploration and Research, Jamshedpur. He had a distinguished academic record and received his doctorate from the Grant Institute of Geology, Edinburgh.

Dr. Krishnamurthy has made significant contribution in petrological and chemical studies of picrite basalts, alkali basalts and upper mantle derived peridotite nodules from Western India and their bearing on the evolution of Deccan Basalts. His other works include origin and evolution of



carbonatites of India, occurring at Savathur, Tamil Nadu and Sung Valley, Meghalaya and Deccan Trap-Carbonatite research in the Narmada Valley. He developed conceptual approaches to Proterozoic uranium metallogeny in India with particular reference to the bimodal basalt-rhyolite suites of the Durgachar Supergroup of Madhya Pradesh and Maharashtra.

In recognition of these contributions, the M.R. Srinivasa Rao Award is bestowed on Dr. P Krishnamurthy.

Receiving the award Dr. Krishnamurthy said:

Prof. Vaidyanadhan, Vice-President of the Society and distinguished fellows and friends, I am thankful to Prof. Vaidyanadhan for the appreciative words spoken about me. I am also thankful to the Council members of the Geological Society of India for selecting me for the Prof. M.S. Srinivasa

Rao award for the year 2002. I understand that Prof. M.R. Srinivasa Rao had been an inspiring teacher and Guru and this award has been endowed by his students to commemorate his services to the study of geology, notably petrology.

Traditional Indian heritage assigns the most laudable and sacred niche for the Guru exemplified by the famous sloka:

*"Gurur Brahma Gurur Vishnu Gurur Devo  
Maheshwaraha Gurur sakhshat Parabrahma  
Thasmai Sri Gurave Namaha"*

My destiny and sojourn in pursuit of excellence in Earth Science began with the influence of illustrious teachers like Drs. S.C. Verma, M.G. Paithankar, A.K. Lahiry and M.S. Rao at the Department of Geology, Motilal Vigyan Maha Vidhyalaya, Bhopal in 1964 when I changed over from M.Sc Chemistry to Geology mainly due to these very inspiring teachers in B.Sc who impressed my young mind most. As told in the Bikshu Geetha of 'Srimad Bagavath' a guru can be an animate or inanimate thing that offers a feature or character to emulate. Thus my journey to learn more began at the Centre of Advanced study in Geology at the University of Sagar, M.P. with Prof. W.D. West as its Director in late 1966, after my M.Sc. Punctuality and dedication I learnt from him.

The 1960s belonged to the understanding and genesis of 'basalts' the most voluminous, mantle derived material on the surface of the Earth including the ocean floors. My researches began under Dr. G.R. Udas, a visiting Scientist to the Centre from AMD and the co-discoverer of the 1st Carbonatite in India at Ambadongar related to the Deccan magmatic episode, and thus began my studies on carbonatites and basalts in the Lower Narmada valley and other parts of India. Taking quick decisions and executing them in time were the hallmarks of Dr. Udas and I learnt these from him.

The first major flood basalt conference was organised at Sagar during 1969 at the Centre where several major studies on the Deccan Traps were in progress including field visits by research students with Prof. G.P.L. Walker. The doggedness and perseverance in seeking field relations of different rock types is a trait I learnt from him. The Commonwealth Scholarship during 1970-74 gave me an opportunity to work and interact with well known persons in the field of flood basalts and alkaline rocks at the Grant Institute of Geology, Edinburgh, notably Keith Cox my mentor and Ph.D. supervisor and B.G.J. Upton and Godfrey Fitton, who guided me when Keith Cox was away from Edinburgh on sabbatical and subsequently when he shifted

to Oxford in 1973. Gordon Biggar taught me atmospheric pressure melting studies on basalts. Picrite basalts due to their pre-eminent position in the scheme of basalt genesis, notably their mineralogy and chemistry became a fascinating part of my study there and subsequent years in India. The Indo-US (1981-87) and Indo-USSR (1988-1991) programme on Deccan and the Siberian Traps gave an opportunity to learn the 'American' and 'Russian' way of approaching basic problems of science with a good British background had been a cherished facet of learning from a number of Indian and foreign scientists notably Dr. K. Gopalan of PRL and NGRI, Dr. Doug Macdougall and John Mahoney of Scripps, Dr. Nesterenko of Vernadsky, Profs. Almukhamedev and Zolothukin of Irkutsk and Prof. Olenikov of Yakutsk. I must profusely thank all the illustrious Directors of AMD at different times since 1975 as every one of them influenced me differently and I had learnt from each one of them over the years. The encouragement, guidance and challenging opportunities they provided made me a better person and I am thankful to all of them.

Thus achievements in any discipline, I feel, are part of a larger collective efforts and accept this award with all humility on behalf of the innumerable individuals who have helped me to make the contributions possible spread over three decades. Let us emulate our Presidents both of our Society and the Nation and strive to make a better and prosperous India.

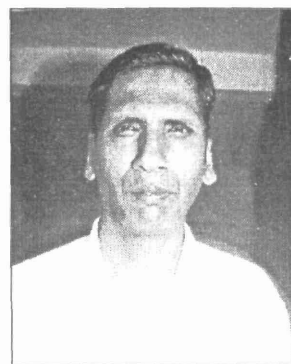
#### H.S. Pareek Award

For encouraging publications on topics related to coal sciences, this award of the Geological Society of India was instituted by Dr. H.S. Pareek, formerly of the Geological Survey of India, in 1998, to be given to the best paper published in the Journal of the Geological Society of India, on a subject of Coal in a calendar year. The Council of the Society selected Dr. J.K. Mohanty and his co-workers Sri S.K. Misra and Dr. B.B. Nayak of Regional Research Laboratory, Bhubaneswar, for their paper "Sequential Leaching of Trace Elements in Coal-A case study" published in the Journal of the Geological Society of India, vol.58, pp.441-447.

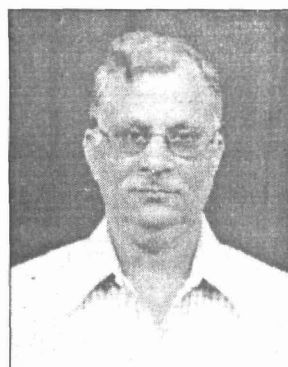
Presenting the award to Dr. J.K. Mohanty the Vice-President said:

The Talchir coal has attracted great industrial activity, in spite of its high ash content. Talchir coalfield is a unique deposit having as many as thirteen seams with a reserve of 35.7 billion tonnes. Use of low ash non-coking coal in power

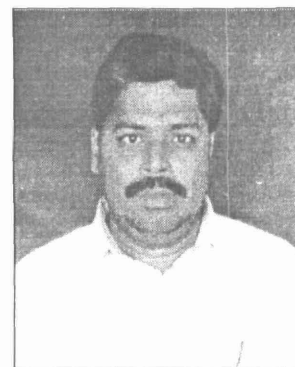
generation and the need for abatement for causative environmental degradation makes it a challenging task to utilize Talchir high ash coal with the least infringement with environmental equipose. Locational dynamics of Talchir coalfield necessitates all out pursuit for petrographic and chemical characterization of its coal to facilitate optimal utilization in thermal power generation. In late nineties,



J.K. Mohanty



S.K. Misra



B.B. Nayak

emphasis, on petrographic work of Talchir coal was renewed and rekindled by a group of scientists of RRL, Bhubaneswar. The publication under reference is significant and this research opens a new vista to the prospect of high ash coal utilization in eco-friendly process.

Dr. J.K. Mohanty, the first author of the paper, was born in 1957 and after a distinguished academic career joined Regional Research Laboratory and is now its Assistant Director. His field of interest includes mineralogical and geochemical characterization of ore deposits, oxides in particular, of low grade ores, coal and environmental pollution around mines, industries and ports.

Sri S.K. Misra, born in 1945, is a Scientist E II in the RRL Bhubaneswar. His area of R & D activities is related to sedimentary petrology and currently in coal petrography.

Dr. B.B. Nayak, born in 1958, is a Technical Officer in



the RRL and is currently engaged in many projects of the laboratory in the RRL.

Replying on his behalf himself and his co-workers Dr. Mohanty said:

Respected President and the distinguished gathering of geoscientific elite.

We feel greatly honoured to receive H.S. Pareek award for the best paper in coal science for the year 2002. Dr. Pareek is a coal scientist *par excellence* in India. The coal scientists in India in general and we, in particular owe a lot to him.

Coal, now-a-days plays a major role in power sector and its importance is bound to increase in the coming days. Orissa hosts approximately 28% (Talchir coal field about 18%) of total Indian non-coking coal reserve. Looking at the reserve base, its increasing utility in power sector and the environmentally non-friendly attributes of coal and its combustion products, we conceived of the idea that was transformed into reality through this modest

endeavour of trace elements leaching study on bulk coal samples, the results of which have been published in the prestigious journal of Geological Society of India.

We are thankful to the President and Council members for selecting our paper for this award. We owe our gratitude to the proposer and the reviewer for their kind recommendations. Our sincere thanks are also due to Dr. R.K. Sahoo (Retd. Scientist), a constant source of inspiration behind this pursuit.

Encouragement and timely advice received from colleagues of Regional Research laboratory, Bhubaneswar are gratefully acknowledged.

Last but not the least, we are enamoured to have been the recipient of an award relating to Talchir coalfield, by the name of a person who coincidentally implanted the very first seed of petrographic study of coal of the same coalfield. This award will act as a catalyst to continue more in depth study of non-coking coals of Talchir coalfield and problems related to its utilisation in the coming days.

## ANNOUNCEMENT

### TRAINING COURSE ON THEORY AND PRACTICE OF INDUCTIVELY COUPLED PLASMA (ICP) – OPTICAL EMISSION SPECTROMETRY AND MASS SPECTROMETRY

In order to provide an opportunity for young research workers as well as for professionals in the industry, it is proposed to organise the above training course under the auspices of the Geological Society of India between 3rd and 5th February 2003 at the National Institute of Oceanography, Panjim, Goa. The course will be offered by Prof. J.N. Walsh and Dr. S. James of the Royal Holloway College, University of London, UK.

Registration fee is Rs.2000/- (includes cost of lecture notes). In the case of teachers and students, registration fee is reduced to Rs.200/-

Those who have necessary preliminary knowledge and intend updating their knowledge on ICP-OES and MS and its methodology and applications are requested to contact: Prof. K.V. Subbarao, Department of Earth Sciences, Indian Institute of Technology, Powai, Mumbai - 400 076. **Phone:** (022)25767267 (O); 25768267/25721632 (R); **Email:** subbu@geos.iitb.ac.in or Dr. V.K. Banakar, National Institute of Oceanography, Dona Paula, Goa - 403 004. **Phone:** (0832) 2456700 (O); **Fax:** (0832) 2456702/24567003; **Email:** banakar@csnio.ren.nic.in or banakar@darya.nio.org