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Faculty of Applied Chemistry and Materials Science
Department Chemical Engineering



Contact information

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Education and training

Dates	1972-1977
Title of qualification awarded	Chemical engineer
Principal subjects/occupational skills covered	Chemical engineering specialized in inorganic processes
Name and type of organisation providing education and training	University Politehnica of Bucharest
Level in national or international classification	Level A in Romanian universities ranking
Dates	1997
Title of qualification awarded	PhD in Chemical Engineering
Principal subjects/occupational skills covered	Optimization of Crystallization Processes
Name and type of organization providing education and training	University Politehnica of Bucharest

Professional experience

Dates	1977-1979
Occupation or position held	Chemical engineer
Main activities and responsibilities	Laboratory synthesis of luminophores Laboratory test for additives in electrochemical depositions SINTOFARM , Bucharest
Name and address of employer	Production
Type of business or sector	
Dates	1979-1984
Occupation or position held	Analyst-programmer
Main activities and responsibilities	Simulation of chemical plants
Name and address of employer	Computing Centre for Chemical Industry
Type of business or sector	
Dates	1984-present
Occupation or position held	Teaching assistant, Lecturer, Assoc. Professor
Main activities and responsibilities	Lectures, projects, laboratory and seminars in the disciplines: Optimization in Chemical Engineering, Unit Operations in Chemical Engineering, Transport processes in chemical engineering, Mathematical methods in chemical engineering
Name and address of employer	University "Politehnica" of Bucharest
Type of business or sector	Higher education

Academic and research interests

Simulation and Optimization in Chemical engineering, Crystallization, Multicomponent separation

Teaching activity

<i>Studies</i>	<i>The name of Programme</i>	<i>Code</i>	<i>Course title</i>	<i>Activity type</i>
<i>Bachelor</i>	<i>Chemical and Biochemical Engineering</i>	UPB.11.S.06.O.513	<i>Statistical data analysis and experimental design</i>	<i>Lecture and practical work</i>
	<i>Food processing engineering</i>	UPB.11.T.03.O.204	<i>Unit Operation in Food Industry I</i>	<i>Lecture</i>
	<i>Chemical engineering (english division)</i>		<i>Transport processes in Chemical engineering</i>	<i>Lecture</i>
<i>Master</i>	<i>Biofuels, Biorefineries and Connected Thechnologies</i>	UPB.11.S.11.O.0107	<i>Numerical methods and optimization</i>	<i>Lecture</i>

Publication (selective):

Books

- Woinaroschy A., M. Mihai, **R. Isopescu**, "Optimization in chemical engineering - examples and applications", Technical Printing House, Bucharest, 1990 (Romanian)
- Valentin Plesu, Tiberiu Danciu, **Raluca Isopescu**, Petrica Iancu, Gheorghe Bumbac, "Computer applications for chemical engineers" "BREN" Printing House, Bucuresti, 1999 (Romanian)

Articles

- **Raluca Isopescu**, Carmencita Mateescu, Mihaela Mihai, Gabriel Dabija, The effects of organic additives on induction time and characteristics of precipitated calcium carbonate, *Chem. Eng. Res. Des.*, **2010**, 88, 1450-1455
- Udrea, I., Capat, C., Olaru, E.A., **Isopescu, R.**, Mihai, M., Mateescu, C.D., Bradu, C., Vaterite synthesis via gas-liquid route under controlled pH conditions, *Ind. Eng. Chem. Res.* **2012**, 51, 8185-8193.
- **Raluca Isopescu** and Vasile Lavric, Kinetic parameters estimation for precipitation using continuous approximation functions and genetic algorithms, *Chem. Eng. Transactions* **2009**, 18, 719-724, ISSN 1974-9791
- C. Mateescu, **R. Isopescu**, M. Mihai, F. Branzoi, I Chilibon, Precipitation of super-fine carbonate by controlled double jet method: solid phase characterization and estimation of kinetic parameters, *J. Optoelectron. Adv. M.*, **2008**, 10, 2667-2674
- Stoicescu C., Iulian O., **Isopescu R.**, Liquid-Liquid Phase Equilibria of 1-Propanol + Water plus n-Alcohol Ternary Systems at 298.15 K and Atmospheric Pressure, *J. Chem. Eng. Data*, **2011**, 56, 3214-3221
- Alexandru Woinaroschy and **Raluca Isopescu**, Time-Optimal Control of Dividing Wall Distillation Columns, *Ind. Eng. Chem. Res.*, **2010**, 49, 9195-9208
- **R. Isopescu**, A Woinaroschy, L. Draghiciu, Energy Reduction in a Divided Wall Distillation Column, *Rev Chim*, **2008**, 59, 812-816
- A. Woinaroschy, **R Isopescu**, Dividing Wall Distillation Column: Dynamic Modeling And Control, Computer Aided Process Engineering, **2008**, vol 25, Editors B Braunschweig and Xavier Joulia, p. 313-318.
- Gijiu, C.L., Dima, R., **Isopescu, R.D.**, Membrane fouling in dead-end microfiltration of yeast suspensions, *Rev. Chim.* **2012**, 63, 60-63.

Research projects

- CO₂ sequestration by chemical bond in useful mineral compounds and reduce the greenhouse gases emission (SEQCARBMIN), Project nr. 22116 in the frame of National Program II (2008-2011)

- Synthesis of calcium carbonate with predefined properties in ultrasound field (SONOCARB), Research grant nr PC-D04-Pt04-504/2005 in the frame of CEEX Program (2005-2008)
- Alternative structures for multicomponent mixtures separation using the divided wall distillation column, Research Grant CNCSIS GR-36/02.06.2006, (2006-2008)

Other information

Member of the Chemical Society in Romania

Member of the Chemical Engineering Society in Romania