

## curriculum vitae

### Personal information

Surname(s) / First name(s)

Official Address(es)

Telephone(s)

Fax(es)

E-mail(s)

Date of birth

**Cormoş Ana-Maria**

11 Arany Janos, 400068, Cluj-Napoca, Romania

0040-264-593833

0040-264-590818

cani@chem.ubbcluj.ro

June 11, 1973

### Occupational field

**Associate Professor**

### Work experience

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

Dates

Occupation or position held

Main activities and responsibilities

Name and address of employer

September 2002 onwards

Associate Professor (October 2014 onwards), Lecturer (October 2007-September 2014), Teaching Assistant (September 2002- September 2007)

- Teaching the courses and laboratory work for the following academic discipline: "Computers Programming with Application in Chemical Engineering", "Modeling and Simulation of Chemical Processes", "Modeling and Simulation Complex Processes", "Chemical Engineering Reactions", "Computer using in chemical research"

- Research area: Modeling and Simulation of Chemical Processes; Computer Applications in Chemistry and Chemical Engineering; Carbon Capture and Storage; Energy conversion systems  
Faculty of Chemistry and Chemical Engineering, Babes-Bolyai, Cluj-Napoca, Romania

November 1998 - May 2005

PhD student

Modeling and Simulation of Limestone Decomposition in Vertical Lime Kiln with coke

Faculty of Chemistry and Chemical Engineering, Babes-Bolyai, Cluj-Napoca, Romania

October 1996- October 1998

Research Assistant

Modeling and Simulation of Chemical Processes; Computer Applications in Chemistry and Chemical Engineering

Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University, Cluj-Napoca, Romania

### Education and training

Dates

Title of qualification awarded

Principal subjects/Occupational skills covered

Name and type of organisation

Dates

Principal subjects/Occupational skills covered

Name and type of organisation

Dates

Principal subjects/Occupational skills covered

Name and type of organisation providing organisation and training

November 1, 1998 – May 11, 2005

Ph D.

Modeling and Simulation of Limestone Decomposition in Vertical Lime Kiln with coke

Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania

December, 2007

Development of application for courses using Excel and Matlab in case of Modeling and Simulation of Chemical Processes; Computer Applications in Chemical Research

Automatic Control Laboratory, ETH Zurich, Switzerland

May, 2005

Workshop: Creativity support tools and methods in process engineering, Prof. Andrzej Kraslawski, Lappeenranta University of Technology, Finland

Faculty of Chemistry and Chemical Engineering, Cluj-Napoca Romania and Lappeenranta University of Technology, Finland

Dates	July 20-21, 2005
Principal subjects/Occupational skills covered	Integration Process, lectures: prof Jiri Klemes and prof. Simon Perry
Name and type of organisation providing organisation and training	Centre for Technology Transfer in the Process Industries, Department of Chemical Engineering University "Politehnica" of Bucharest and Manchester University
Dates	February 17- August 16, 2003
Title of qualification awarded	Research stage
Principal subjects/Occupational skills covered	Numerical approaches for population balance equations: Implementation of the moving pivot technique developed by Ramkrishna into a Fortran equation solver program. Case study: barium sulfate precipitation process.
Name and type of organisation providing organisation and training	ETH Zurich, Switzerland, Institute of Process Engineering, Group on Advanced Separation Processes- group of Prof. Dr. Marco Mazzotti
Dates	February 11- April 10, 2002
Title of qualification awarded	Research stage
Principal subjects/Occupational skills covered	Simulation of the Scrubbing Unit of Waste Incineration Plant
Name and type of organisation providing organisation and training	University of Technology in Vienna, Austria, Group of Gas-Solid Process - Prof. Dr. Anton Friedl Financial Support: Word Bank Project: Informatics of Chemical Systems. 1997-2002, Code 70
Dates	December 2- December 4, 2000
Principal subjects/Occupational skills covered	Workshop: ChemCAD – a tool for modeling and simulation of chemical processes
Name and type of organisation providing organisation and training	Nor.Par.a.s and Etvos Lorant University, Budapest, Hungary
Dates	October 1997- June 1998
Title of qualification awarded	Master of science
Principal subjects/Occupational skills covered	Interface Process Engineering
Name and type of organisation providing organisation and training	Faculty of Chemistry and Chemical Engineering, Babes-Bolyai Univesity, Cluj-Napoca, Romania
Dates	October 1991- June 1996
Title of qualification awarded	Bachelor of Science
Principal subjects/Occupational skills covered	Chemistry-Physical
Name and type of organisation providing organisation and training	Faculty of Chemistry and Chemical Engineering, Babes-Bolyai Univesity, Cluj-Napoca, Romania

### Personal skills and competences

Language skill	English
Social skills and competences	Teamwork, communication and interpersonal skills, responsibility.
Computer skills and competences	Microsoft Office (Word, Excel, PowerPoint), Corel Draw, ChemWin MATLAB/SIMULINK, COMSOL Multiphysics, Fortran, ChemCAD, HYSYS, Aspen

### Additional information

#### Main Projects

##### Project manager

- Integrating process intensification methods with advanced control strategies for improved performance of CO<sub>2</sub> capture systems, Project ID: PN-III-P4-ID-PCE-2020-0632, 2021-2023.
- Demonstration of Gas Switching Technology for Accelerated Scale-up of Pressurized Chemical Looping Applications (GaSTech), ERA-Net Cofound ACT, No 91/2017.
- Dynamic simulation of a post-combustion CO<sub>2</sub> capture pilot with assessment of solvent degradation, Mobility project, Project ID: PN-III-P3-3.1-PM-RO-BE-2016-0008, 2017-2018.
- The improving of the technical- economic performance and reduction of environmental impact of

chemical processes using mathematical modeling and simulation of the processes using computers  
CNCSIS AT 2006 – Them 3, COD 7.

*Member in the research teams* (17 national projects, 7 international projects, 2 industrial projects);

Selected Projects:

- Validation of innovative energy efficient calcium looping technology for decarbonization of fossil fuel-intensive industrial applications – INNOCAL, PN-III-P2-2.1-PED-2019-0181, 2020-2022.
- 3D-CAPS: Three-Dimensional Printed Capture Materials for Productivity Step-Change, ERA-Net Cofund ACT, No 87/2017.
- Developing innovative low carbon solutions for energy-intensive industrial applications by Carbon Capture, Utilization and Storage (CCUS) technologies, CNCS – UEFISCDI, project ID: PN-III-P4-ID-PCE-2016-0031.
- SEWGS Technology Platform for cost effective CO<sub>2</sub> reduction the in the Iron and Steel Industry (STEPWISE), Project ID 640769, Horizon 2020.

#### **Publications**

- 2 books (co-author), 106 scientific papers (47 - highly visible ISI indexed journals, 8 - IDB indexed journals, 40-ISI conferences proceedings and 11 - conferences proceedings IDB); Hirsch index: 18; Total number of citations: 764 (without self-citations, according to SCOPUS database).

#### **Students' research coordination**

- Coordinated the students' research to obtain scholarships / awards / participation in events (4 performance scholarships offered by UBB, 10 awards at student conferences, 14 participation to international conferences);
- Publication of the results from bachelor and master thesis in 12 articles ISI (9 articles with IF >3), 12 proceeding ISI and 3 proceeding indexed IDB.

#### **Scientific referent for ISI-ranked journals**

Energy; International Journal of Greenhouse Gas Control; International Journal of Hydrogen Energy; Industrial & Engineering Chemistry Research; Fuel Processing Technology; International Journal of Refrigeration; Environmental Science & Technology; Energy & Fuels; Fuel; Journal of Cleaner Production; Applied Thermal Engineering; Resource Conservation and Recycling; Studia Universitatis - Seria Chemia etc.

#### **Congresses Organization**

- Member of Organizing Committee for ESCAPE-17 (Bucharest, 2007) and CAPE-Forum 2005;

#### **Professional Affiliation**

- Member of Romanian Chemical Engineers Society;

#### **Profile address from Scopus, ORCID:**

- Scopus: <https://www.scopus.com/authid/detail.uri?authorId=8450482900>
- ORCID: <https://orcid.org/0000-0003-0832-0722>