Curriculum vitae Europass

Personal information

First name(s) / Surname(s)	Simona Margareta COMAN
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URL	https://unibuc.ro/user/Simona.Margareta.Coman/
Nationality	Romanian
Date of birth	26.07.1969
Gender	female

Work experience

Dates	2008-present
Occupation or position held	Professor
Main activities and responsibilities	didactic and research activities in the field of catalysis
Name and address of employer	University of Bucharest, Faculty of Chemistry, Romania
Type of business or sector	Education and Academic research
Dates	2005-2008
Occupation or position held	Associate Professor
Main activities and responsibilities	didactic and research activities in the field of catalysis
Name and address of employer	University of Bucharest, Faculty of Chemistry, Romania
Type of business or sector	Education and Academic research
Dates	2001-2005
Occupation or position held	Lecturer
Main activities and responsibilities	didactic and research activities in the field of catalysis
Name and address of employer	University of Bucharest, Faculty of Chemistry, Romania
Type of business or sector	Education and Academic research
Dates	1992-2001
Occupation or position held	Assistant Professor
Main activities and responsibilities	didactic and research activities in the field of catalysis
Name and address of employer	University of Bucharest, Faculty of Chemistry, Romania
Type of business or sector	Education and Academic research

Education and training

Dates	March 2018
Title of qualification awarded	Habilitation
Principal subjects/occupational skills covered	Chemistry - Heterogeneous catalysis
Name and type of organisation providing education and training	University of Bucharest, Doctoral School in Chemistry

Dates	1993-2001
Title of qualification awarded	PhD degree
Principal subjects/occupational skills covered	Title of the thesis: "Catalysts for enantio- and diastereoselective hydrogenation reactions", Supervizor: Prof. Em. Angelescu
Name and type of organisation providing education and training	University of Bucharest
Dates	1987 - 1992
Title of qualification awarded	License degree
Principal subjects/occupational skills covered	Chemistry- Catalysis
Name and type of organisation providing education and training	University of Bucharest

Personal skills and competences

Research stages:

- **2007-2008**, ***Post-doctoral fellowship Alexander von Humboldt Foundation***, Germany, Host institution: Institut für Chemie, Humboldt-Universität zu Berlin, Brook-Taylor-Str. 2, 12489, Berlin, 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, Thechniques and Cullturells (OSTC)', Ministry of Valon, Belgium, Catholic University Louvain, Catalyse et Chemie des Materiaux Divises, Louvain-la-Neuve, Prof. Dr. Paul Grange. The fellowship was obtained through the selection of scientific papers for 'Young researchers in South-Eastern Europe'.
- **2001**, ***Research fellowship***: Belgium, funded by the Ministry of the Flemish Community, Belgium, Catholic University of Leuven, Department of Interface Chemistry, Catalysis Center, Kasteelpark Arenberg 23, B-3001, Heverlee, Prof. Dr. Pierre A. Jacobs.
- **1999-2000**, ***Research fellowship***: Belgium, funded by the Ministry of the Flemish Community, Belgium, Catholic University of Leuven, Department of Interface Chemistry, Catalysis Center, Kasteelpark Arenberg 23, B-3001, Heverlee, Prof. Dr. Pierre A. Jacobs.

Mother tongue(s) Romanian

Other language(s)

Self-assessment	Understanding				Speaking				Writing	
European level (*)	Listening		Reading		Spoken interaction		Spoken production			
English	C2	Experienced user	C2	Experienced user	C1	Experienced user	C1	Experienced user	C1	Experienced user
French	B1	Independent user	B1	Independent user	A2	Basic user	A2	Basic user	A2	Basic user

Social skills and competences

Versatile, efficient and considerate, either as a team member or on independent assignments; Desire to learn more; Good communication skills; Good adaptability.

Organisational skills and competences

The ability to design and implement a project, the ability to coordinate work teams, the ability to initiate and the ability to respond positively to crisis situations.

Technical skills and competences

a) Teaching using multimedia tools
b) Other practical skills in fields like: computers, mechanical equipment, thermo-mechanical processes, materials, science:

- Preparation of inorganic nanomaterials
- Chemical synthesis, inert atmosphere manipulations
- Heterogeneous catalysis
- Hydrogenation reactions, isomerization reactions, fine chemicals synthesis, biomass capitalisation
- Analytical methods: HPLC, GC, GC-MS, TLC
- Determination of surface and bulk properties: BET, TG-DTA, RAMAN, DRX, FTIR, UV-VIS

Other skills and competences

Publications:
- 1 European patent
- 2 books
- 9 chapter books in International Editures
- 103 ISI publications
- 10 non-ISI publications.
- 1698 citations (without self-citations)
- Hirsch index = 28 (Scopus source)

Member of professional associations:

2019 - present: Member of the Board of the Romanian Catalysis Society (SCR)
2019 - present: Member of the Board of the Federation of the European Zeolite *Association* (*FEZA*)
2016 - present: Member of the the Board of the International Association of Catalysis Communities (IACS)
2010-2014: Member of the European Research Network Management Committee COST CM 0905: Organocatalysis (ORCA)

Member of didactical commisions/boards:

2019-present: Member of the Board of Doctoral School in Chemistry, Faculty of Chemistry
2009-2015; **2017**- present : Member of the Board of Faculty of Chemistry
2017- present: Member of the Board of the Organic Chemistry, Biochemistry and Catalysis Department
2008-2013; 2016-present: Member of the licence commision, Chemistry section, Faculty of Chemistry
2012-present: Chairman of the Dissertation Commission, Master: Chemistry of Advanced Materials
2011-present: Master Coordinator: Chemistry of Advanced Materials
2009-present: Member in doctoral commissions for the analysis of doctoral theses, Chemistry Domain

Member of the organizing committees of the scientific conferences:

2019: Member of Scientific Committee: The 5th 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

Editorial activity:

2020 - present: Editorial team member, Catalysts, MDPI, ISSN: 2073-4344
2020: Invited Editor, Molecules, MDPI: SI "New Approaches in Green Catalysis".
2018 - present: Editorial team member, Current Catalysis, Bentham Science Publishers, ISSN: 2211-5455 (online), ISSN: 2211-5447 (print)

Referee for the following journals*:* Applied Catalysis A: General; Applied Catalysis B: Environmental; ACS-Catalysis; ACS-Sustainable Chemistry and Enginnering; BioResources; Catalysis Today; Catalysis Science & Technology; Catalysis Communications; Catalysis Letters; ChemSusChem; ChemCatChem; ChemPlusChem; Fuels&Energy; Fuel Processing Technology; Industrial Crops and Products; JMolCatal; JorganometallicChem; Reaction Kinetics Mechanisms and Catalysis; Revue Roumaine de Chimie; Revista de Chimie; RSC Advances; RSC Book

Driving licence

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Additional informations

Awards and Distinctions: "Gheorghe Spacu" Prize in Chemical Sciences, awarded by the Romanian Academy, December 2012

Annex

ISI Publications on the last 5 years

Bucharest, July 10, 2020

Prof. Dr. Habil. Simona Margareta COMAN

Annex (ISI publications on the last 5 years):

List of ISI publications (2015-2020)

1. N. Candu, C. Rizescu, I. Podolean, M. Tudorache, V. I. Parvulescu, S. M. Coman (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, 729-737 (IF = 5.721)
2. Coman, S. M., Parvulescu, V. I. (2015): Non-precious metals catalyzing hydroamination and C-N coupling reactions, *Organic Process Research & Development*, 19(10), 1327-1355 (IF 3.584) (Review)
3. O. D. Pavel, P. Goodrich, L. Cristian, L., S. M. Coman, V. Parvulescu, C. Hardacre (2015): Direct oxidation of amines to nitriles in the presence of ruthenium-terpyridyl complex immobilized on ILs / SILP, *Catal. Sci. & Tech.*, 5, 2696 - 2704 (IF = 5.721)
4. S. M. Coman, M. Verziu, A. Tirsoaga, B. Jurca, C. Teodorescu, V. Kuncser, V. I. Parvulescu, G. Scholz, E. Kemnitz, E. (2015): NbF_5-AlF_3 catalysts: Design, synthesis and application in lactic acid synthesis from cellulose, *ACS Catalysis,* 5, 3013–3026 (IF = 12.16)
5. V. Kuncser, S. M. Coman, E. Kemnitz, V. I. Parvulescu (2015): Magnetic nano-composites for an efficient valorization of biomass, *J. Appl. Phys.,* 117, 17D724 *(IF = 2.37)*
6. P. A. Lazaridis, S. Karakoulia, A. Delimitis, S. M. Coman, V. I. Parvulescu, K. S. Triantafyllidis (2015): D-glucose hydrogenation/hydrogenolysis reactions on noble metal (Ru, Pt)/activated carbon supported catalysts, *Catal. Today,* 257, 281-290. (IF = 4.95)
7. A. Primo, I. Esteve, J. F. Blandez, A. Dhakshinamoorthy, M. Alvaro, N. Candu, S. Coman, V. Parvulescu, H. Garcia (2015): Remarkable Catalytic Activity of Oriented 2.0.0 Copper (I) Oxide Grown on Graphene Film, *Nature Commun*., *Article number: 8561* (IF = 11.878)
8. A. Primo, I. Esteve-Adell, N. Candu, S.Coman, V. Parvulescu, H. Garcia (2016): One Step Pyrolysis Preparation of Oriented 1.1.1 Gold Nanoplatelets Supported on Graphene and Six Orders of Magnitude Enhancement of the Resulting Catalytic Activity, *Angew. Chem.-Int. Ed.,* 55 (2), 607-612. (*IF = 12.257)*
9. C. Opris, B. Cojocaru, N. Gheorghe, M. Tudorache, S. M. Coman, V. I. Parvulescu, B. Duraki, F. Krumeich, J. A. van Bokhoven (2016): Lignin fragmentation over magnetically recyclable composite Co@Nb_2O_5@Fe_3O_4 catalysts. Synthesis of Separable Nanocatalysts and Characterization, *J. Catal., 339, 209-227* (IF = 4.07)
10. I. Podolean, C. Rizescu, C. Bala, L. Rotariu, V. I. Parvulescu, S. M. Coman, H. Garcia, (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* (IF = 7.35)
11. I. Podolean, F. Anita, H. Garcia, V. I. Parvulescu, S. M. Coman (2017): Efficient magnetic recoverable acid-functionalized-carbon catalysts for starch valorization to multiple bio-chemicals, *Catal. Today*, 279, 45-55 (IF = 4.95)
12. N. Candu, F. Anita, I. Podolean, B. Cojocaru, V. I. Parvulescu, S. M. Coman (2017): Direct conversion of cellulose to α-hydroxy acids (AHAs) over Nb_2O_5-SiO_2 coated magnetic nanoparticles, *Green Processing and Synthesis*, 6, 255-264 (IF = 1.10)
13. C. Opris, B. Cojocaru, N. Apostol, M. Tudorache, S. Coman, V. Parvulescu, B. Duraki, F. Krumeich, J. van Bokhoven (2017): Lignin fragmentation onto multifunctional Re@Co@Nb2O5@Fe3O4 catalysts: the role of the composition and deposition route of rhenium, *ACS Catal., 7*(5), 3257-3267 (IF = 12.16)
14. C. Rizescu, I. Podolean, J. Albero, V. I. Parvulescu, S. M. Coman, C. Bucur, M. Puche, H. Garcia (2017): N-doped graphene as metal-free catalyst for glucose oxidation to succinic acid, *Green Chem*., 19, 1999-2005 (IF = 9.405)
15. C. Rizescu, I. Podolean, B. Cojocaru, V. I. Parvulescu, S. M. Coman, J. Albero, H. Garcia (2017): $RuCl_3$ supported on N-doped graphene as reusable catalyst for one-step glucose oxidation to succinic acid, *ChemCatChem,* 9(17), 3314-3321 (IF = 4.423)
16. P.A.Lazaridis, S.A.Karakoulia, C. Teodorescu, N. Apostol, D. Macovei, A. Panteli, A. Delimitis, S. M. Coman, V.I. Parvulescu, K.S.Triantafyllidis (2017): High hexitols selectivity in cellulose hydrolytic hydrogenation over platinum (Pt) vs. Ruthenium (Ru) catalysts supported on micro/mesoporous carbon, *Appl. Catal. B: Environ., 214, 1-14* (IF = 16.683)
17. S. M. Coman, I. Podolean, M. Tudorache, B. Cojocaru, V. I. Parvulescu, H. Garcia (2017): Graphene oxide as catalyst for the diastereoselective transfer hydrogenation of unsaturated ketones to secondary allylic alcohols, *ChemComm*., 53, 10271-10274 (IF = 5.996)
18. M. El Fergani, N. Candu, S. M. Coman, V. I. Parvulescu (2017): Nb-based zeolites: efficient bi-functional catalysts for the one-pot synthesis of succinic acid from glucose, *Molecules, 22(12),* 2218; doi:10.3390/molecules22122218 (IF = 3.06)
19. N. Candu, D. Paul, I.-C. Marcu, M. Tudorache, V. I. Parvulescu, S. M. Coman (2018): New organic-inorganic LDH composites: synthesis, characterization and catalytic behavior in the green epoxidation of α, β-unsaturated esters, *Inorganica Chimica Acta*, *475, 127-132* (IF = 2.45)
20. M. Verziu, M. Serano, B. Jurca, V. I. Parvulescu, S. M. Coman, G. Scholz, E. Kemnitz (2018): Catalytic features of Nb-doped nanoscopic inorganic fluorides for an efficient one-pot conversion of cellulose to lactic acid, *Catal. Today*, 306, 102-110 (IF = 4.95)
21. N. Candu, D. Paul, I.-C. Marcu, V. I. Parvulescu, S. M. Coman (2018): Levulinate-intercalated LDH: a potential heterogeneous organocatalyst for the green epoxidation of α,β-unsaturated esters, *Catal. Today*, 306, 154-165 (IF = 4.95)
22. I. Podolean, B. Cojocaru, H. Garcia, C. Teodorescu, S. M. Coman, V. I. Parvulescu (2018): From glucose direct to succinic acid: an optimized recyclable bi-functional Ru@MNP-MWCNT catalyst, *Top. Catal.*, 61(18-19), 1866-1876 (IF= 0.95)

23. M. Tudorache, C. Opris, B. Cojocaru, N. Apostol, A. Tirsoaga, S. Coman, V. Parvulescu, B. Duraki, F. Krumeich, J. van Bokhoven (2018): Highly efficient, easily recoverable and recyclable Re(VI)@SiO2@Fe3O4 catalyst for the fragmentation of lignin, *ACS Sustain. Chem. Eng.,* 6, 9606-9618 (IF = 7.03)

24. N. Candu, A. Simion, S. M. Coman, A. Primo, I. Esteve-Adell, V. I. Parvulescu, H. Garcia (2018): Graphene film-supported oriented 1.1.1 gold (0) versus 2.0.0 copper (I) nanoplatelets as very efficient catalysts for coupling reactions, *Top. Catal.,* 61(14), 1449-1457, DOI: 10.1007/s11244-018-1043-x (IF= 0.95)

25. A. Tirsoaga, M. El Fergani, V. I. Parvulescu, S. M. Coman (2018): Upgrade of 5-Hydroxymethylfurfural to dicarboxylic acids onto multifunctional based Fe_3O_4@SiO_2 magnetic catalysts, *ACS Sustain. Chem. Eng.,* 6(11), 14292-14301 (IF = 7.03)

26. A. I. Simion, N. Candu, S. M. Coman, A. Primo, I. Esteve-Adell; V. Michelet, V. I. Parvulescu, H. Garcia (2018): Bimetallic Oriented (A□u□/C□u□2O) versus monometallic 1.1.1 A□u□ (0) or 2.0.0 C□u□2O Graphene supported Nano-platelets as very efficient Catalysts for Michael and Henry Additions, *Eur. J. Org. Chem*., 2018, *6185-6190* (IF = 3.029)

27. Sudarsanam, P., Zhong, R., Van den Bosch, S., Coman, S. M., Parvulescu, V. I., Sels, B. F. (2018): Functionalized heterogeneous catalysts for sustainable biomass upgrading to high-value chemicals, *Chem. Soc. Rev.*, 47, 8349-8402 DOI: 10.1039/C8CS00410B *(IF 40.443)*

28. N. Candu, M. El Fergani, M. Verziu, B. Cojocaru, B, Jurca, N. Apostol, C. Teodoresu, V. I. Parvulescu, S. M. Coman (2019): Efficient glucose dehydration to HMF onto Nb-BEA catalysts, *Catal. Today,* 325, 109-116 (IF = 4.95)

29. N. Candu, B. Cojocaru, S. M. Coman, V. I. Parvulescu (2019): Diastereoselective hydrogenation of Formoterol intermediate over M(Ir, Pd, Pt, Rh, Ru)/BEA zeolite catalysts, *Catal. Today,* https://doi.org/10.1016/j.cattod.2019.04.009 (IF = 4.95)

30. N. Candu, I. Man, A. Simion, B. Cojocaru, S. M. Coman, C. Bucur, A. Primo, H. Garcia, V. I. Parvulescu (2019): Nitrogen-doped graphene as metal free basic catalyst for coupling reactions, *J. Catal.*, *376, 238-247* (IF = 4.07)

31. N. Candu, A. Tompos, E. Talas, M. Tudorache, S. M. Coman (2019): Green catalytic synthesis of phenprocoumon, STUDIA UBB CHEMIA, LXIV (3), 47-58 (IF = 0.305)

32. J. Přech, E. Ioannou, V. Roussis, V. Kuncser, I. Podolean, S. M. Coman, V. Valtchev, V. I. Parvulescu (2020): Magnetic Fe@Y composites as efficient recoverable catalysts for the valorization of recalcitrant biomass, *ACS Sustain. Chem. Eng*, 8, 319-328 (IF = 7.03)

33. A. Tirsoaga, M. El Fergani, N. Nuns, P. Simon, P. Granger,V. I. Parvulescu, S. M. Coman (2020): Multifunctional nanocomposites with non-precious metals and magnetic core for 5-HMF oxidation to FDCA, *Appl. Catal. B: Environ., DOI:* 10.1016/j.apcatb.2020.119309 (IF = 16.683)

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