



Curriculum vitae Europass

PERSONAL INFORMATION

Name **TIBERIU FRENTIU**
Address
Telephone
Fax
E-mail
Nationality
Date of birth

WORK EXPERIENCE

- Dates (from – to) **15 September 1990 - Present**
- Occupation or position held
September 1990 – September 1996 – Assistant Professor
October 1996 – September 2000 – Lecturer
October 2000 – February 2016 – Associated Professor
March 2016 – present – Full Professor
- Main activities and responsibilities
Teaching and research activity in the field of analytical chemistry and instrumental analysis;
Courses of Analytical chemistry, Instrumental analysis, Environmental monitoring, Food quality control, Analytical techniques for speciation and element imaging
Laboratory classes with students
Research projects (Analytical spectrometry using inductively and capacitively coupled plasmas; miniaturized spectral instrumentation using plasma sources; chemical speciation of toxic metals in environmental samples by selective extraction)
- Name and address of employer
“Babes-Bolyai” University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania
- Type of business or sector
Higher education and research
- Dates (from – to) **1993-2009; 2018 - 2022**
- Occupation or position held
Senior researcher
- Main activities and responsibilities
Research. Design, construction, study of characteristics and development of analytical applications of the medium or low power capacitively coupled plasma as atomization/excitation source in atomic fluorescence/emission spectrometry.
Research in the field of inductively coupled plasma mass spectrometry. Accreditation of a laboratory for environmental analysis.
- Name and address of employer
National Institute for Research and Development of Optoelectronics Bucharest – Research Institute of Analytical Instrumentation, Donath 67, 400293, Cluj-Napoca Romania
- Type of business or sector
Research. Field of atomic spectrometry.

- Dates (from – to)
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- Main activities and responsibilities
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- Occupation or position held

- Main activities and responsibilities

- Name and address of employer

- Type of business or sector

EDUCATION AND TRAINING

- Dates (from – to)

- Title of qualification awarded

- Principal subjects/occupational skills covered

- Name and type of organization providing education and training

- Dates (from – to)

- Title of qualification awarded

- Principal subjects/occupational skills covered

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- Title of qualification awarded

- Principal subjects/occupational skills covered

- Name and type of organisation providing education and training

MOTHER TONGUE

January 1989 – September 1990

Chemical Engineer

Research. Study of inductively coupled plasma as source in atomic emission

Enterprise for Analytical Instrumentation Apparatus and Research Equipment
Bucharest, Branch Cluj-Napoca, Romania

Research. Field of atomic spectrometry

October 1987 – December 1988

Designer Engineer

Preparation of technical book of facilities to obtain titanium tetrachloride, zirconium tetrachloride; chemical purification of titanium and zirconium tetrachloride using aluminum powder and distillation; scrubbing; processing of titanium and zirconium sponge at the Chemical Plant Giurgiu. Technical inspections and verification of the progress in the construction of the facility to obtain titanium and zirconium at the Chemical Plant Giurgiu.

Institute for Technological Engineering, Research, Design and Production for Inorganic Chemical Industry and Non-ferrous Metals, Bucharest, (IAMN Bucharest), Romania

Design of facilities and equipment for the chemical industry of titanium and zirconium

September 1985 – September 1987

Chemical Engineer

Operation of the cold storage facility and compressors of ammonia and carbon dioxide, facilities for waste gases

Plant for Chemical Fertilizers Arad (Vladimirescu), Romania

Industry, production of NPK fertilizers

June 2015 –

Dr. habil., doctoral advisor

Doctoral advisor in Chemistry

“Babes-Bolyai” University, Cluj-Napoca, Romania

September 1992 – November 1996

PhD in Chemistry

Analytical Chemistry/ expertise in atomic spectrometry using capacitively coupled plasma sources of medium and low power

“Babes-Bolyai” University, Faculty of Chemical Technology, Cluj-Napoca, Romania

September 1980 – June 1985

Chemical Engineering, Graduate

Chemistry, chemical technology and engineering/ Inorganic technology Chemistry

“Babes-Bolyai” University, Faculty of Chemical Technology, Cluj-Napoca, Romania

September 1974 – July 1979

Chemical operator/High school diploma

Chemistry, technology and chemistry engineering/Operator in industry of inorganic compounds

Industrial chemistry High School, Ocna –Mures, Romania

Romanian

OTHER LANGUAGES	
	English
• Reading skills	Good
• Writing skills	Good
• Verbal skills	Good
	French
• Reading skills	Good
• Writing skills	Basic
• Verbal skills	Basic
SOCIAL SKILLS	Good capacity to integrate in work teams, good communication
AND COMPETENCES	
ORGANISATIONAL SKILLS	Head of Analytical Chemistry Department 2007-2012; Head of the Department for Distance Learning in the Faculty of Chemistry and Chemical Engineering 2010-2011; Member of the Faculty Council 2007-2012 and 2016 – present;
AND COMPETENCES	Director of the Doctoral School of Chemistry 2023 - present Participation in the establishment of an Accredited Environmental Analysis Laboratory (LAM) within ICIA Cluj-Napoca Participation in the establishment of a Laboratory for complex spectral analysis in a Research Base with Multiple Users (BCUM) of Babes-Bolyai University Cluj-Napoca Organizer of scientific events: (<i>Optical Techniques for Environmental Monitoring and Risk Assessment, Summer School, Otem 2006</i> July 31, August 9, 2006, Baia Mare, Romania) Director and responsible for projects won in national competitions (Horizon 2000, Nucleus, CNCIS, CEEX module I and IV, INFRAS, PNCDI). Organizational competences acquired by attending a course on Academic Management (Cluj-Napoca, May 2008).
TECHNICAL SKILLS	<ul style="list-style-type: none"> • Project manager (9) • Member in research team (13 projects, of which 2 in international team) • 6 books (atomic and molecular spectrometry, bases of speciation analysis, chemical imaging) • 1 guide book for laboratory experiments in instrumental analysis • Papers published abroad: 121 of which 95 in ISI journals and 26 in proceedings • Papers published in Romania: 38 (34 journals with peer-review and 4 in proceedings) • Scientific communications in Romania: 44 • Scientific communications abroad: 91 • 3 diplomas of excellence and 3 gold medals at international invention salons • 2 national (OSIM) patents • Gheorghe Spacu Award – Romanian Academy 2019 • Member in Society of Chemistry in Romania • Referee for journals: Analyst; Analytical Chemistry; Analytical Letters; Analytical Science; Talanta; Chemical Papers; Scientia Agricola; Journal of Hazardous Materials; Spectrochimica Acta Part B; Food Control; Chemosphere; Journal of Analytical Atomic Spectrometry; Analytical Methods; International Journal of Environment and Analytical Chemistry; Ecotoxicology and Environment; Analytical and Bioanalytical Chemistry; Spectroscopy Letters; Material Science in Semiconductor Processing; Revue Roumaine de Chimie
AND COMPETENCES	
TECHNICAL SKILLS	Windows, Power Point
With computers	
ARTISTIC SKILLS	Popular dances
AND COMPETENCES	
DRIVING LICENCE(S)	No

I hereby certify that the above statements are true.

Cluj-Napoca

15.07.2025

Prof. Tiberiu Frențiu PhD