

Curriculum vitae

Simona Margareta COMAN

Personal information

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Nationality Romanian
Date of birth 26.07.1969
Gender female

Work experience

2008-present Professor– Faculty of Chemistry, University of Bucharest - Romania
1992-2008 Assistant Professor, Lecturer, Associate Professor – Faculty of Chemistry, University of Bucharest - Romania

Education

2018 Habilitation Certificate, Chemistry- Heterogeneous catalysis, University of Bucharest, Romania
2001 Ph.D. degree awarded by University of Bucharest, Romania. Thesis: "Catalysts for enantio- and diastereoselective hydrogenation reactions", Adviser Prof. Dr. Emilian Angelescu
1987 - 1992 License degree, Faculty of Chemistry, University of Bucharest, Romania

Research stages

2007-2008 **Postdoctoral fellowship Alexander von Humboldt Foundation**, Germany, Host institution: Institut für Chemie, Humboldt-Universität zu Berlin, Supervisor: Prof. Dr. Habil. Erhard Kemnitz. The fellowship was won by selecting scientific files for senior researchers.
2002-2003 **Postdoctoral fellowship**: Belgium, funded by the 'Services Federaux des Affaires Scientifiques, Techniques and Culturelles (OSTC)', Ministry of Valon, Belgium, Catholic University Louvain, Catalyse et Chemie des Matériaux Divisés, Louvain-la-Neuve, Supervisor: Prof. Dr. Paul Grange. The fellowship was obtained through the selection of scientific papers for 'Young researchers in South-Eastern Europe'.
2001, 1999-2000 **Research fellowship**: Belgium, funded by the Ministry of the Flemish Community, Belgium, Catholic University of Leuven, Department of Interface Chemistry, Catalysis Center, Supervisor: Prof. Dr. Pierre A. Jacobs

Invited professor/researcher

2021 **Invited profesor**: Adam Mickiewicz University in Poznan, Poland, 18 February-04 March, Crt. 1/HIGHCHEM/2021
2021 **Visiting profesor**: Department of Chemical Technology, Faculty of Chemistry, Adam Mickiewicz University in Poznan, 27.09.2021-08.10.2021, **Action 01** - Proposal No. 006/01/POB3/0002

Project management experience

2023-2026	RESPONSIBLE SPECIFIC PROJECT 4: Bio-products, products with added value and sustainable energy from marine macroalgae: a step towards the circular economy Coordinator Specific, in Integrated research and sustainable solutions for the protection and restoration of ecosystems in the lower Danube basin - Black Sea coastal area, No. 760010/30.12.2022, National Redresing and Resilience Plan Call no. PNRR-III-C9-2022 – I5
2017-2019	PROJECT COORDINATOR in Multifunctional core-shell magnetic nanoparticles for the direct synthesis of Furan-2,5-dicarboxylic acid (FDCA) from cellulose, PN-III-P4-ID-PCE-2016-0533, Nr. 116/2017
2014-2017	RESPONSIBLE PARTNER UNIVERSITY OF BUCHAREST in Metabolic engineering of <i>Escherichia coli</i> for direct production of 1,4-butanediol from glucose and glycerol and its catalytic conversion to added-value compounds, PN-II PCCA2, Nr. 44/2014
2012-2016	RESPONSIBLE PARTNER UNIVERSITY OF BUCHAREST in Synthesis of some C4, C5 carboxylic acid building block chemicals from renewable biomass resources, PN-II PCCA2, Nr. 31/2012
2012-2014	PROJECT COORDINATOR in Novel heterogeneous catalytic systems based on ionic liquids and organocatalysts for asymmetric epoxidations, PN-II-CT-ERC-2012-1, Nr. 8/2012
2011-2016	PROJECT COORDINATOR in Heterogeneous organocatalysts for the green synthesis of chiral glycidate intermediates, PN-II-ID-PCE-2011-3-0041
2010-2014	Member of the European Research Network Management Committee COST CM 0905: Organocatalysis (ORCA)
2007-2010	PROJECT COORDINATOR in The reduction of the reaction steps in the synthesis of the Taxol side chain in heterogeneous catalysis, PNCDI – II– Nr. 40/2007
2006-2008	PROJECT COORDINATOR in Nanostructured advanced materials based on ionic liquids and triflates with applications in the synthesis of pharmaceutical intermediates, CNCSIS, COD 1071
2004-2005	PROJECT COORDINATOR in The synthesis, characterization and catalytic properties of iridium nanoparticles immobilized into zeolites matrix, CNCSIS, COD 137
Scientific journals reviewer	Applied Catalysis A: General; Applied Catalysis B: Environmental; ACS-Sustain Chem Eng; J.Mol.Structure; New Journal of Chemistry; ACS Appl. Nano Mat.; Catal Today; Catal Sci & Tech; Carbohydrate polymers, Catalysts, Molecules; Chem Eng Res Design, Org. Proc. Res&Develop.; Fuel Processing Technology; Rev Roum Chim; J Colloid and interface science, Solid State Sciences.
Publications	> 130 : 119 ISI publications; 2 books; 11 book chapters; 1 European patent. H-index : 34 (Scopus); 38 (Google scholar); i10-index = 84 (Google scholar) 17 invited/keynote lectures at international conferences and more than 190 presentations
Membership in academic societies	
2019 -	Member of the Romanian Catalysis Society (SCR) Council
2019 -	Member of Federation of the European Zeolite Association (FEZA) Council. Secretary of the Federation of the European Zeolite Association (FEZA) (2021- 2023)
2016 -	Member of the International Association of Catalysis Communities (IACS) Council
Organisation of scientific meetings	
2026	Member of the scientific committee, 10th Conference of the Federation of the European Zeolite Associations (FEZA 2026), Naples, Italy, 28 June – 02 July Member of the scientific committee, International Summer school in Nanoscience and Nanotechnologies (Nanosum 2026, CIVIS), Rome, Italy, 15-19 June 2026
2025	Member of the scientific committee, The 14th International Symposium of the Romanian Catalysis Society (RomCat2025), Cluj-Napoca, Romania, 09-11 July 2025
2023	Member of Scientific Committee - 9th Conference of the Federation of European Zeolite Associations,Portoroz-Portorose, Slovenia, 2-6 July 2023 Member of the scientific committee, International Summer school in Nanoscience and Nanotechnologies (Nanosum 2023, CIVIS), Marseille, 18-23 June 2023

2022	Member of the organizing committee - The 13th International Symposium of the Romanian Catalysis Society (RomCat2022), Baile Govora, Romania, 22-24 June 2022 Member of the scientific committee, International Summer school „Materials from biomass” (BioMat), Trondheim, Norway, 12-16 September 2022
2021	Member of the organizing committee - Contemporary solution for advanced materials with high impact on society (CoSolMat Virtual), 11-15 October 2021 Member of the International Advisory Board - 8th Conference of the Federation of European Zeolite Associations (FEZA 2021 Virtual) 5-9 July 2021 Member of the Committee for PhD students Evaluation, ChemInter Virtual- a high-quality international and interdisciplinary doctoral study program carried out at the Faculty of Chemistry, University of Adam Mickiewicz in Poznań, Poland, 21-22 June 2021
2019	Member of Scientific Committee - The 5 th International Congress of water, waste and energy management (WWEM-19), Paris, France, 22-24 July 2019
2016	Member of Scientific Committee - International Congress on Green Chemistry and Sustainable Engineering, Rome, Italy, 20-22 July 2016

Other commissions of trust in public sector

2020-2024	Member of the CNATDCU, Chemistry Section
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Institutional responsibilities

2013-2023	Member of 14 commissions for university teaching positions
2022 -	Member in the admission commission of Doctoral School in Chemistry, Faculty of Chemistry Member in the admission commission for master degree, Faculty of Chemistry, University of Bucharest
2011-	Coordinator of „Chemistry of Advanced Materials” Master, Faculty of Chemistry, University of Bucharest
2009-	Member in doctoral commissions for the analysis of doctoral theses, Chemistry Domain
2017-2023 2009-2015	Member of the Faculty of Chemistry Council, University of Bucharest
2017- 2022	Member of the Organic Chemistry, Biochemistry and Catalysis Department Council, Faculty of Chemistry
2019-2021	Member of the Doctoral School in Chemistry Council, Faculty of Chemistry, University of Bucharest
2008-2013 2016-2020	Member of the licence commission, Chemistry section

Review boards

2023-	Associate Editor, Frontiers in Chemistry – Organometallic Chemistry
2022-	Editorial board member, Universal Journal of Green Chemistry (UJGC), Universal Wiser Publisher
2021-	Review Editor in Frontiers in Chemistry - Catalysis and Photocatalysis
2020-	Editorial team member, Catalysts, MDPI, ISSN: 2073-4344
2018-	Editorial team member, Current Catalysis, Bentham Science Publishers, ISSN: 2211-5455 (online), ISSN: 2211-5447 (print)

Mentoring and training researchers

Host Profesor for 1 PhD student in ACS GREET (Global Research Experiences, Exchanges and Training Program) Project, Colorado School of Mines-University of Bucharest, 2011
21 MSc and 16 undergraduate students under coordination
3 PhD students under coordination

Awards and Distinctions

Member in 14 commissions for the PhD thesis defence and 2 commissions for the Habilitation defence

"Gheorghe Spacu" Prize in Chemical Sciences Award on 2010, awarded by the Romanian Academy in December 2012

List of publications of the last 5 years (2021-2025)

1. A. Tirsoaga, V. Kuncser, V. I. Parvulescu, S. M. Coman (2021): Niobia-based magnetic nanocomposites: design and application in direct glucose dehydration to HMF, *Catal Today*, 366, 48-56, DOI: 10.1016/j.cattod.2020.09.033
2. M. El Fergani, N. Candu, M. Tudorache, C. Bucur, N. Djelal, P. Granger, S. M. Coman (2021): From useless humin by-product of glucose dehydration to efficient Nb@humin catalysts with high efficiency in the glucose dehydration to HMF, *Appl. Catal. A: General*, 618, 118130, DOI: 10.1016/j.apcata.2021.118130
3. Podolean, I., Coman, S., Parvulescu, V., Kikionis, S., Ioannou, E., Roussis, V., Primo, A., Garcia, H. (2022): Catalytic transformation of the marine ulvan polysaccharide into rare sugars, tartaric and succinic acids, *Catal Today*, 383, 345-357, DOI: 10.1016/j.cattod.2020.06.086
4. M. El Fergani, N. Candu, P. Granger, S. M. Coman, V. I. Parvulescu (2022): Hierarchically MO_x@Nb-zeolites for the selective oxidation of HMF to HMFCa, *Catal. Today*, 405-406, 267-276, <https://doi.org/10.1016/j.cattod.2022.04.033>
5. E. E. Toma, G. Stoian, B. Cojocaru, V. I. Parvulescu, S. M. Coman (2022): CQDs@ZnO nanocomposites for visible light photodegradation of organic pollutants, *Catalysts*, 12, 952. <https://doi.org/10.3390/catal12090952>
6. S. Ion, O. D. Pavel, N. Guzo, M. Tudorache, S. M. Coman, V. I. Parvulescu, B. Cojocaru, E. E. Jacobsen (2022): Use of Photocatalytically Active Supramolecular Organic-Inorganic Magnetic Composites as Efficient Route to Remove β -Lactam Antibiotics from Water, 12, 1044. <https://doi.org/10.3390/catal12091044>
7. M. El Fergani, N. Candu, I. Podolean, B. Cojocaru, A. Nicolaev, C.M. Teodorescu, M. Tudorache, V. I. Parvulescu, S. M. Coman (2022): Catalytic hydrotreatment of humins waste over bifunctional Pd-based zeolite catalysts, *Catalysts*, 12, 1202. <https://doi.org/10.3390/catal12101202>
8. M. Bordeiasu, A. Ejmont, J. Gościńska, B. Cojocaru, V. I. Parvulescu, S. M. Coman (2023): Catalytic oxidation of biomass-derived 5-hydroxymethylfurfural to 5-hydroxymethyl-2-furancarboxylic acid by Co-based MOFs, *Appl. Catal. A: General*, 657, 119147
9. I. Podolean, M. El Fergani, N. Candu, S. M. Coman, V. I. Parvulescu (2023): Selective oxidation of glucose over transitional metal oxides based magnetic core-shell nanoparticles, *Catal. Today*, 423, 113886
10. I. Podolean, M. Dogaru, N. C. Guzo, O. A. Petcuta, E. E. Jacobsen, A. Nicolaev, B. Cojocaru, M. Tudorache, V. I. Parvulescu, S. M. Coman (2024): Highly efficient Ru-based catalysts for lactic acid conversion to alanine, *Nanomaterials*, 14(3), 277
11. G. Stoian, E. E. Toma, P. Oancea, N. Candu, B. Cojocaru, M. Tudorache, S. M. Coman (2024): CQDs-Based nanocomposites for the 5-(hydroxymethyl)furfural photooxidation, *Rev Roum Chim*, 69 (5-6), 285-290
12. D. Stan, A.-C. Mirica, S. Mocanu, D. Stan, I. Podolean, N. Candu, M. El Fergani, L. M. Stefan, A.-M. Seciu-Grama, L. Aricov, O. Brincoveanu, C. Moldovan, L.-A. Bocancia-Mateescu, S. M. Coman (2025), Hybrid Hydrogel Supplemented with Algal Polysaccharide for Potential Use in Biomedical Applications, *Gels*, 11(1), 17, <https://doi.org/10.3390/gels11010017>
13. O. A. Petcuta, N. C. Guzo, M. Bordeiasu, A. Nicolaev, V. I. Parvulescu, S. M. Coman (2025): Ru/Beta zeolite catalysts for levulinic acid hydrogenation: the importance of catalyst synthesis methodology, *Catalysts*, 15, 80, <https://doi.org/10.3390/catal15010080>
14. M. Bordeiasu, J. Gościńska, R. Panek, A. Nicolaev, B. Jurca, V. I. Parvulescu, S. M. Coman (2025): Magnetic Fe,Co-nanocarbon frameworks derived from Fe-doped ZIF-67 as highly active catalysts for HMF oxidation, *ChemSusChem*, 18, e202500678. DOI: 10.1002/cssc.202500678

Bucharest, July 27, 2026

Prof. Dr. Habil. Simona Margareta COMAN