

Dr. B.N. Mohapatra
Director General, NCB



Dr. Bibekananda Mohapatra assumed charge as the Director General of National Council for Cement and Building Materials on Monday, 03 December 2018. Cabinet committee under PMO had approved the appointment of Dr. Mohapatra as Director General, National Council for Cement and Building Materials, NCB, the premier research institute of India in Cement and Building Materials. Prior to assuming charge as Director General, NCB, Dr. Mohapatra had been serving as Vice President & Corporate Quality Head of Ambuja Cements Limited under the banner of Lafarge Holcim. Earlier, he served in several key positions in Dalmia Institute of Scientific & Industrial Research, OCL India Limited, Vikram Cement Works (UltraTech Cement Ltd) under Aditya Birla Group.

Dr Mohapatra brings with him over 32 years of cross-functional experience in Research and Development, Material Characterization, Optimization of Raw Mix Design, New Product Development, Strategic Planning for process and plant scale production with utilization of alternate fuels and alternate raw materials, diagnosis of various process challenges in Cement manufacturing, Quality Control, Quality Assurance, Quality Optimization. Development of Composite cement, High Slag and Flyash Cement. Oil well cement, Limestone Calcined Clay Cement for low clinker factor and reduction of CO₂ emission & Low energy cement for Cement sustainability initiative are the other areas of his research.

Dr. Mohapatra has earned his Ph.D Degree in Cement Mineral Chemistry under the guidance of Dr. G Goswami, Ex-Principal Scientist of Dalmia Institute of Scientific and Industrial Research. He commenced his career as Lecturer in Chemistry and then Scientist in Dalmia Institute of Scientific and Industrial Research, Rajgangpur, Odisha. He worked as HOD (Quality Assurance) in Orissa Cement Limited for about 10 years. He joined Vikram Cement Works (A Unit of UltraTech Cement Ltd), Khor, Dist. Neemuch (MP) as Assistant Vice President. Dr Mohapatra was working as Vice President (New Product Development and Product Quality Management) in the Corporate Sector of Ambuja Cements Limited (under the banner of Lafarge Holcim), Mumbai prior to joining NCB.

He has expertise in characterization of materials covering physical, physio-thermal, thermal (like DTA/DTG) and X-ray diffractometry. He has done extensive research works on effect of inherent Fluorine in cement manufacturing process and cement quality. His contribution in use of alternate fuel by utilizing hazardous wastes and all agricultural refuses brought a new dimension to the cement manufacturing of the country. He was also associated with development and commercial production of cement such as Composite Cement, Sulphate Resisting Portland Cement, Oil Well Cement, etc.

His innovations and leadership in implementing many quality programmes resulting in product quality improvement being widely accepted by client sectors. He attended many National and International Conferences and published about 68 research papers in reputed both National and International Journals. Under his active leadership, Vikram Cement Works (UltraTech Cement Ltd) under Aditya Birla Group have bagged 13 prestigious awards. He was also the member of many awards selection committee and recognized as one of the leading cement scientist of the country. He has also authored a book on “**Application of X-Ray Diffractometry in Cement Quality Control System**” which was released on 14th NCB International Seminar held at Delhi during year 2015. This book is very much applicable to all the Quality Personnel working in cement industries, Research Organization, education institutes i.e. IIT, NIT and others engineering college.

He completed the Corporate Management for India for companywide Quality Management Program being selected by Association for Overseas Technical Scholarship (AOTS), Japan. He has been an Auditor for American Petroleum Institute (API Spec Q1), Quality Certification for ISO 9001-2008, EMS 14001 and OHSAS. He is a Certified Examiner for Quality Management for IMC RBNQA Trophy and Member of Quality Management Sectional Committee, MSD 2 nominated by BIS. He is a member in various Committees of Bureau of Indian Standards (BIS), State Pollution Control Board (SPCB), Central Pollution Control Board (CPCB), Ministry of Environment & Forests (MoEF) and Central Ground Water Authority (CGWA), Govt. of India.

Apart from the above, he had also retained membership of various committees such as (i) Member of BIS Cement & Concrete Sectional Committee CED 2, Cement Pozzolana and Cement Additives sub-committee CED 2:1 and Concrete Sub-committee CED 2:2 (ii) Member of Research Advisory Committee of National Council for Cement and Building Materials (NCCBM) (iii) Member of technical committee for development of Low Calcined Clay Cement (LC3) of IIT-Mumbai, Delhi & Chennai & TARA (iv) Member of Research Advisory Committee at DISIR (Dalmia Institute of Scientific and Industrial Research, Rajgangpur, Odisha (v) Member of scientific committee of 15th International Congress on the Chemistry of Cement (ICCC) out of four Indian Scientist to be held at Prague at 2019 and (vi) Member of the Technical Committee for the development of Standards for RMC (Formed by CII – Confederation of Indian Industry).

During his long 32 years of challenging career, some of the key areas of activities and contribution include (i) Mineral and Material Characterisation (ii) Waste Elimination and Utilization (iii) New Product Development (iv) Utilization of Alternate Fuel & Raw Material (AFR) for Sustainability (v) Research on Cement Technology (vi) Quality Control & Quality Assurance (vii) Concrete Technology (viii) Project Management (ix) Leadership & Team Management (x) Technology Selection (xi) Raw Material Handling (xii) Environment Management System & Control; (xiii) Client Relationship Management (xiv) Member of the professional bodies; and (xv) Professional Training at Industries, IITs, Engineering Institutes, NCCBM, Research Institutes etc. and produced pragmatic solutions to the problems faced by industry. **Some of his significant contributions include (i) Successful incineration of cement poppy straw/doda chura in the cement kiln in environment friendly manner (ii) Innovative approach and co-ordination between Pollution Control Board and Industry for successful disposal of hazardous waste Opium Marc stored in Opium Alkaloid plant in cement kiln involving all the Government Authorities (iii) Successful incineration of non-recyclable plastic and refused derived fuel in Cement Kiln in Madhya Pradesh and use of 100% Pet coke in Cement Kilns.**

Besides this, under his active leadership, Vikram Cement Works (Ultratech Cement Ltd) bagged highest Quality Awards of our country like (i) Rajiv Gandhi Award for Quality-2010 (Best of All) by BIS (ii) Rajiv Gandhi Award for Environment-2011 by MoEF (iii) CII Best Environment Award-2012 (iv) CII Best Energy Award-2012 (v) Indian Manufacturing Excellent Award-2012 (vi) 14th National Award for Excellence in Energy Management 2013 by CII, Hyderabad (vii) “Best Environmental Excellence in Plant Operation 2012-13” by NCCBM, New Delhi (viii) “IMC Ramakrishna Bajaj National Quality Award” consecutively for three years i.e., 2011, 2012 & 2013 by Indian Merchant Chamber, Mumbai (ix) Best paper award in 7th NCB International Seminar on Cement and Building Materials for the paper “Impact of New Generation on Granulometry of cement ground in Vertical Roller in Mill” (x) Best paper award in 13th NCB International Seminar on Cement and Building Materials for the paper “Indian Experience of Using AFR in Cement Kiln” and (xi) Best paper award in 15th NCB International Seminar on Cement, Concrete and Building Materials for the paper “A study of Mineralogy and Microstructure of Clinker by XRD and Microscopy”.

During his tenure of service, he has shown exemplary performance in demonstrating his ability to accomplish task with discipline, hard work and innovative skills in executing assignments / projects by coordinating with internal and external stakeholders. His remarkable personality and zeal is a result of assimilation of a stable research background with a flexibility to adopt modern technology with an understanding of issues.
