



Shahid Beheshti University of Medical Sciences
School of Public Health and Safety

School of Public Health & Safety Laboratories

Advanced Instrumental Analysis Laboratory **Department of Environmental Health Engineering**





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The advanced instrumental analysis laboratory is one of the most equipped laboratories of the Environmental Health Engineering department which is equipped with advanced devices and equipment for preparing samples and measuring various compounds in environmental and biological samples.

Laboratory expert information

Name/Last Name	E-mail	Telephone
Fatemeh Shokri Dariyan	shokrif18@gmail.com	(+98)21 22 43 20 40 (168)

Laboratory tools and equipment

High pressure liquid chromatography (HPLC) KNAUER
Microwave plasma atomic emission spectroscopy (MP-AES) AGILENT
Gas chromatography (GC) VARIAN
Gas chromatography–Mass spectrometry (GC-MS) AGILENT
Spectrophotometer
Spectrometer
Turbidity meter
COD reactor



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Thermal digester
Jar test
Digital balance
Oven
Electric furnace
Vacuum pump
Shaker
Heather stirrer
Mantle heater
pH meter
Incubator
Ultrasonic cleaner
Refrigerator freezer
Digital loop
Electron microscope
Dissolved oxygen measuring device
Electrical conductivity measuring device
Centrifuge
Bain-marie



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Aeration pump
Water distiller
Laboratory hood

Advanced instrumental analysis laboratory services

Parameter	Method
Qualitative analysis and determination of drugs; Measurement and identification of pesticides in water, food, and biological samples; Isolation and identification of organic compounds in unknown samples (quantitative and qualitative analysis)	HPLC
Volatile organic compounds	GC-MS
Volatile organic compounds	GC
Measurement of metals	MP-AES
Measurement of environmental contaminants (water, wastewater, soil, solid waste, sludge, fertilizer and food)	Spectrophotometry
Digestion of samples (water, wastewater, soil, solid waste, sludge, fertilizer, food, blood, urine)	Thermal - Acidic
Counting microplastics	Digital loop