

Specifications for Sophisticated Analytical Instruments/Systems

Foreword

Sophisticated analytical instruments such as Atomic Absorption Spectrophotometer, Gas Chromatograph etc., are gradually becoming essential requirements for the laboratories involved in monitoring and control of environmental pollution. These being very expensive instruments and expected to perform important tasks, require special attention while selecting suitable makes and models to suit to the specific analysis needs. Evaluation of the requirements based on the applications, the features/limitations of the options available, and their respective performances in India was, therefore, necessary for obtaining optimum results from such sophisticated systems. Keeping this in view an exercise was undertaken in the Central Pollution Control Board. An attempt has been made to collect and review the available literature, information, options, and experiences of various relevant laboratories/experts on six priority instruments/systems namely, Atomic Absorption Spectrophotometer (AAS), Gas Chromatograph (GC), High Performance Liquid Chromatograph (HPLC), Total Organic Carbon Analyzer (TOC), Ultra Violet (UV)/visible spectrophotometer, and Ultrapure water purification system.



The present report includes the methodology of the evaluation process, critical review, specifications thus finalized, and the list of the concerned suppliers.

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It is believed that the document would be useful to the personnel of Pollution Control Boards as well as other laboratories involved in pollution control activities.

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