

## PERSONAL INFORMATION

## Alexandru Ivanov

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Sex M | Date of birth 1986 | Nationality Romanian

## OCCUPATIONAL FIELDS

IGR: Environmental Engineer (Chemist)  
INCDPM: CS III, Environmental Engineer

## WORK EXPERIENCE

01.11.2021 – now

**Environmental Engineer (Chemist)**

Geological Institute of Romania – IGR, Bucharest. [www.igr.ro](http://www.igr.ro)

- Member of the GeoEcoLab laboratory within the Installations of National Interest.
- Responsible for the implementation of analytical methods and the use of the Zeenit 700 atomic absorption spectrometer from Analytik Jena (flame, furnace, hydrides / cold vapors) as well as auxiliary test preparation equipment.
- Participant in the research activity carried out by the institute.

Scientific Research, Laboratory Analysis

01.04.2016 – now

**CS III, Deputy Head of the EQA Department, Engineer**

National Institute for Research and Development in Environmental Protection – INCDPM, Bucharest. [www.incdpm.ro](http://www.incdpm.ro)

- Responsible for RENAR accredited methods for the determination of 9 metals per furnace by HRCSAAS technique (initial accreditation 10.01.2019, Certificate no. LI 1202, No. Cr. 12).
- Responsible for the implementation and periodic verification of the adequacy of the accredited methods and of the intermediate precision verifications.
- Responsible for the development of methods and the use of the High Resolution Atomic Absorption Spectrometer ContrAA 700 from Analytik Jena (flame, furnace, hydrides / cold vapors) as well as auxiliary sample preparation equipment.
- Responsible for the development of methods and the use of ICPMS equipment (Nexlon 350X - Perkin Elmer), AAS (AA240 - Varian), TC Analyzer, TN, TOC (MultiN / C2100 - Analytik Jena), FTIR (4100LE - Jasco) as well as the use their auxiliary equipment.
- Participant in the research activity carried out in the institute.

Scientific Research, Laboratory Analysis

01.09.2013 – 31.03.2016

**CS, Engineer, from 07.07.2014 Deputy Head of the EQA Department**

National Institute for Research and Development in Environmental Protection – INCDPM, Bucharest. [www.incdpm.ro](http://www.incdpm.ro)

- Responsible for the development of methods and the use of the High Resolution Atomic Absorption Spectrometer ContrAA 700 from Analytik Jena (flame, furnace, hydrides / cold vapors) as well as auxiliary test preparation equipment.
- Responsible for the development of methods and the use of ICPMS equipment (Nexlon 350X - Perkin Elmer), AAS (AA240 - Varian), TC Analyzer, TN, TOC (MultiN / C 2100 - Analytik Jena), FTIR (4100LE - Jasco), as well as the use of their auxiliary equipment.
- Participant in the research activity carried out in the institute.

Scientific Research, Laboratory Analysis

01.09.2011 – 31.08.2013

**ACS, Engineer**

National Institute for Research and Development in Environmental Protection – INCDPM, Bucharest. [www.incdpm.ro](http://www.incdpm.ro)

- Responsible for the development of methods and the use of AAS equipment (AA240 - Varian), TC Analyzer, TN, TOC (MultiN / C2100 - Analytik Jena), FTIR (4100LE - Jasco), as well as the use of their auxiliary equipment.
- Participant in the research activity carried out in the institute.

Scientific Research, Laboratory Analysis

01.11.2009 – 31.10.2010

**Research Assistant**

UPB - Department of Applied Physical Chemistry and Electrochemistry, REMORESE Project "Redox molecular receptors for electrochemical sensors" 2007-2009

- Use of the potentiostat / galvanostat (PGSTAT 12 - Autolab, PAR 283 - Princeton Applied Research), UV-Vis-NIR spectrometer (V-670 - Jasco) equipments in research activities.
- Participation in the organization of scientific events within the project (NOMARES Workshop).
- Technical editing of scientific books (F.E. Daneş, E-M Ungureanu, Kinetics of physico-chemical transformations, AGIR Publishing House, 2009 and E-M Ungureanu, Organic electrochemistry from foundations to applications, Politehnica Press Publishing House, 2010).

**Scientific Research**

01.11.2007 – 31.10.2009

**Research Assistant**

UPB - Department of Analytical Chemistry and Instrumental Analysis, Grant Project CEEEX-Module IV P-Conform, 2006-2008, "Laboratory for quality control and identification of honey counterfeiting - APILAB"

- Use of the atomic absorption spectrometer equipment with electrothermal atomization (Zeenit 650 - Analytik Jena), the microwave digester (MWS-2 - Berghof) and the analytical balance (AUW220 - Shimadzu) in the APILAB accredited laboratory.

**Scientific Research**
**EDUCATION AND TRAINING**

2010 – 2012

**Master's Degree in Environmental Engineering**

University "Politehnica" of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Engineering and Environmental Protection in the Chemical and Petrochemical Industry.

- Environmental Quality Monitoring, Water Treatment and Purification, Gas Purification, Waste Management and Treatment, etc.

2005 – 2010

**Bachelor's Degree in Environmental Engineering**

University "Politehnica" of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Engineering and Environmental Protection in the Chemical and Petrochemical Industry.

- Chemistry (Analytical, Inorganic, Organic, Physical), Electrochemistry, Chemical Technologies, Unit Operations in Process Industries, Environmental Quality Monitoring, Water Treatment and Purification, Waste Management and Treatment, etc.

**PERSONAL SKILLS**

Mother tongue

Romanian

Other language

	ÎNȚELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
English	C2 – Advanced	C2 – Advanced	B1 – Average	A2 – Average	B1 – Average

Job-related skills

Skills for regular use and maintenance of various analytical equipment:

- HRCSAAS Analytik Jena ContraAA 700 High Resolution Atomic Absorption Spectrometer (Flame Atomization and Graphite Furnace Mode), HS60 Modular Cold Vapor / Hydride Generation Module (Flow Injection), HS55 Modular Cold Vapor / Hydride Generation Module (batch) and SSA600 Module for solid samples insertion into the graphite furnace.
- Analytik Jena Zeenit 650 atomic absorption spectrometer with graphite furnace atomization mode and HS55 Module for cold vapor / hydride generation.
- Varian AA240 atomic absorption spectrometer with flame atomization module, GTA120 module for oven atomization and VGA77 module for cold vapor / hydride generation.
- Thermo Solaar M5 atomic absorption spectrometer with flame atomization mode, oven atomisation mode and cold vapor / hydride generator module.
- GBC Avanta S atomic absorption spectrometer with flame atomization mode.
- ICP-MS Perkin Elmer Nexlon 350x Inductively Coupled Plasma Mass Spectrometer, equipped with two external gas channels collision / reaction cell, Cetac autosampler, FIMS100

hydride generator, etc.

- Analytik Jena Multi N/C 2100 elemental carbon / nitrogen analyzer for liquid samples (TC, TIC, TOC, NPOC), CLD (TN) module, HT1300 module for solid samples (TC, TOC).
- Multiple models of UV-Vis, NIR, FTIR molecular absorption spectrometers.

#### Computer skills

- Microsoft Win 95 - Win 11, Ubuntu 16.04 - 20.04 LTS (installation, use, troubleshooting).
- Microsoft Office Word/Excel/Powerpoint/Visio, Microsoft Teams, OpenOffice, LibreOffice, LibreCAD.
- Autocad 2002-2008 level 1 (2D technical drawing), Mathcad 13 – 14, Origin 8, JMP 10.
- Aspect LS (soft AAS Analytik Jena), Aspect CS (soft HRCSAAS Analytic Jena), Syngistix (soft ICPMS Perkin Elmer), WinAAS (soft GFAAS Analytic Jena), SpectrAA (soft AAS Varian), AA WinLab (soft FIMS Perkin Elmer), Spectra Manager (soft UV-Vis and FTIR Jasco), GPES and Nova (soft PGstat Metrohm Autolab), MultiWin (soft TC, TIC, TOC, NPOC, TN Analytic Jena), etc..

#### ADDITIONAL INFORMATION

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##### Publications

Identifiers in specialized databases:

- <https://orcid.org/0000-0001-8546-0572>
- <https://publons.com/researcher/L-9275-2017/>

Date:

10.11.2021