



Dr. Prabhat Kumar Gupta, Scientist F & Head, Chemical Metrology Section (Retd.), National Physical Laboratory, New Delhi

Dr. Prabhat K. Gupta (born 15 Jan. 1957, M.Sc. Chemistry), chief scientist, lead the Analytical Chemistry/ Chemical Metrology division at National Physical Laboratory (NPL) during 2003-16 and had more than 36 years of R&D experience in NPL New Delhi. His research interest involved, as a national nodal coordinator since 11<sup>th</sup> FYP period, the metrology in chemistry (MiC) and certified reference materials (CRM) activities for realizing SI ‘mole’, through MiC, and to help provide traceability at apex level in country in such measurements through a nationwide network of ~22 partners, mostly CSIR labs under project ‘advances in metrology’, in various sectors impacting quality of life and trade; started building capacity & quality system and participation in CCQM & APMP international key-comparisons and helped establishing MiC international collaborations with PTB Germany.

He had helped showcase NPL-CSIR & its potential designated partner’s chemical metrology services as Indian NMI; interaction and close cooperation with national (BIS, NABL, QCI, CPCB, IMD, ICAR, MoEF, ISRO-GBP, Universities and DST) & international (BIPM-CCQM-APMP, CITAC, ISO, PTB/BAM Germany, NIST USA etc) stakeholders for SI traceability, quality data and spreading awareness/ education. He had been working for many challenges in NPL & its partners in MiC & CRM activities, because of its tremendous scope touching all aspects of life like energy, health, environment, food security, drinking water, trade, and societal sectors.

Earlier, he had carried out 1<sup>st</sup> nation-wide methane campaign during 1991, participated in the 8<sup>th</sup> Indian scientific expedition to Antarctica in 1988-89 and INDOEX program from 1996 to 1999. He led studies for aerosols & precursor gases, GHG inventory & budget estimates. He had

organized Asian training courses in 1993 & 1995, and coordinated the 'Methane Asia Campaign 1998-99 (MAC-98)' and was PI in the activities related to the preparation of India's initial national communication (NATCOM) to the UN framework convention on climate change (UNFCCC) for four projects (Rice cultivation, Livestock, Agricultural soils and agricultural residue burning) and nationwide N<sub>2</sub>O & CH<sub>4</sub> measurement campaign during 2001-2006. Recently two NATCOM-SNC projects are completed for providing measurement traceability in GHGs to all NATCOM teams. He was PI for many trace elements in water PT programs for NABL.

He had been a national member designate, Consultative Committee on Quantity of Matter (CCQM) of CIPM at BIPM Paris France; Member, Technical Committee on Quantity of Matter (TCQM) of Asia Pacific Metrology Programme (APMP) regional metrology organization; Council Member, International cooperation on traceability in analytical chemistry (CITAC) and Coding Member, COMAR to update the international database of CRMs. He is lead assessor of NABL for ISO-17025/ ISO-17034 and ISO-17043, apart from member of accreditation committees. He is chair of BIS CHD-06 committee.

He has published more than 120 research papers in SCI Journals, ~130 in conference proceedings; 9 in Books, ~25 in technical reports. He has guiding 6 Ph.D. students, apart from 3 M.Tech. students. He has given several invited talks and visited many countries. He has rich administrative, scientific & technical management skills, and organized many national and international conferences/ meetings.