



## Work experience

- 09/2014-present: Professor, PhD, Alexandru Ioan Cuza University of Iasi, Faculty of Chemistry, Department of Chemistry, Analytical Chemistry Laboratory. Teaching and research activities.
- 02/2007-09/2014: Associated professor, PhD, Alexandru Ioan Cuza University of Iasi, Faculty of Chemistry, Department of Chemistry, Analytical Chemistry Laboratory. Teaching and research activities.
- 07/2003-09/2004: Postdoctoral Fellow at Faculdade de Ciencias e Tecnologica Experience Universidade Nova de Lisboa, Portugal. Research Training Network, EU project "Reactive Intermediates Laboratory Studies of Atmospheric Chemistry and Combustion Relevant to." Contract No CT-2000-00006-HPRN..
- 02/2003-02/2007: University Lecturer, PhD, Alexandru Ioan Cuza University of Iasi, Faculty of Chemistry, Department of Chemistry, Analytical Chemistry Laboratory. Teaching and research activities.
- 04/2002-02/2003: Assistant professor, PhD, Alexandru Ioan Cuza University of Iasi, Faculty of Chemistry, Department of Chemistry, Analytical Chemistry Laboratory. Teaching and research activities.
- 03/1998-03/2002: PhD student at Bergische Universität Gesamthochschule Wuppertal, Germany, Physical Chemistry Department. Main research work devoted to laboratory and photo-smog chamber investigation (kinetic and mechanistic investigation on the gas phase atmospheric degradation of organic chemical compounds such as (hydroxy)aromatic. Development of reaction mechanisms for the degradation of gas phase chemicals under photo-oxidative conditions. Long-path spectroanalytic techniques (FTIR) used for the investigation under simulated atmospheric conditions of gaseous organic pollutants in large glass/quartz vessel reactors (1080 L quartz reactor) and outdoor reactors (EUPHORE-chamber). Use of analytical equipments for solar radiation intensity measurements. Use of monitors: CO, NO<sub>x</sub>, O<sub>3</sub>. Equipments for aerosol measurements (counters and scanning mobility particle sizer). Laboratory work activities with students from Bergische Universität Gesamthochschule Wuppertal, Germany.
- 10/1996-02/1998: Assistant, Alexandru Ioan Cuza University of Iasi, Faculty of Chemistry, Department of Chemistry, Analytical Chemistry Laboratory. Teaching and research activities.

## International/national research projects

### Coordinator (director) of international projects

- 1) H2020- INFRAIA-1-2016-2017, Advanced Communities - EUROCHAMP-2020 - Integration of European Simulation Chambers for Investigating Atmospheric Processes - Grant N° 730997, 2016-2019, (101000,00 EUR).
- 2) NATO: ESP.EAP.CLG 982287, Pesticides and Organic Nitrate Level in Natural Matrixes from Iasi-Romania. NATO, Environmental Security, 2006-2008 (10000,00 EUR).
- 3) EVR1-CT-2001-40013, Improvements and Access to a Large Simulation Chamber (IALSI); CE Environment and Sustainable Development; Global Change, Climate and Biodiversity; 2002-2004, ([http://cordis.europa.eu/project/rcn/58163\\_en.html](http://cordis.europa.eu/project/rcn/58163_en.html)) (17500,00 EUR).

### Coordinator (director) of national projects

- 1) POS-CCE Axis II. D2.2. O2.2.1., SMIS-901 /CSNR-13984, INTEGRATED CENTRE OF ENVIRONMENTAL SCIENCE STUDIES IN THE NORTH EAST REGION-CERNESIM, Grant N° 257/28.10.2010, 2010-2014 (<http://cernesim.uaic.ro>). (32009409,00 Lei)
- 2) PN-II-2007-405 INVESTIGATION ON ENVIRONMENTAL RADIONUCLIDE RETENTION ON HETERO-POLIOXO-METALLIC SORBENTS FOR RADIONUCLIDE ANALYSIS BY IONIC CHROMATOGRAPHY, Grant N° 9/28.09.2007, 2007-2010, (<http://araci.uaic2007.googlepages.com>) (826717,00 Lei).

## Research interest

### Analytical chemistry - State of arts instrumental methods of analysis

- Optical spectrometry
- Mass spectrometry
- Gas and liquid chromatography.

### Environment Chemistry

- Environmental analytical chemistry (organic, inorganic pollutants in air and water).
- Atmospheric chemistry.

## Significant results

- Publications in ISI quoted journals (peer reviewed process): **56**

- Other publications: **20**
- Contributions at **30** international conferences and **50** national conferences (conferences/oral presentations/poster)
- Books: **4**
- Citations in ISI quoted journals: **710** (self-citation of all authors excluded)
- Hirsch Factor: **12** (self-citation excluded)

#### **Certificated abilities**

- 1) Certificate with registered no. TRRO AK-33-2010 emitted by TUV Rheinland Romania. Certificate acknowledging completing and undertaking the examination in Bucharest on 19.02.2010 for the course „Assistant for testing and calibration laboratories”, (32 hours), according to the national standard SR EN ISO/CEI 17025:2005 identical with the European Standard EN ISO/IEC 17025:2005. The examination was organised on the basis of the examination requirements of Academia TUV Rheinland Romania.
- 2) Certificate with registered no. TAR AK-69/02/2010 emitted by TUV Austria Romania. Certificate acknowledging completing and undertaking the examination on 12.02.2010 for the course „Internal auditor for testing and calibration laboratories in agreement with the requirements of the ISO 17025:2005 and ISO 19011:2002 standards”.
- 3) Certificate AnalytikJena to DIN EN ISO 9001:200 - multi N/C3100.
- 4) Certificate AnalytikJena to DIN ISO 9001:2008 – ContrAA700 and novAA350.

#### **Technical skills and competences**

Expertise in use of spectrophotometric techniques (UV-vis), atomic absorption spectroscopic techniques (ContrAA 700 with flame and graphite furnace) for the characterisation of various matrices. Expertise in using in situ long path spectroscopic techniques (FT-IR) for the determination and quantification of gaseous chemical pollutants in reaction chambers suitable for the simulation of the atmosphere. Expertise in using chromatographic techniques such as IC, GC-FID-MS, GC-FID-MS-TDS, GC-ECD, GC-GC-MS, HPLC. Expertise in using instruments for aerosol characterisation such as scanning mobility particle sizer analyser. Extensive experience in operating indoor and outdoor photoreactors. Experience in handling analytical equipment for the measurement of solar radiation, SO<sub>2</sub>, CO, NO<sub>x</sub> and O<sub>3</sub>. Experienced user of Software for a wide range of analytical instruments.

#### **Other skills and competences**

##### **Social skills and competences**

Coordinator of bachelor and master thesis  
 Coordinator/co-worker of PhD students research activities  
 Responsibility, ability to work with deadlines and in a multidisciplinary and multifunctional team.

##### **Organisational skills and competences**

From 2014 Coordinator of the Integrated Centre for Studies in Environmental Science Nord-Est / (CERNESIM)  
 Since 2008 Quality Responsible of Laboratory of analytical chemistry and instrumental analysis (LAICA) laboratory accredited by RENAR.  
 Since 2012 member of the Scientific Committee of the Conference Faculty of Chemistry and Conference

##### **Scientific skills and competences**

Member of Editorial Board Anal. St. of Univ. Al.I. Cuza Iasi Series Geology,  
 Member of Editorial Board ACTA CHEMICA IAȘI

##### **Reviewer for articles published in ISI quoted journals (peer review process)**

Journal of Photochemistry and Photobiology A, Chemosphere, Science of the Total Environment, Environmental Chemistry Letters, Atmospheric Chemistry and Physics, Environmental Chemistry, Environmental Science and Technology

#### **Training for short periods in international laboratories**

July/August 2011, 2015: Department of Chemistry and Environment at the Ecole des Mines in Douai, France  
 June/July 2010: Department of Chemistry and Environment at the Ecole des Mines in Douai, France  
 July 2006, 2007: Laboratory of Analytical Chemistry, University of Torino, Italy

#### **Membership of professional societies**

Member of the Romanian Chemical Society – since 2005

#### **Language**

English - reading, writing, speaking –good  
 German - reading, writing, speaking - medium