

# SEAM-N-MMA Environmental Laboratory, Biratnagar

SEAM-N-MMA Environmental Laboratory was established in 2004 with the aim to deliver the expertise and services in environmental quality analysis, environmental research and monitoring sectors.

## Services:

- Analysis of water and wastewater as well as to provide analytical service in the field of environmental research
- Analysis of soil samples
- Analysis of different food samples
- Consultancy in water quality monitoring and assessment program
- Training on environmental issues like water pollution, soil pollution, air pollution and noise pollution to various students from environmental science, engineering and food technology
- Awareness program on water quality and its issues at the community level
- Facilitate pollution control activities in the industries
- Establish good relationship and efficient services to the clients

## Parameters:

### For Water, Wastewater and Soil Analysis

#### Physical Parameter:

Color, Turbidity, pH, Electrical Conductivity, Temperature, Total Solids (TS), Total Dissolved Solids (TDS), Total Suspended Solids (TSS)

#### Chemical Parameter:

Chloride, Fluoride, Sulphate, Sulphide, Nitrite Nitrogen, Nitrate Nitrogen, Ammonical Nitrogen, Silica, Total Nitrogen (Kjeldhal), Total Phosphorous, Soluble Phosphorous, Total Hardness, Calcium Hardness, Acidity, Carbonate, Bicarbonate, Hydroxide, Carbondioxide, Oil & Grease, Phenolic Compounds, Manganese, Residual Chlorine, Iron, Sodium, Potassium, Lithium, Calcium, Magnesium, Copper, Zinc, Nickel, Total Chromium, Hexa Valent Chromium, Lead, Arsenic, Cobalt, Mercury, Cadmium, Aluminum, Selenium, Silver, Biochemical Oxygen Demand, Chemical Oxygen Demand, Dissolved Oxygen, Organic Matter

#### Microbiological Parameter:

Total Coliform, Faecal Coliform, Total Plate Count, Faecal Streptococcus

### For Food Analysis

Volatile Matter, Water Insoluble Matter, Oil Content (Ether Extract), Total Ash, Water Insoluble Ash, Moisture Content, Alcohol Soluble Extract, Crude Fiber, Salt (NaCl), Acid Insoluble Ash, Protein, Crude Fat, Solid Content in Gruel, Acid Values in Extracted Fat, Peroxide Values, Free Fatty Acid, Gluten Content, Alcoholic Acidity, Total Fat (Ether Extract), Melting Point, Boiling Point, Specific Gravity, B.R. Reading, Foreign Particles, Free Alkali, Sulphur Dioxide, Benzoic Acid, Allyl Isothiocynate, Saponification Value, Unsaponification Value, Iodine Value, Color, Hexabromide Test, Milk Fat, Milk SNF, Titrable Acidity in milk power, Total Fatty Matter, Matter Insoluble in Alcohol, Rosin Acid, Chloride, Nitrate Content, Nitrogen Content, Calcium, Zinc, Sodium, Potassium, Total Phosphorous, Alkali Insoluble Ash, Yeast Count, Moulds Count, Total Coliform, Faecal Coliform, Fermentation Test, Total Plate Count

**For Pesticide Analysis**

In Progress



Environmental Laboratory at Biratnagar



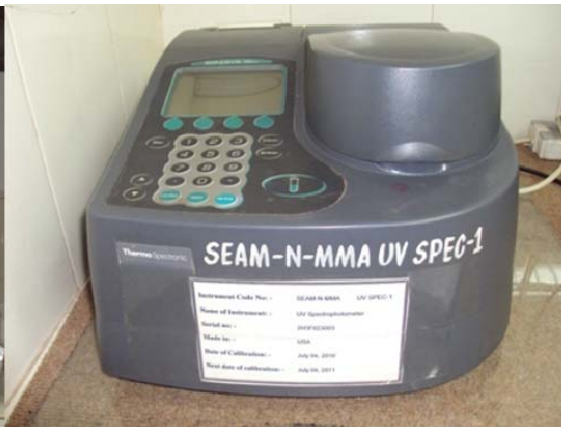
Gas Chromatography (GC)



High Performance Liquid Chromatography (HPLC)



Atomic Absorption Spectrophotometer (AAS)



UV VIS Spectrophotometer