

# Dr. Birendra Kumar Mohapatra

In a span of 36 years of R&D career Dr. B.K. Mohapatra has contributed significantly towards R & D of natural resources of Odisha. He worked extensively in the area of mineral exploration, process mineralogy, characterisation of ores/minerals, processed products and contributed significantly in the development of mineral resources of our country, Odisha in particular

Dr. Mohapatra is a **gold medalist** from Utkal University. He has cleared the Geologist examination conducted by UPSC by **securing first position in Orissa**. In 1975 he joined Geological Survey of India, Bhopal where he successfully completed exploration of sulphide metals in Bundelkhand rock. Dr. Mohapatra joined CSIR-Institute of Minerals and Materials Technology, Bhubaneswar in Jan. 1981 as scientist B and in 2005 he reached the present position of Chief Scientist.

As a scientist at CSIR-IMMT, Dr. Mohapatra always thrived to engage with the industry. He has completed 30 mineral-based projects mostly funded by private agencies, where he was a leader. He has published **91 journal papers** and **supervised six students for Ph.D. degree and five more are registered** under him. He received Peravadhanulu award by IIME for best paper presentation three times in the year 2005, 2009 & 2010.

For the first time he had taken up geochemical prospecting of manganese ore in a part of Orissa, sponsored by M/s OMM Ltd. [a private agency]. Further he located a new iron ore body NE of Pattmunda, under OMM lease hold.

He had made noteworthy contribution in some projects like manganese nodule from Indian Ocean, nickel from Sukinda Chromite overburden, iron/manganese ore from Bonai-Keonjhar belt, etc. His innovative findings are not only limited to **14 first reports of minerals** but also have large implications in the area of mineral beneficiation, metal extraction, waste utilisation etc.. Many of his findings are published in SCI journals. One of his recent publications has been considered as the **hottest paper** in 25 selected in the field of geochemistry.

Dr. Mohapatra is also an experienced teacher. He started his career as a lecture in a Govt. College, Orissa, and now he is **coordinating and teaching** a course in PGDME and PGRPE programs being conducted at IMMT.

In the proposed **12<sup>th</sup> five year plan**, Dr. Mohapatra has two lead roles to perform. The study of "Precious /semiprecious stones for value addition"; recovery of alumina from Nepheline Syenite and platinum group of metals in Sukinda chromite belt. In the first proposal rejected gemstones of Orissa will be treated so that these look better, last longer and market at a higher price to meet the societal quest. In the second proposal alumina will be recovered from non-bauxitic ore without generating any waste. Further, its byproducts will be potash and cement.