

## Europass Curriculum Vitae



### Personal information

First name(s) / Surname(s) **Cornelia Silvia Păcurariu**

Address(es)

Telephone(s)

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E-mail **cornelia.pacurariu@upt.ro**

Nationality

Date of birth

Gender

### Professional experience

Dates 2004 - present

Occupation or position held Professor

Name and address of employer Politehnica University Timișoara, Faculty of Industrial Chemistry and Environmental Engineering, 2 Victoriei Sq., 300006 Timișoara, Romania

Main activities and responsibilities Teaching and research activities in the field of: Chemical kinetics, Applied physical chemistry, Physical chemistry of interfaces, Nanomaterials synthesis, Spectroscopic (UV-Vis, FT-IR) and thermal analysis (DTA, DSC, TG) methods, Environmental protection.

### Education, Degrees and Diplomas

Date 2009

Qualification awarded PhD coordinator in the field of Chemical Engineering

Name of organisation providing education Politehnica University Timișoara, Faculty of Industrial Chemistry and Environmental Engineering

Date 1998

Qualification awarded PhD, Diploma, in the field of Chemical Engineering

Name of organisation providing education Politehnica University Timișoara, Faculty of Industrial Chemistry and Environmental Engineering

Date 1976

Qualification awarded Chemical Engineer

Principal subjects/occupational skills covered Technology of Macromolecular Compounds

Name of organisation providing education Polytechnic Institute „Traian Vuia” of Timișoara, Faculty of Chemical Engineering

**Personal skills and competences**

Mother tongue(s) Romanian

Other language(s)

Self-assessment

European level (\*)

English

French

<b>Understanding</b>		<b>Speaking</b>				<b>Writing</b>	
Listening		Reading		Spoken interaction		Spoken production	
C1		C1		B2		B2	
C1		C1		B2		B2	

(\*) *Common European Framework of Reference for Languages*

## Professional skills and Competences

### Publications

Scientific papers published in peer-reviewed ISI journals: Scopus – 96/ Web of Science – 92

Scientific papers published in other journals and proceedings: 45

Representative publications:

- A. Capraru, E. A. Moaca, **C. Păcurariu**, R. Ianos, R. Lazau, L. Barbu-Tudoran, Development and characterization of magnetic iron oxide nanoparticles using microwave for the combustion reaction ignition, as possible candidates for biomedical applications, Powder Technology, 394 (2021) 1026-1038
- R. Dumitru, S. Negrea, **C. Păcurariu**, A. Surdu, A. Ianculescu, A. Ianculescu, A. Pop, F. Manea, CuBi<sub>2</sub>O<sub>4</sub> Synthesis, Characterization, and Application in Sensitive Amperometric/Voltammetric Detection of Amoxicillin in Aqueous Solutions, Nanomaterials, 11,3 (2021) Article Number 740
- R. Dumitru, S. Negrea, A. Ianculescu, **C. Păcurariu**, B. Vasile, A. Surdu, F. Manea, Lanthanum Ferrite Ceramic Powders: Synthesis, Characterization and Electrochemical Detection Application, MATERIALS, Volume: 13, Issue: 9 (2020) Article Number: 2061
- M. Stoia, **C. Păcurariu**, C. Mihali, I. Mălăescu, C. N. Marin, A. Căpraru, Manganese ferrite-polyaniline hybrid materials: Electrical and magnetic properties, Ceram. Int., 45(2) (2019), 2725–2735.
- R. Dumitru, A. Ianculescu, **C. Păcurariu**, L. Lupa, A. Pop, B. Vasile, A. Surdu, F. Manea, BiFeO<sub>3</sub>-synthesis, characterization and its photocatalytic activity towards doxorubicin degradation from water, Ceram. Int., 45(2), (2019) 2789-2802.
- E. Muntean, M. Stoia, **C. Păcurariu**, Facile synthesis, characterization and magnetic properties of manganese ferrite/carbon composites, Thermochim. Acta, 667, (2018) 122-131.
- R. Ianos, E.-A. Moaca, A. Capraru, R. Lazau, **C. Păcurariu**, Maghemite, gamma-Fe<sub>2</sub>O<sub>3</sub>, nanoparticles preparation via carbon-templated solution combustion synthesis, Ceram. Int., 44(12) (2018) 14090-14094.
- R. Ianos, R. Lazău, R. Băbuta, E. Muntean, E.-A. Moaca, **C. Păcurariu**, Solution combustion synthesis: a straightforward route for the preparation of chromium-doped lanthanum aluminate, LaAl<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub>, pink red pigments, Dyes Pigm., 155, (2018) 218-224.
- R. Ianos, **C. Păcurariu**, S. G. Muntean, E. Muntean, M. A. Nistor, D. Niznansky, Combustion synthesis of iron oxide/carbon nanocomposites, efficient adsorbents for anionic and cationic dyes removal from wastewaters, J. Alloys Comp., 741, (2018) 1235-1246.
- R. Ianos, E. Muntean, R. Babuta, R. Lazau, **C. Păcurariu**, C. Băndas, Combustion synthesis of pink chromium-doped alumina with excellent near-infrared reflective properties, Ceram. Int., 43 (2017) 2568–2572.
- M. Stoia, **C. Păcurariu**, E. Muntean, Thermal stability of the solvothermal-synthesized MnFe<sub>2</sub>O<sub>4</sub> nanopowder, J. Therm. Anal. Calorim., 127(1) (2017) 155-162.
- **C. Păcurariu**, I. Lazău, R. Lazău, Kinetic studies of the dehydroxylation and crystallization of raw kaolinite and fluorides-modified kaolinite, J. Therm. Anal. Calorim., 127(1) (2017) 239-246.
- **C. Păcurariu**, O. Paska, R. Ianos, S. G. Muntean, Effective removal of methylene blue from aqueous solution using a new magnetic iron oxide nanosorbent prepared by combustion synthesis, Clean Technol. Environ. Policy, 18(3) (2016) 705-715.
- R. Ianoș, R. Istrate, **C. Păcurariu**, R. Lazău, Solution combustion synthesis of strontium aluminate, SrAl<sub>2</sub>O<sub>4</sub> powders: single-fuel versus fuel-mixture approach, Phys.Chem.Chem.Phys., 18 (2016) 1150-1157.
- M. Ardit, S. Borcănescu, G. Cruciani, M. Dondi, I. Lazău, **C. Păcurariu**, C. Zanelli, Ni-Ti Codoped Hironite Ceramic Pigments by Combustion Synthesis: Crystal Structure and Optical Properties, J. Amer. Ceram. Soc., 99 (5) (2016) 1749-1760.

- M. Stoia, R. Istrate, **C. Păcurariu**, Investigation of magnetite nanoparticles stability in air by thermal analysis and FTIR spectroscopy, *J. Therm. Anal. Calorim.*, 125(3) (2014) 1185-1198.
- **C. Păcurariu**, A. E. Moacă, R. Ianoș, O. Marinică, C. V. Mihali, V. Socoliuc, Synthesis and characterization of  $\gamma\text{-Fe}_2\text{O}_3/\text{SiO}_2$  composites as possible candidates for magnetic paper manufacture, *Ceram. Int.*, 41(2015) 1079-1085.
- R. Ianoș, **C. Păcurariu**, G. Mihoc, Magnetite/carbon nanocomposites prepared by an innovative combustion synthesis technique - Excellent adsorbent materials, *Ceram. Int.*, 40 (2014) 13649–13657.
- R. Ianoș, A. Tăculescu (Moacă), **C. Păcurariu**, D. Niznansky,  $\gamma\text{-Fe}_2\text{O}_3$  nanoparticles prepared by combustion synthesis, followed by chemical oxidation of residual carbon with  $\text{H}_2\text{O}_2$ , *Mater. Chem. Phys.*, 148 (2014) 705-711.
- O. M. Pașka, **C. Păcurariu**, S. G. Muntean, Kinetic and thermodynamic studies on methylene blue biosorption using corn-husk, *RSC Adv.*, 4 (2014) 62621-62630.
- **C. Păcurariu**, G. Mihoc, A. Popa, S.G. Muntean, R. Ianoș, Adsorption of phenol and p-chlorophenol from aqueous solutions on poly (styrene-co-divinylbenzene) functionalized materials, *Chem. Eng. J.*, 222 (2013) 218-227.

Patents: 2

Books: 8

Research grants Scientific Research Grants finalized:15

Scientometric parameters Hirsch index, h: Scopus –22 / Web of Science – 20

Total number of citations: Scopus – 1627 / Web of Science – 1468

Total number of citations (self-citations of author excluded): Scopus – 1386 / Web of Science – 1314

Professional recognition Mentioned in Who is Who in Thermal Analysis and Calorimetry, Eds: I. M. Szilágyi, G. Liptay, Springer Int. Publish. Switzerland, 2014 <http://www.springer.com/us/book/9783319094854>: researcher index no. 214 C. Păcurariu.

Editorial board member of: Romanian Journal of Materials <http://solacolu.chim.upb.ro/indexeng.htm>, and of Chemical Bulletin of the "POLITEHNICA" University of Timisoara [www.chemicalbulletin.ro](http://www.chemicalbulletin.ro)

Membership in professional bodies: Romanian Chemical Society (1999-present), Romanian Ceramic Society (2000-present)

Invited reviewer for 9 international ISI ranked journals: International Materials Reviews, Journal of the European Ceramic Society, Journal of the American Ceramic Society, Materials Research Bulletin, Materials Characterisation, Thermochemica Acta, Journal of Thermal Analysis and Calorimetry, Arabian Journal of Chemistry, Journal of Non-Crystalline Solids.

## Organizational skills and other competences

Academic Management Experience as:

2004-2016-Head of "Applied Chemistry and Engineering of Inorganic Compounds and of Environmental" Department, Faculty of Industrial Chemistry and Environmental Engineering

Member in the scientific committee of international conferences: The 5th Central and Eastern European Conference on Thermal Analysis and Calorimetry, 27-30 August 2019, Roma, Italy <http://www.ceec-tac.org/conf5/chonorific.html>, 12th European Symposium on Thermal Analysis and Calorimetry, 27-30 August 2018, Brasov, Romania, <http://www.estac12.org/estac12/comitees.html>, 4th Central and Eastern European Conference on Thermal Analysis and Calorimetry, 27-30 August 2017, Chisinau, Moldova, <http://www.ceec-tac.org/conf4/chonorific.html>, 12th Conference on the Science and Engineering of Oxide Materials, CONSILOX, 16-20 sept., 2016, Sinaia Romania, <http://www.consilox.ro>, 3<sup>rd</sup> Central and Eastern European Conference on Thermal Analysis and Calorimetry, 25-28 August, 2015, <http://www.ceec-tac.org/conf3/welcome.html>, Ljubljana, Slovenia, 2<sup>nd</sup> Central and Eastern European Conference on Thermal Analysis and Calorimetry, 27-30 August, 2013, Vilnius, Lithuania, 1<sup>st</sup> Central and Eastern European Conference on Thermal Analysis and Calorimetry, 7-10 September, 2011, Craiova, Romania, etc.

Initiator of collaboration with reputed researchers from abroad: Prof. D. Niznansky (Charles University in Prague, Czech Republic), M. Dondi and C. Zanelli (Institute of Science and Technology for Ceramics, Faenza, Italy), M. Ardit and G. Cruciani (Department of Physics and Earth Sciences, University of Ferrara, Italy).

Competences in using thermal analysis (DSC, DTA, TG) and spectroscopic analysis (FT-IR, UV-VIS) and also familiar with using various programs, such as: OriginPro 8, Microsoft Office 2010, MatLab 7, Mathcad 14.