PERSONAL INFORMATION

Iunia Podolean

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Sex Female | Date of birth 15/06/1982 | Nationality Romanian

WORK EXPERIENCE

2016 - present — Assistant professor

University of Bucharest, Faculty of Chemistry, Department of Organic Chemistry, Biochemistry and Catalysis

2008 - present — Research assistant

University of Bucharest, Faculty of Chemistry, Research Centre for Catalysis and Catalytic Processes, Bucharest, Romania

- Catalytic synthesis and catalysts characterization
- Catalyst performance testing

EDUCATION AND TRAINING

2007 - 2013 — Doctoral degree in chemistry (magna cum laude)

University of Bucharest, Faculty of Chemistry, Romania.

PhD Thesis: “Asymmetric hydrogenation of double bond C=N on CSILP (Chiral Supported Ionic Liquid Phase)- and CSILC (Chiral Supported Ionic Liquid Catalysts)-type catalysts”

2005 - 2007 — Master Degree (9.61/10)

University of Bucharest, Faculty of Chemistry, Bucharest, Romania
Language of instruction/examination: French

Master Thesis: “Synthesis of p-aminophenol, intermediate for paracetamol production, over supported catalysts”

2001 - 2005 — Bachelor Degree (9.33/10)

Technical University of Moldova, Faculty of Technology and Management in Food Industry, Chisinau, Moldova
Language of instruction/examination – French

Bachelor thesis: “Studies on starch structure and thermodynamic properties”

PERSONAL SKILLS

Mother tongue(s): Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B2	B1	B1	B2
Russian	C2	C2	C2	C2	C2
German	C1	C1	B2	B2	C1
French	A1	A1	A1	A1	A1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Organisational / managerial skills

Team work on specific activity as member in several research projects teams and managerial ability of individual project as leader of one research project.

Job-related skills

Catalysts synthesis: chiral organometallic catalysts; supported organocatalysts; solid catalysts of asymmetric SILP, SILC and SCILL type, magnetic nanomaterials. Characterization of solid surfaces: BET, XRD, FTIR and DRIFT, UV-Vis, RAMAN, Elemental Analysis, TG-DTA, ICP-OES. Catalytic processes: hydrogenation (including asymmetric), oxidation, biomass valorization, fine organic synthesis; Reaction products analysis techniques: liquid chromatography HPLC (including chiral column), gas chromatography (GC-FID), preparative chromatography and mass spectrometry (GC-MS), TOC.

ADDITIONAL INFORMATION

Publications

19 ISI articles (9 as first author) Hirsch index: 9; Number of citations: 206 (Web of Science Core Collection);
The address of the researcherid.com: Researcher ID: P-4286-2014

Conferences

30 Co-authored communications (poster or oral communication) at national and international conferences / congresses

Projects

Leader of one research project funded by the Romanian Ministry of Education and Research.
Member in the research team of 9 research projects funded by the Romanian Ministry of Education and Research.

Honours and awards

- Research fellowship Queen's University of Belfast, UK (03.2016-06.2016)
- Postdoctoral research fellowship within the national project POSDRU/159/1.5/S/ 137750, UEFISCDI (2014-2016)
- Marie Curie doctoral fellowship, Research Center Quill, Queen's University of Belfast, UK (08.2007-02.2008)
- Undergraduate fellowship offered by Agence Universitaire de la Francophonie, Institute of Biochemical Physics from Moscow, Russia (09.2004-10.2004)
- Undergraduate fellowship offered by Francophone University Agency, University Laval from Québec, Canada, Québec, Canada (07.2003-08.2003)

ANNEXES

List of publications

1. Podolean, I., Cojocaru, B., Pârvulescu, V.I., Mazur, M., Abdi, S., Čejka, J. (2023) Synthesis of lactide from L-Lactic acid over iso-reticular zeolites derived from Al-UTL, Applied Catalysis A: General, DOI: 10.1016/j.apcata.2023.119379
2. El Fergani, M., Candu, N., Podolean, I., Cojocaru, B., Nicolaev, A., Teodorescu, C.M., Tudorache, M., Parvulescu, V.I., Coman, S.M. (2022) Catalytic Hydrotreatment of Humins Waste over Bifunctional Pd-Based Zeolite Catalysts, Catalysts 12, 1202.
3. Podolean, I., El Fergani, M., Candu, N., Coman, S.M., Parvulescu, V.I. (2022) Selective oxidation of glucose over transitional metal oxides based magnetic core-shell nanoparticles, Catalysis Today, DOI:10.1016/j.cattod.2022.08.028
4. Podolean, I., Coman, S.M., Bucur, C., Teodorescu, C., Kikionis, S., Ioannou, E., Roussis, V., Primo, A., Garcia, H., Parvulescu, V.I., (2022) Catalytic transformation of the marine polysaccharide ulvan into rare sugars, tartaric and succinic acids, Catalysis Today, 383, 345-357
5. Podolean, I., Zhang, J., Shamzhy, M., Pârvulescu, V.I., Čejka, J., (2020) Solvent-free ketalization of polyols over germanosilicate zeolites: the role of the nature and strength of acid sites, Catalysis Science & Technology, 10, 8254-8264
6. Prech, J., Ioannou, E., Roussis, V., Kuncser, V.E., Podolean, I., Coman, S.M., Valtchev, V., Parvulescu V.I., (2019): Magnetic Fe@Y composites as efficient recoverable catalysts for the valorization of the recalcitrant marine sulfated polysaccharide ulvan. ACS Sustainable Chemistry & Engineering. 8, 319-328
7. Podolean, I., Pavel, O.D., Manyar, H.G., Taylor, S.F.R., Ralphs, K., Goodrich, P., Parvulescu, V.I., Hardacre C., (2019) SCILLs as selective catalysts for the oxidation of aromatic alcohols, Catalysis Today 333, 140-146
8. Podolean I., Cojocaru, B., Garcia, H., Teodorescu, C., Parvulescu, V.I., Coman, S.M. (2018) From Glucose Direct to Succinic Acid: an Optimized Recyclable Bi-functional Ru@MNP-MWCNT Catalyst, Topics in Catalysis 61, 1866-1876
9. Rizescu, C., Podolean, I., Albero, J., Parvulescu, V.I., Coman, S.M., Bucur, C., Puche, M., Garcia, H. (2017): N-doped graphene as metal-free catalyst for glucose oxidation to succinic acid, Green Chem., 19 (8), 1999-2005
10. Coman S. M., Podolean I., Tudorache M., Cojocaru B., Parvulescu V. I., Garcia H. (2017): Graphene oxide as catalyst for the diastereoselective transfer hydrogenation of unsaturated ketones to secondary allylic alcohols, ChemCommun., 53 (74), 10271-10274
11. C. Rizescu, I. Podolean, B. Cojocaru, V. I. Parvulescu, S. M. Coman, J. Albero, H. Garcia (2017): RuCl3 supported on N-doped graphene as reusable catalyst for one-step glucose oxidation to succinic acid, ChemCatChem, 9 (17), 3314-3321
12. Candu, N., Anita, F., Podolean, I., Cojocaru, B., Parvulescu, V. I., Coman, S. M. (2017): Direct conversion of cellulose to α-hydroxy acids (AHAs) over Nb2O5-SiO2 coated magnetic nanoparticles, Green Processing and Synthesis, 6 (3), 255-264
13. Podolean, I., Rizescu, C., Bala, C., Rotariu, L., Parvulescu, V. I., Coman, S. M., Garcia, H., (2016): Unprecedented catalytic wet oxidation of glucose to succinic acid induced by the addition n-butyl amine to Ru(III) catalysts, ChemSusChem, 9 (17), 2307-2311
14. Pavel, O.D., Podolean, I., Parvulescu V.I., Taylor, S.F.R., Manyar, H., Ralphs, K., Goodrich, P., Hardacre, C. (2017): Impact of SCILL catalysts for the SS coupling of thiols to disulfides, Faraday Discussions, 206, 535-547
15. Podolean I., Anita F., Garcia H., Parvulescu V. I., Coman S. M. (2017): Efficient magnetic recoverable acid-functionalized-carbon catalysts for starch valorization to multiple bio-chemicals, Catal. Today, 279, 45-55
16. Candu, N., Rizescu, C., Podolean, I., Tudorache, M., Parvulescu, V. I., Coman, S. M. (2015): Efficient magnetic and recyclable SBILC (Supported Basic Ionic Liquid Catalyst)-based heterogeneous organocatalysts for the asymmetric epoxidation of trans-methylcinnamate, Catal. Sci. & Tech., 5 (2), 729-737
17. Podolean, I., Negoi, A., Candu, N., Tudorache, M., Parvulescu, V. I., Coman, S. M. (2014): The cellulose capitalization to bio-chemicals in the presence of magnetically nanoparticles catalysts, Top. Catal, 57 (17-20), 1463-1469
18. Podolean, I., Kuncser, V., Gheorghe, N., Macovei, D., Parvulescu, V. I., Coman, S. M. (2013): Ru based magnetic nanoparticles (MNP) for succinic acid synthesis from levulinic acid, Green Chem, 15 (11), 3077-3082
19. Podolean, I., Hardacre, C., Goodrich, P., Brun, N., Backov, R., Coman, S. M., Parvulescu, V. I. (2013): Chiral supported ionic liquid phase (CSILP) catalysts for greener asymmetric hydrogenation processes, Catal. Today, 200, 63–73
20. Goodrich, P.; Hardacre, C.; Paun, C.; Parvulescu, V. I.; Podolean, I. (2008): „Ionic Liquid Effect on the Reversal of Configuration for the Magnesium(II) and Copper(II) Bis(oxazoline)-Catalysed Enantioselective Diels–Alder Reaction", Adv. Synth. Catal., 350, 2473–2476