

## P.N. Srivastava Medal 1999



### Introduction by Prof Anshu K. Sinha

**D**R (Mrs) Archana Tripathi started her academic career in the Institute as Junior Scientific Assistant in the year 1972 and has reached to the present status of Scientist 'D'. She is simple, silent and sincere worker, full of zeal and enthusiasm. Her hard work, devotion and conviction to science accomplished her to attain P. N. Srivastava Medal for the year 1999. This award was established in the year 1971 by Mrs P.K. Srivastava, in memory of her late husband, Dr P. N. Srivastava, a Junior Scientific Officer at the Institute. It includes a Gold Medal and a Citation. It is awarded every alternate year from 1997 for the best piece of research being carried by Scientist 'D' of the Institute.

Born in Allahabad, Uttar Pradesh, on 22<sup>nd</sup> July 1949, Archana received her Bachelor of Science Degree from Isabella Thoburn College, affiliated with the University of Lucknow, Lucknow, UP, India. MSc (Botany) and PhD degrees were conferred upon her by the same university in the years 1969 and 1977 respectively. Her dissertation dealt with fossil pollen and spores of Lower Gondwana. The title being "Palynology of the Carbonaceous sediments in the Lower Gondwana deposits of South Karanpura Coalfield, India". She had great inclination to learn foreign languages, and as such passed Diploma courses in French and Russian languages from the University of Lucknow in the year 1971 and 1973 respectively while doing her PhD thesis.

Her specialisation is Gondwana Palynology dealing with dating and correlation of coal bearing strata, interpreting palaeoclimate and palaeoenvironment during the deposition of sediments, besides the academic aspects - morphotaxonomy and character evolution. She is also engaged in use of computer in palynological data handling.

Her research career includes a number of outstanding discoveries. The spore-pollen species based model for high resolution palynozonation of Permian to Early Cretaceous sequence of Damodar and Rajmahal Basin is referred world over by Gondwana palynologists. The scheme for palaeoclimatic interpretation, during deposition of Lower Gondwana sediments, based on morphographic characters of spores and pollen is unique and significant. The researches carried out in various areas have resolved many stratigraphic problems in various coalfields. The palynodating of Dubrajpur Formation in Rajmahal Basin, Bihar has shown it to be a time transgressive unit encompassing Triassic, Jurassic and Early Cretaceous sediments. The Intertrappean beds of Rajmahal Basin, pertaining to Rajmahal Formation famous for the Rajmahal mega plant fossils, are palynologically dated as Early Cretaceous (Aptian). Her work on Early Cretaceous angiospermous pollen as well as angiospermoid exine characters in Late Permian pollen from India is of great significance in understanding the evolution and advent of angiosperm pollen in India and its spatial relationship.

Archana has visited Czech and Slovak Republic (previously Czechoslovakia) under Indian National Science Academy Scientist Exchange Program in 1988. She is widely travelled. She had presented original research papers in International Conferences in India, Italy, South Africa, Japan and Australia. Besides, she has visited many Palaeobotanical Labs in European countries like England, Germany, etc.

I am sure her lively, amicable nature and cooperative attitude and also extreme dedication to her work go a long way explore new findings which will bring name and fame to the motherland in general and to the Institution in particular.

I wish her all success in life.

## Response by Dr Archana Tripathi

I was in great ecstasy when I was asked to prepare a write up about my feelings on receiving P.N. Srivastava Medal, as it was recognition of my humble work.

The 14<sup>th</sup> Nov. 1999 was an auspicious and memorable day for me when P.N. Srivastava Medal was awarded to me. For this I have no words to express my deep sense of gratitude to Professor Anshu K. Sinha, Director, Birbal Sahni Institute of Palaeobotany, for his continuous encouragement and members of the committee for selecting me for this award. My efforts for palynostratigraphy of Gondwana Sequence in Rajmahal Basin particularly search for Jurassic palynoflora in India – a much-debated topic and the angiospermous pollen enabled me to see this day of honour.

I could refresh my memories when Professor A.R. Rao taught us the palaeobotany in MSc classes. I had never thought in those days that palaeobotany would make my career. Later when I learned about the coal department in the Birbal Sahni Institute of Palaeobotany, I was extremely anxious to know about it. How a Botanist can do research in coal!

I started my work in South Karanpura Coalfield, Bihar for my PhD dissertation and later extended to other coalfield areas. For the last one and half decades I am engaged in analysing the Gondwana Sequence of Rajmahal Basin well known for its classical Rajmahal Flora, one of the most coveted areas of Professor Birbal Sahni. Really I feel overjoyed to be associated with the said important area.

The Rajmahal Basin is a vast basin evincing the volcanic episode. It is such a treasure trove that it is still yielding data, making new discoveries be it biostratigraphy or morphotaxonomy and evolution of early angiosperms. In fact my work in this area made me capable and eligible to receive the P.N. Srivastava Medal for the year 1999.

I don't know how to thank my mentors Dr D.C. Bharadwaj and R.S. Tiwari because the relationship between the two, *Guru* (teacher) and *Shishya* (disciple), is much above the gratitude. Needless to say that they shaped my scientific career by their able guidance, which enabled me to attain the present achievement.

I wish to dedicate my achievement to my husband Dr V.D. Tripathi and sons - Naman and Taran, whose time I have stolen for my research work. I am extremely grateful for the moral support and cooperation of my parents and in-laws, the most important and valuable aspect of a married working lady, which has provided me encouraging and congenial atmosphere for professional work which is seldom available to an Indian woman with multifarious duties of a daughter, wife, mother and a professional. In the last but not the least I wish to extend my sincere thanks to my senior Dr Suresh Chandra Srivastava and all my colleagues for their cooperation and help so kindly extended to me in my career.

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