

National Environmental Standard Laboratory

Economic development has created vast commercial opportunities in India in the area of environment for various industries and other stakeholders. A large number of policies have been initiated in this field providing new impetus & opportunities to industries in India. Due to the stiff international competition, industries in India need support to enhance quality of their products.

In the field of air pollution monitoring, the data quality is posing a major challenge as the reliability of such measurements needs to be ascertained. The roles of instrument and the calibration are the major issues that need to be addressed. Most of the instruments used are usually imported which comes with product certifications from international agencies like USEPA, TUV, MCERT etc. These certificates are issued based on the environmental conditions of the certificate issuing country which are very different from the environmental conditions prevalent in India. This affects the quality of measurements by the instrument operating for a long time in the Indian conditions and warrants a revisit of the certification process at regular intervals.

The estimated global market value of air pollution monitoring system is US \$ 3997.8 million which is projected to grow to US\$ 7,1187 million by the end of 2025. India and other third world countries are the major target areas where majority of such equipment will get installed in compliance with the respective regulatory requirements, thus offering a great market opportunity.

The vast Indian market potential for air pollution monitoring and mitigation equipment is catalysing the efforts of a large number of indigenous manufacturers of such equipment to produce the same in India. However, the absence of an Indian certification system for such equipment is a major impediment for them to be cost and technology competitive with international players.

In view of this, The Ministry of Environment, forest & Climate Change (MoEF&CC) has designated the CSIR-NPL as verification and certification agency for emission and ambient air pollution monitoring equipment in India through a gazette notification. To meet this requirement CSIR-NPL has developed a CSIR-NPL India Certificate Scheme (NPLI CS) to provide certification of performance evaluation of air pollution monitoring equipment.

In order to develop requisite testing and calibration facility for air pollution monitoring equipment, CSIR-NPL is establishing a state of art 'National Environmental Standard Laboratory' for measuring the performance of various air ambient & emission pollution monitoring equipment like Online Continuous Emission Monitoring Equipment (OCEMS), Continuous Ambient Air Quality Monitoring System (CAAQMS) etc. with the financial assistance provided by the MoEF&CC. This will facilitate the goals of 'Atmanirbhar Bharat' envisaged by the Honourable Prime Minister of India.