

## PERSONAL INFORMATION

## Comănescu Cezar

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 cccomanes@gmail.com

Sex M | Nationality Romanian

## WORK EXPERIENCE

- 2021 - present **Lecturer, Faculty of Chemical Engineering and Biotechnologies, University “Politehnica“ of București, Bucharest, Romania**
- 2011-2021 **Teaching Assistant, Faculty of Applied Chemistry and Materials Science, University “Politehnica“ of București, Bucharest, Romania**
- 2015-2017 **Postdoctoral Associate, CIQUS - University Santiago de Compostela, Spain**, organometallic catalysis for novel synthesis of functional heterocycles (scientific advisor: Moisés Gulías and José Luis Mascareñas)
- 2012-2014 **Postdoctoral Research Assistant at Department of Chemistry and Biochemistry, University of Notre Dame, USA**, organometallic chemistry and catalysis (PI: Vlad Iluc)

## EDUCATION AND TRAINING

- 2008 - 2011 **PhD Degree, “Politehnica“ University of Bucharest**, Faculty of Applied Chemistry and Material Science, GPA: 10 (on a 1-10 scale). Title of the thesis: “New siloxanic materials: Synthesis, characterization and applications”. Collaboration on the national project STOHICO, with the goal of developing an alternate “green” fuel based on hydrogen storage materials
- 2008 - 2010 **Master Degree** in „Modern Inorganic Syntheses”, “Politehnica“ University of Bucharest, Faculty of Applied Chemistry and Material Science, GPA: 10 (on a 1-10 scale)
- 2003 - 2008 **Graduate** at “Politehnica“ University of Bucharest, GPA: 9.76; Diploma Work: 10 (on a 1-10 scale); top of the series of graduates at the Faculty of Chemical Engineering Taught in Foreign Languages (FILS)
- 1999 - 2003 **Baccalaureate Degree**, special edition for the National Chemistry Enlarged Team; GPA: 9.73 (1-10 scale), Mathematics-Computer Science Intensive English profile; High School studies at „B.P. Hasdeu” National College, GPA: 9.69 (on 1-10 scale)

PERSONAL SKILLS

Mother tongue Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Spanish	B2	B2	B2	B2	B2

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

Communication skills Good communication skills gained through international, multicultural scientific experience

Organisational / managerial skills Self-motivated, goal-oriented work capacity, responsible, self-reliable, proactive and dynamic, problem-solving

Job-related skills Independent user of NMR, powder and single-crystal X-Ray diffractometers, MS Mass spectroscopy, IR Infrared Spectroscopy

Digital competence

SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Proficient user	Independent user

Levels: Basic user - Independent user - Proficient user  
Digital competences - Self-assessment grid

Competent with most Microsoft Office software and some experience with HTML Operating Systems: MS-Dos, Windows. Utilities: Hyperchem, Mathcad, MDL® ISIS/Draw; Mestrenova (NMR processing software), ChemBioDraw Ultra 13.0, Shelxle (Single crystal XRD solving software), Gaussian (DFT computations)

## Publications

- Complex Metal Borohydrides: from Laboratory Oddities to Prime Candidates in Energy Storage Applications, C. Comanescu\*, *Materials* **2022**, 15(6), 2286. (IF=3.623)
- Mesoporous Cobalt Ferrite Nanosystems Obtained by Surfactant-Assisted Hydrothermal Method: Tuning Morpho-structural and Magnetic Properties via pH-Variation, P. Palade, C. Comanescu, A. Kuncser, D. Berger, C. Matei, N. Iacob, V. Kuncser, *Nanomaterials* **2020**, 10(3), 476. (IF=4.034)
- Rhodium-catalyzed annulation of ortho-alkenylanilides with alkynes: Formation of unexpected naphthalene adducts, A. Seoane, C. Comanescu, N. Casanova, R. GarcíaFandiño, D. Xabier, J. L. Mascareñas, M. Gulías, *Angew. Chem. Int. Ed.* **2019**, 58, 1700 – 1704 (IF=12.102)
- Palladium-Catalyzed Formal (5 + 2) Annulation between ortho-Alkenylanilides and Allenes, B. Cendón, N. Casanova, C. Comanescu, R. García-Fandiño, A. Seoane, M. Gulías, J. L. Mascareñas, *Org. Lett.*, **2017**, 19 (7), 1674–1677 (IF=6.732)
- Structural, Magnetic, and Mossbauer Investigation of Ordered Iron Nitride with Martensitic Structure Obtained from Amorphous Hematite Synthesized via the Microwave Route, P. Palade, C. Plapcianu, I. Mercioniu, C. Comanescu, G. Schinteie, A. Leca, R. Vidu, *Ind. Eng. Chem. Res.* **2017**, 56(11), 2958-2966 (IF=2.567)
- E-H (E = B, Si, Ge) Bond Activation of Pinacolborane, Silanes, and Germanes by Nucleophilic Palladium Carbene Complexes, C. Comanescu, V. M. Iluc, *Chem. Commun.* **2016**, 52, 9048–9051 (IF=6.834)
- C-H Activation Reactions of a Nucleophilic Palladium Carbene, C. Comanescu, V. Iluc, *Organometallics* **2015**, 34 (19), 4684–4692 (IF=4.126)
- Palladium carbene complexes as persistent radicals, C. Comanescu, M. Vyushkova, V. M. Iluc, *Chem. Sci.* **2015**, 6, 4570-4579 (IF=9.144)
- Frustrated Lewis pair-like reactions of nucleophilic palladium carbenes with B(C<sub>6</sub>F<sub>5</sub>)<sub>3</sub>, P. Cui, C. Comanescu, V. M. Iluc, *Chem. Commun.* **2015**, 51, 6206-6209 (IF=6.718)
- Synthesis and Reactivity of a Nucleophilic Palladium (II) Carbene, C. Comanescu, V. M. Iluc, *Organometallics* **2014**, 33 (21), 6059–6064 (IF=4.126)
- Flexible Coordination of Diphosphine Ligands Leading to cis and trans Pd(0), Pd(II), and Rh(I) complexes, C. Comanescu, V. Iluc, *Inorg. Chem.* **2014**, 53 (16), 8517–8528 (IF=4.820)
- Synthesis and characterization of novel mesocomposites Co<sub>3</sub>O<sub>4</sub> and CuO@OMS (ordered mesoporous silica) as active catalysts for hydrocarbon oxidation, C. Comanescu, *J. Nanopart. Res.* **2014**, 16:2323 (IF=2.278)
- Nanoconfinement in activated mesoporous carbon of calcium borohydride for improved reversible hydrogen storage, C. Comanescu, G. Capurso, A. Maddalena, *Nanotechnology* **2012**, 23(38), 385401 (IF=3.672)