Groundwater Exploration (including project development, hydrogeological studies and management of groundwater resources)

Dr. Shivendra Nath Rai, Scientist ‘F’, National Geophysical Research Institute, Hyderabad, has developed new generation of analytical mathematical models to predict water table fluctuations in different aquifer systems. Models prepared by him have also found application in ground water resource management through the selection of appropriate recharging or pumping techniques. Models prepared by Dr. Rai are capable of predicting the rise and decline of the water table depending on the increase and decrease in the recharge or pumping rate.

He has also made sustained efforts in the field of ground water exploration through geophysical surveys, notable amongst these is by locating potential zones within and below the Deccan trap as well as in the Gondwana Formations in Maharashtra.

In recognition of his significant contributions in the field of Groundwater Exploration through predictive models and geophysical studies, National Mineral Award - 2007 is conferred upon Dr. Shivendra Nath Rai. He shares this award with Professor Nandipati Subba Rao.