

IANCU Petrica

Lecturer, PhD

University "POLITEHNICA" Bucharest
Faculty of Applied Chemistry and Materials Science
Department of Chemical Engineering



Contact information

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Education and training

Dates	July 1991
Title of qualification awarded	Chemical Engineer
Principal subjects/occupational skills covered	Technology of Chemical Organic Compounds
Name and type of organisation providing education and training	Polytechnical Institute Bucharest,
Level in national or international classification	Graduate
Dates	July 1998
Title of qualification awarded	Chemical Engineer
Principal subjects/occupational skills covered	Computer Aided Chemical and Biochemical Engineering
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest,
Level in national or international classification	Master
Dates	July 2008
Title of qualification awarded	PhD in Chemical Engineering
Principal subjects/occupational skills covered	Process Integration for Water Minimisation in Oil Processing and Petrochemistry
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest,
Level in national or international classification	PhD

Professional experience

Dates	1991 – 1995; 1995 – 1996; 1996 – 1999
Occupation or position held	Scientific Research Assistant; Scientific Researcher; Scientific Researcher III
Main activities and responsibilities	Research in Chemical Engineering and Process Systems Engineering
Name and address of employer	University POLITEHNICA of Bucharest – Department of Chemical Engineering
Type of business or sector	Education, consulting and scientific research
Dates	1999 - 2001
Occupation or position held	Scientific Researcher, degree III
Main activities and responsibilities	Database software development and implementation
Name and address of employer	University POLITEHNICA of Bucharest - Human Resources Department
Type of business or sector	ITC
Dates	2001 - 2002
Occupation or position held	University Assistant

Main activities and responsibilities	Teaching, consulting and scientific research in Chemical Engineering
Name and address of employer	University POLITEHNICA of Bucharest - Department of Chemical Engineering
Type of business or sector	Education, training, consulting and scientific research
Dates	2002 - present
Occupation or position held	Lecturer
Main activities and responsibilities	Teaching, consulting and scientific research in Chemical Engineering
Name and address of employer	University POLITEHNICA of Bucharest - Department of Chemical Engineering
Type of business or sector	Education

Academic and research interests

- computer aided process modeling and simulation
- innovative process development and design, as reactive distillation
- development of new processes based on CO₂ capture by microalgae
- computers programming and applications in chemical engineering
- database design, implementation and operation for university management systems
- management systems design for educational institutions and business companies
- computer aided design
- design/retrofit of industrial process plants with professional computer tools
- application of methodologies for process integration based on pinch analysis in chemical industry, petrochemistry and oil processing
- application modern methodologies of process integration for rational use of water in industrial processes
- biofuels production processes conceptual design and analysis

Teaching activity

<i>Study cycle (Undergraduate/ Master)</i>	<i>Specialisation</i>	<i>Discipline code in Curricula</i>	<i>Discipline name</i>	<i>Activity type(course, project, laboratory, etc)</i>
<i>Undergraduate</i>	<i>Chemical Engineering</i>	<i>UPB.11.T.01.O.004 UPB.11.T.02.O.014</i>	<i>Computer usage and computer aided design</i>	<i>Course/laboratory</i>
<i>Undergraduate</i>	<i>Industrial Bioprocesses</i>	<i>UPB.11.F.01.O.905</i>	<i>Computer usage and computer aided design</i>	<i>Course/laboratory</i>
<i>Undergraduate</i>	<i>Food products control and expertise</i>	<i>UPB.11.F.03.O.206</i>	<i>Applied Informatics</i>	<i>Course/laboratory</i>
<i>Undergraduate</i>	<i>Industrial Bioprocesses</i>	<i>UPB.11.S.08.A.913</i>	<i>Bioprocess Integration</i>	<i>Course/laboratory</i>
<i>Undergraduate</i>	<i>Chemical Engineering</i>	<i>UPB.11.T.06.O.312</i>	<i>Unit Operations in Chemical Industries</i>	<i>Project</i>
<i>Undergraduate</i>	<i>Chemical Engineering in English</i>		<i>Unit Operations</i>	<i>Workshop Seminar</i>
<i>Master</i>	<i>Environmental Engineering</i>	<i>UPB.11.S.09.O.1206</i>	<i>Wastewater minimization on industrial sites</i>	<i>Course/ Workshop</i>

Publications (selective):

Articles

- Iancu, P., Pleșu, V., Velea, S., *Flue gas CO₂ capture by microalgae in photobioreactor: A sustainable technology* (2012), Chemical Engineering Transactions, 29, pp. 799-804.
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84870845630&partnerID=40&md5=e7ee82590022dca0569fc65224c0e56c>

- Isopescu, R., Dinu, G., Pleșu, V., Iancu, P., Bercaru, M., Arsene, I., *New developments for electronic document management in University* (2010), *Chemical Engineering Transactions*, 21, pp. 1063-1068.
<http://www.scopus.com/inward/record.url?eid=2-s2.0-78650278061&partnerID=40&md5=ebed570431ca7ff5930f307cf72c436b>
- Iancu, P., Plesu, V., Lavric, V., *Regeneration of internal streams as an effective tool for wastewater network optimization* (2009), *Computers and Chemical Engineering*, 33 (3), pp. 731-742
<http://www.scopus.com/inward/record.url?eid=2-s2.0-58949083676&partnerID=40&md5=c3ae8c0d05904443a3a1af0004e9e5d5>
- Lavric, V., Iancu, P., Pleșu, V., *Cost-based design of wastewater network optimal topology* (2007) *Resources, Conservation and Recycling*, 50 (2), pp. 186-201.
<http://www.scopus.com/inward/record.url?eid=2-s2.0-34047162491&partnerID=40&md5=382d2e5a3801d5084011438cbfff7427>
- Iancu, P., Pleșu, V., Lavric, V., *Cost versus network length criteria in water network optimal design* (2006) *Computer Aided Chemical Engineering*, 21 (C), pp. 1821-1826.
<http://www.scopus.com/inward/record.url?eid=2-s2.0-77956725697&partnerID=40&md5=c2a7cca23133864dda8474b00780b76c>
- Lavric, V., Iancu, P., Pleșu, V., *Genetic algorithm optimisation of water consumption and wastewater network topology* (2005) *Journal of Cleaner Production*, 13 (15), pp. 1395-1405.
<http://www.scopus.com/inward/record.url?eid=2-s2.0-27144501077&partnerID=40&md5=8e405acd5771044f4f88ea7b9b44904c>

Research projects

- 2008-2011 : PROJECT "Parteneriate" PNII, ID 22085 - Greenhouse gas emissions reducing using microalgae (GREENGHG) – *project responsible and researcher*
- 2008-2011 : PROJECT "IDEI" PNII, ID 663 - Modeling and optimization of water networks in oil and petrochemical plants - *project director and researcher*
- 2008-2011 ; PROJECT "Parteneriate" PNII ID 22138 - Innovative technologies for obtaining high performance biofuels from renewable raw materials, specific to Romania (TINOCIP) - *researcher*
- 2010-2013: PROJECT POSDRU ID 87/1.3/S / 61839 - Training teachers for the efficient use of modern ITC information resources in teaching chemistry – *project manager assistant* (e-chimie.upb.ro)
- 2010-2013 : PROJECT POSCCE ID 652 - New possibilities of integrating sustainable biodiesel production, recovery of glycerol and omega fatty acids esters (BioGlyVal) – *executive director and researcher*

Other information

Management Director of Centre for Technology Transfer in Chemical Engineering (UPB-CTTIP)
www.chim.upb.ro/CTTPI