



CSIR - CENTRAL MECHANICAL ENGINEERING RESEARCH INSTITUTE

(Under Ministry of Science and Technology, Govt. of India)

Mahatma Gandhi Avenue, Durgapur – 713 209

West Bengal, India

www.cmeri.res.in

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Azadi Ka
Amrit Mahotsav

**ONE MONTH Skill Development Training Program on
ANALYSIS & ASSESSMENT OF WATER AND WASTEWATER
USING SOPHISTICATED INSTRUMENTS**



Venue: CSIR-CMERI, Durgapur

Date: 16th Nov – 15th Dec, 2022

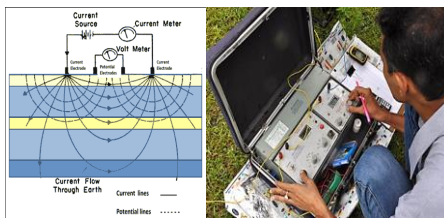
CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI), the only national laboratory dedicated to Mechanical Engineering, carry out dedicated research and development over a broad spectrum of mechanical engineering and allied disciplines of science and technology. The Environmental Engineering Group of CSIR-CMERI carry out dedicated R&D efforts towards clean water technology, water testing, water purification technology etc. The group has developed iron and arsenic filters for both domestic and community levels, a number of which have been commercially exploited through licenses. The water testing facility is recognized by the WB pollution control board (WBPCB). The group offer three day skill development training program on “Analytical Techniques and Instrumentation for Water Quality Assessment”. The Group has also developed Plastic waste disposal & energy recovery system and also offering training to the unemployed youths in this area.

Over large parts of the world, rivers, lakes and other water bodies show increasing trends of water pollution, especially for developing countries under economic expansion and increasing population sizes. Therefore, assessment of the physical, chemical and biological water quality is essential for the reduction of freshwater pollution.

Who can participate/Eligibility Criteria: Unemployed Youth with a Bachelor/Master degree or equivalent in Science or Engineering or a related discipline (pursuing or pass out) can apply/participate.

Objectives and subjects/areas to be covered under training:

- To aware about water related issues [water conservation, water pollution, water related diseases, water quality parameters (for drinking and waste water), water sampling & collection procedure, testing including working principles & theoretical backup knowledge, data interpretation/assessment & report preparation, introduction of process to locate underground Aquifer, determining water flow characteristics of rivers etc.]
- To provide hands-on training on testing of various water quality parameters (physical, chemical, heavy metals & bacteriological) [TDS, conductivity, turbidity, hardness, pH, residual chlorine, alkalinity, sodium, potassium, calcium, magnesium, arsenic, iron, fluoride, nitrate, phosphate, chromium, manganese, nickel, lead, zinc, phenol, oil & grease, BOD, COD, TSS, total coliform, E. coli etc.] by using sophisticated analytical instruments like Atomic Absorption Spectrophotometer (AAS) with GFS, Microwave digester, UV-VIS spectrophotometer, Flame photometer, Ion-selective electrodes, Turbidity Meter, Lamina Flow etc.



Training course duration: ONE MONTH. (Entry: Throughout the year).

Course Fee: Rs. 5000/- (Rupees Five Thousand) [The course fee do not include fooding and lodging. However, participant can use canteen facility and Institute hostel accommodation may be made available (depends on availability) on chargeable basis]

Certificate: After successful completion of the training, participation certificate will be provided to the participants.

For details, interested participants may contact: Dr. Biswajit Ruj, Chief Scientist & Coordinator, bruj@cmeri.res.in (9474372196) / Dr. RR Sahoo, Head and Principal Scientist, rr_sahoo@cmeri.res.in (8016280116); Environmental Engineering Group, CSIR-CMERI, Durgapur-713209, W. Bengal.