UHMI Department of Environment Radiation Monitoring (DERM) offers wide set of methodological support in determination of radionuclides in environmental samples providing identification, characterization and environmental impact assessment for radioactive contaminated sites.

We focus on:

- Environment monitoring programs for radiation protection purposes;
- Methodological support of the countrywide radiation monitoring network (gamma dose rate stations, radioactive aerosol and fallout, soils and surface/marine water);
- Analytical laboratory support and services in determination of radionuclides and other contaminants;
- Site-specific radiological surveys and sampling techniques. Spatial data analyses and Data interpretation;
- Radiological and non-radiological hazards characterization and safety assessment;
- Remediation planning and long-term post-remediation monitoring and surveillance

UHMI

STATE EMERGENCY SERVICE OF UKRAINE
NATIONAL ACADEMY OF SCIENCES OF UKRAINE

Ukrainian Hydrometeorological Institute

Contacts:

Head of department: Oleg Voitsekhovych
E-mail: o.voitsekhovych@gmail.com
Tel. +380 95 529 99 39 (DERM UHMI)
Tel. +380 44 525 12 50 (UHMI main)
Fax. +380 44 525 53 63
Address: 37 Nauki ave, Kyiv, Ukraine, 03028

Ukrainian Hydrometeorological Institute

Department of Environment Radiation Monitoring

UHMI

Sampling and sample preparation

DERM are focused on the methods for effective aerosol, soil, bottom sediments and water sampling programs designs, developing strategies for monitoring network as an element of accidental preparedness for potential releases from the Nuclear Industry Enterprises, developing methods and networks for site specific environmental monitoring at the Uranium production legacy sites and adequate harmonized methods for analytical measurements of the environmental samples with wide spectra of artificial and natural radionuclides.

We have strong experience analyzing a wide range of sample matrices, including:

- Ground, surface water, mine effluent and wastewater
- Soils, sludge, rocks, building debris, bottom sediments
- Air Aerosols
- Biota, vegetation
- Mixed and hazardous waste

Radiochemistry

Laboratory of DERM uses modern methods of radiochemical separation of natural and artificial radionuclides, constantly improving and modifying them to achieve better results. Laboratory carries out quality control, take part in international proficiency testing and has state certification.

Analytical equipment

Gamma-spectrometry:

- HPGe Detectors for analysis of NORM and artificial radionuclides

Liquid scintillation counting:

- Triathler (with a/b separation) - Gross Alpha, $^{238+234}$U, ^{226}Ra, ^{222}Rn, ^{210}Po, ^{90}Sr+^{90}Y
- TriCarb 2900TR – Gross Alpha, ^{3}H, ^{14}C, ^{90}Sr+^{90}Y

Alpha spectroscopy and beta counting:

- UMF-2000 a/b radiometer with alpha-spectrometric measurements of U, Th, Po, Pu, Am isotopes

Trainings and stuff

Staff members of DERM UHMI have been regularly trained under fellowship programs in the key analytical Centers of EU and USA.

DERM UHMI now is one of the most qualified analytical laboratory in Ukraine, which play significant role as a methodological center, by supporting radiation monitoring networks in the countries and transferring experience to train other laboratories including fellowships from other countries.

Our partners

State Agency of Ukraine on Exclusion Zone Management

Central Analytical Laboratory

EcoCentre

SSE EcoCentre»

Laboratory of gamma-ray spectrometry and radiochemistry of Ukrainian Hydrometeorological Institute is certified by IAEA as a member of the IAEA ALMERA network

IAEA International Atomic Energy Agency Atoms for Peace

ALMERA