




PERSONAL INFORMATION



 Str. Arany Janos nr. 11, Cluj-Napoca, 400028, Romania
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 szabolcs.fogarasi@ubbcluj.ro

Sex M | Date of birth 28/11/1985 | Nationality Hungarian

RESEARCH FIELDS

Electrochemical processes for waste minimization; recovery of metals of economic and industrial interest from WEEE; transport phenomena and unit operations; modeling, simulation and optimization of chemical processes; technico-economic assessment of industrial scale processes; Computer Aided Process Engineering;

WORK EXPERIENCE

October 2023 – present

Associate professor

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- Teaching activities for the following academic disciplines: Heat transfer and heat transfer equipments; Fluid mechanics and momentum transfer; Unit operations in food industry; Transfer processes;

Business or sector: Education & research

March 2017 – September 2023

Lecturer

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- Teaching activities for the following academic disciplines: Heat transfer and heat transfer equipments; Fluid mechanics and momentum transfer; Unit operations in food industry; Transfer processes;

Business or sector: Education & research

March 2014 - February 2017

Assistant professor

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- Teaching activities for the following academic disciplines: Heat transfer and heat transfer equipments; Fluid mechanics and momentum transfer; Mass transfer unit operation;

Business or sector: Education & research

March 2022 - December 2024

Project manager

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- Project title: *REcycling of spent Li-ion batteries and end-life photovoltaic panels: From the development of metal recovery processes to the implementation of a START-up* (acronym: RESTART), Project cod: COFUND-LEAP-RE-RESTART, No. 291/2022;

Business or sector: Education & research

May 2018 - April 2020

Project manager

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- Project title: *Innovative and ecofriendly process development for copper and non-metallic fractions recovery from electronic component free waste printed circuit boards; (acronym: ECOTEC_RCu_WPCBB)*, Project cod: *PN-III-P1-1.1-PD-2016-0139*, No: *57/2018*;
Business or sector: Education & research

September 2017 - March 2020

Project team member

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- Project title: *Demonstration of Gas Switching Technology for Accelerated Scale-up of Pressurized Chemical Looping Applications (acronym: GaSTech)*, ERA-Net Cofund ACT, No *91/2017*;
Business or sector: Education & research

September 2014 - September 2015

Postdoctoral researcher

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- Project title: *Recovery of base metals from waste printed circuit boards by combined chemical and electrochemical processes*, POSDRU/159/1.5/S/132400;
Business or sector: Education & research

April 2013 – December 2014

Project team member

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- Project title: *Mathematical modeling of metal leaching processes from waste electrical and electronic equipment for recycling purposes*, No: *RO-HU 673/2013*;
Business or sector: Education & research

February 2013 - December 2016

Project team member

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- Project title: *Technico-economical optimization of the environmental impact of CCS technologies integration in electric power plants using solid fossil fuels and renewable energy sources (biomass)*
Business or sector: Education & research

EDUCAȚIE ȘI FORMARE

October 2009 - November 2012

PhD in chemical engineering

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, Department of Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- *Thesis title: Recovery of gold and silver from waste printed circuit boards*
- Research Internship between January 2012 – August 2012 at the University of Pannonia, Faculty of Engineering, Institute of Chemical and Process Engineering, Veszprem, Hungary

October 2004 - June 2009

Chemical engineer

Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering, 11 Arany Janos Street, Cluj-Napoca, RO-400028, Romania

- *Diploma work title: Pilot installation design for the electrosynthesis of hydrogen peroxide*

PERSONAL SKILLS

Mother tongue(s)

Hungarian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Romanian	C1	C1	C2	C1	C2
English	C2	C2	C2	C1	C1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills Self-motivated with excellent oral and written communication skills displayed through personal interaction, briefings, presentations, and written correspondence

Job-related technical skills Atomic absorption spectrophotometer, Zmorph VX 3D printer

Computer skills Microsoft Office, Matlab, Comsol Multiphysics, EndNote, OriginLab, Labview, ChemCAD, FreeCAD, Voxelizer

Driving licence ▪ B

Publications Publications: 1 textbook, 46 ISI scientific papers (20 main author) (SCOPUS: 624 citations, Hirsch index 13)

Projects Member in 1 national and 2 international projects; Project director / responsible for one national and one international research project.

Memberships Member of the society of chemical engineers Romania
Scientific referent for ISI-ranked journals: Renewable & Sustainable Energy Reviews; Fuel; Clean Technologies and Environmental Policy; Journal of Cleaner Production; Applied Thermal Engineering; Energies; Processes; Waste Management Journal; Hydrometallurgy; Molecules; Materials; Studia Universitatis - Seria Chemia; Resources, Conservation & Recycling; Chemical Engineering Journal; etc.