

Analytical service

Water analysis	Soil analysis
pH, conductivity, redox potential, colorimetry, turbidity	pH, conductivity
TSS, TDS	Humidity
Alkalinity (total alkalinity, carbonates, bicarbonates, hydroxides)	Texture (Granulometry)
Organic carbon (total, dissolved, NPOC)	Organic material
BOD ₅ , COD	Exchangeable Na, K, Mg, Ca
Quantification of cations and anions	Exchange capacity (Na)
Total nitrogen	Calcium carbonate equivalent
Total phosphorus	Assimilable form of metals (Fe, Cu, Mn, Zn)
Free chlorine	Total metals
Total chlorine	Assimilable phosphorus
Kjeldahl nitrogen	Kjeldahl nitrogen
Dissolved and total metals	
Bronopol	

Analysis of contaminants and organic compounds in water, soil and other matrices by chromatography coupled to mass spectrometry

Pesticides, pharmaceuticals, hormones, stimulants and degradation products
BTEX: benzene, toluene, ethylbenzene and xylene
Priority contaminants according to the European Directive 2013/39 UE
Trihalomethanes: chloroform, bromodichloromethane, chlorodibromomethane y bromoform
Haloacetic acids: MCCA, MBAA, DCAA, TCAA, DBAA
Bisphenol A and tetrabromobisphenol A
Perfluorinated compounds: PFOA y PFOS
Screening of pharmaceuticals and pesticides by accurate mass library (> 2000 compounds)
Determination of exact mass by LC-TOF in pure and isolated compounds
Identification of volatile compounds
Non-target analysis: identification of metabolites and transformation products

Analysis of micro and nanoplastics (MNPs)

Identification and semiquantification of MNPs Py-GC-MS
Particle counting, identification and shape/size determination by μ FTIR-RAMAN
Size separation by FFF-UV/IR-DLS

Biological analysis

Detection and counting method of <i>E.coli</i> and total coliforms, aerobic bacteria, intestinal enterococci, <i>P. aeruginosa</i> , <i>Clostridium perfringens</i> , <i>Cryptosporidium</i> , <i>Giardia</i> and <i>Campylobacter</i> .
Antibiogram of aerobic enterobacteria
Extraction and quantification of chlorophyll <i>a</i>
Extraction and quantification of cyanotoxins (microcystins)
Enzymatic activity in soil (Phosphatase, Arilsulfatase, β -Galactosidase, Urease)
DNA/RNA extraction in environmental samples
Detection of genetic material of SARS-CoV-2 in residual water
Detection and quantification of genes by qPCR
Sequencing of 16S rDNA (ONT)
Sequencing antibiotic resistance genes (ARGs)