

Shri P.B. Maithani

Lifetime Achievement Award

Shri Prem Ballabh Maithani obtained his M.Sc (1969) degree in Geology from Lucknow University and after a brief stint as JRF upto 1972 at Wadia Institute Of Himalayan Geology, joined the Atomic Minerals Division, Department of Atomic Energy at Southern Region, Bangalore on 18th January 1973. He has contributed immensely in augmentation of uranium resources in the country. Shri P.B. Maithani has rich experience of over thirty eight years in the field of uranium and Rare earth and Rare metal exploration in different geological domains of the country.

Initially he was associated with exploration for uranium hosted in the Quartz-Pebble-Conglomerate in the Bababudan Group in of Chikmagalur. Later, he was associated with the Rare Minerals and Rare Earth Group (RMRE) wherein survey and exploration resulted in locating more than 250 RMRE bearing pegmatites in Karnataka, Tamilnadu and AndhraPradesh. Evaluation and recovery of columbite-tantalite in the pegmatites of Hassan and Mandya districts of Karnataka, Salem & Trichirappally districts in Tamil Nadu and granitic terrains of Kanigiri area, A.P resulted in the discovery of tantalite bearing pegmatite swarms extending over 6km in Maralagalla-Allapatna area, which is unique where production of tantalite was continued up to 1998 for a period of over 18 years and more than 58 tonnes of tantalite was recovered from pegmatite and its float. The Marlagalla- Allapatna pegmatite belt still remains to be explored in full. In Arehalli area, Hassan district, Karnataka Columbite-TantaliteTapiolite (>80% Ta₂O₅) -Spodumene-Beryl bearing pegmatites were located which yielded about 5.5 tonnes of Niobium –Tantalum concentrate and still has a potential to contribute. The columbite-bearing granite of Kanigiri area forms a potential non pegmatitic source for columbium-tantalum minerals and is first of its kind in India and is comparable with the known world occurrence at Jos-bukuru, Nigeria.

Mr. Maithani was deputed to USA under the IAEA training programme on "Uranium geology, exploration techniques, mineral processing and technology at Colorado School of Mines, Golden followed by on the job training with U S Geological survey (U-Th Branch)" for a period of over 6 months in 1980. The training has given him valuable opportunity to work in close association with

USGS geologists, and to visit various classical sandstone-type deposit / mines in Colorado, Wyoming and New Mexico, including Insitu leaching in Texas uranium operation, Corpus Christie Texas.

After returning from US, he got an opportunity to work in the sedimentary terrains of North Eastern Region where for the first time uranium anomalies in Phlangdiloin and adjoining areas, in the plateau regions of Mahadek Sandstones were located. His work in the Meghalaya Plateau paved the way in identifying the Lower Mahakek plateau domains as the potential host for uranium mineralization. The Meghalaya plateau is one of the potential uranium resource area in India today, which hosts significant uranium deposits, like Domiasiat, Wahkyn, Wakhut etc.

He was also associated with the uranium exploration in migmatite terranes of Chotanagpur Granite Gneissic Complex(CGGC) in Jajawal area, M.P, Champaners and the infra-trapeans in parts of Panchmahal and Baroda districts, Gujarat and Jhabua district of M.P., where a number of uranium and rare earth occurrences were located. His studies indicated that Kutch, Panchmahal and Saurashtra areas have potential for REE resources.

Sri Maithani has served as Incharge, Publication Group, AMD and had immense contribution in editing and release of the prestigious RMRE volume of Exploration & Research Of Atomic Minerals Journal of AMD.

He was instrumental in planning and execution of uranium exploration programmes in the northern parts of Cuddapah Basin, for locating high grade large tonnage unconformity type U- deposit in Chitrial, Koppunuru,R.V. Tanda areas. In Chitrial area of Nalgonda district, A.P., due to his meticulous planning and guidance, about 8000 tonnes of U_3O_8 has already been established along the unconformity surface between the basement and the overlying Srisailam sediments. This area has a vast potential and efforts are on for carrying out exploration in the contiguous areas of Chitrial plateau. After serving as Regional Director, Additional Director for a brief period, Shri Maithani is presently functioning as Director, AMD, shouldering the responsibilities of guiding and supervising uranium exploration activities of the Directorate.

He has authored more than sixty eight (68) scientific publication in various national and international journals (some of them were also presented in the seminars).

The Executive Council (EC) is pleased to award Shri Maithani the first Lifetime Achievement Award for his lifetime research work.