

National Mineral Awards – 2007

Stratigraphy, Structural Geology, Palaeontology, Geomorphology, Economic Geology and Geodynamics

Dr. Dilip Saha Professor,

Indian Statistical Institute, Kolkata has used a modern approach for carrying out detailed structural analysis on the deformed Proterozoic sequence for the first time.

His work on microstructure and fabric measurement in the Singhbhum shear zone and boundary thrusts of the Nallamalai fold belt led towards a better understanding of kinematics of crustal scale shear zones. He was the first to establish multiple deformations in the northern Nallamalai fold belt and recorded earlier events which occurred prior to Rodinia amalgamation followed by later Pan-African imprint which provided deep insight into the evolution of the southeastern margin of Indian craton and its amalgamation with the Gondawana. His studies on regional geological synthesis on various Purana basins of India are widely recognised and have thrown immense light on the basin evolution and inversion history.

Prof Saha's research on the theoretical and computational aspect of structural geology especially on the development of crenulation cleavage in low grade rocks provided a new tool in estimating scale dependent volume strain. His work on the fabric and microstructures in shallow crustal granites has been helpful in gaining information on continental tectonics and constraining emplacement history of granites in the upper crust.

In recognition of his significant contributions in the Proterozoic evolution of the south Indian craton and the intracratonic basins, National Mineral Award - 2007 is conferred upon Professor Dilip Saha.