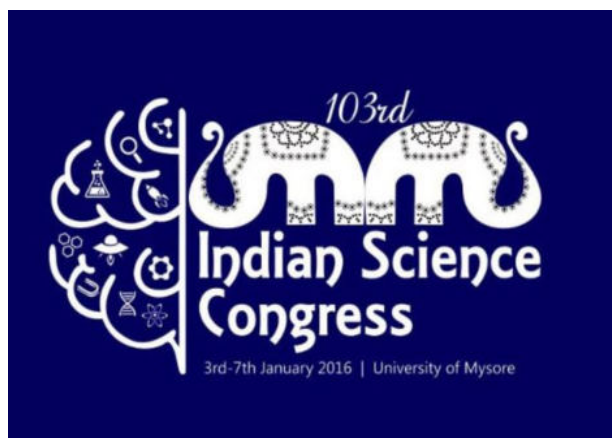


**A BREIF TECHNICAL REPORT ON
103rd INDIAN SCIENCE CONGRESS, 2016
(University of Mysuru, Jan 03-07)**



**CENTRAL POLLUTION CONTROL BOARD
ZONAL OFFICE (SOUTH)
BENGALURU**

Indian Science Congress, one of the largest annual science events is being organized by the Indian Science Congress Association (ISCA). ISCA is an organization which took lead to create awareness among teachers, trainers, coaches, teacher educators, researchers, academicians, professionals and students about looking for indigenous invention and innovation that can bring inclusive sustained progress of India. During Indian Science congress, fourteen sections namely Agriculture and Forestry, Animal, Veterinary and Fishery Sciences, Anthropological and Behavioral Sciences (Including Archaeology, Psychology and educational sciences), Chemical Sciences, Earth System Sciences, Engineering Sciences, Environmental Sciences, Information and Communication Science and Technology (Including Computer Sciences), Material Sciences, Mathematical Sciences (Including Statistics), Medical Sciences (Including Physiology), New Biology (Including Biochemistry, Biophysics, Molecular Biology and Biotechnology), Physical Sciences, Plant Sciences and Social Sciences are covered.

The 103rd Indian Science Congress (ISC) was held in University of Mysore, Karnataka during 03-07 January, 2016. The focal theme of this year was '**Science and Technology for Indigenous Development in India**'. It was inaugurated by Shri. Narendra Modi, Hon'ble Prime Minister of India on 03rd January 2016. Nobel laureates from various countries including Prof. Dan Schechtman, Prof. Arthur B. McDonald, Sir Prof. John B. Gurdon, Prof. David J. Gross, Prof. Serge Haroche and Field medalist Prof. Manjul Bhargava were invited to talk at various sessions during ISC. Relevant topics such as 'Society and science', 'Space Science and its applications', 'Sustainability and Future Generation Wireless Networks' and 'Safe Water and Sanitation' were presented by various eminent Scientists, technologists, policy makers and Researchers as a part of the event. There were plenary sessions, panel discussions and public lectures devoted to different facets of focal theme. A women's science congress was organized in association with ISC, with a theme 'Science and Technology for Indigenous Development for Women in India'. This program was intended to showcase the contribution of women in Science and Technology. Renowned women scientists delivered lectures in that session. Rashtriya Kishore Vaigyanik Sammelan, The Children Science congress was also organized simultaneously from 04th -06th January, to provide a unique opportunity to children to use their scientific temperament and knowledge and to quench their thirst for creativity by conducting scientific experiments.

The Science Exhibition '**Pride of India Expo**' is one of the major events of Indian Science Congress. Since 2010, every year CPCB is participating in the exhibition as a step to make general public aware of the measures and methods adopted by the organization towards controlling the pollution. CPCB South Zonal Office at Bengaluru, along with the Head Office participated in the ISC - 'Pride of India Expo', 2016 at Mysuru. CPCB had put up a stall of 18 sq. m. area, the items displayed at ISC included Major Publications from CPCB, Environmental related posters, Tran slides related to CPCB activities, Noise Measuring Device, Ambient Air Quality Monitoring Instrument (Gaseous), PM₁₀ monitored Filter Papers, Water Testing Kit, Fluoride Testing Kit and also Online Air Quality data through website.

Mrs. Poornima. B. M, Scientist 'C', Mr. R. Mahendra Kumar, PS were deputed to participate in the event from South Zone Office, along with Mr. Pratap Singh Shahi and Mr. Kunwar Singh from H.O. Representative from Karnataka State Pollution Control Board and Environment SA were also present in the exhibition. Two project trainees from South Zonal Office were also given a chance to participate in the exhibition along with the officials. About **150** people visited the CPCB stall in 05 days programme, apart from a vast number of students from the host University, Colleges, Schools and other Institutions.

Details of items display at ISC, 2016:

1) Water Testing Kit

The Central Pollution Control Board has developed a water testing kit for students, NGOs and public at a large. The first version of the kit was launched in 1995. About 21 parameters (5 Physical tests, 13 chemical tests and 3 biological tests) can be analyzed with the aid of this kit, using simple, inexpensive and standardized methods. This kit has been fabricated as a portable laboratory provided with the apparatus and reagents needed for field testing, to assess the quality of water under field conditions. The main objectives of this WTK are to create mass awareness among students, NGOs and the public and to provide low-cost water testing facility. This kit has been designed not only to test water samples but also serves as a scientific, informative, thought provoking and educative tool to students, NGOs and public.

2) Fluoride Test Kit

The reagent used for testing fluoride in water is Acid Zirconyl using SPADNS method. The kit includes a colour chart with which the fluoride concentrations can be read out directly. In this method the concentration of Fluoride in water can be measured from 0.3 mg/L to 3.0 mg/L.

3) Air Pollution Sampler (Gaseous Pollutant Sampler)

Gaseous sampling requires only a low flow rate. A tapping is taken from the suction side of the blower, below the orifice plate assembly to provide suction for sampling air through a set of Impinger. These impingers are housed in a separate enclosure and kept in an ice tray. The separate enclosure and ice tray insulate the impingers from ambient temperature and heat generated in the motor of the system. The APM 411 gaseous sampling attachment can be easily detached from the main sampler, can be transported and stored independently. Specific absorption media are used to absorb specific gaseous pollutants.

4) Noise Level Meter (CR83- 1C)

A Noise level meter gives out the Ambient Noise intensity in Decibels, commonly used in Noise Pollution studies for the quantification of different kind of Noise, especially for Industrial, Environmental etc.

5) Publications from CPCB

A wide range of publications on various studies conducted by CPCB were displayed for reference and Sale purpose. 'Parivesh' Magazine series booklets were distributed free of cost to the public along with Environmental Protection Awareness Posters.

Benefits for organization through this exhibition:

- 1) CPCB had a chance to interact with common public regarding matters of Air and Water Quality. People who visited our stall freely expressed their concerns on environmental issues in their areas, for which the officials were able to provide simple and effective remedial actions.

- 2) Water testing kit, an innovation from CPCB, was appreciated by most of the people including teachers and NGO workers. Many of them were interested in acquiring a Water Testing Kit for their Institutions/towns. This cost effective method can provide a solution for questions regarding health and safety associated with drinking water sources.
- 3) CPCB was successful in familiarizing Air pollutant Sampler and Noise level Meter to common public. Students were the major beneficiaries in this exhibition.
- 4) The existence and role of CPCB was made known to many youngsters and motivated them to take up R& D studies on environmental issues.

Photographs Taken during ISC



