

CURRICULUM VITAE

Carmen Racles, Dr., senior researcher, 55 years old

“Petru Poni” Institute of Macromolecular Chemistry (PPIMC), Iasi, Romania

e-mail: raclesc@icmpp.ro

ORCID iD: 0000-0003-3343-9389

Brainmap: U-1700-034G-5396

Carmen Racles is a senior researcher at ICMPP and has strong expertise in synthesis and characterization of siloxane-containing materials, including polymers, copolymers, networks, composite materials, surfactants, liquid crystals, nanoparticles.

PROFESSIONAL EXPERIENCES

2000 –present “Petru Poni” Institute of Macromolecular Chemistry, Inorganic Polymers Department, Iasi - **Senior Researcher**

2002-2003 - **Post-doctoral fellowship**, at ESCPE-CNRS Lyon, France

1995-2000 – **PhD in chemistry**, Gh. Asachi Technical University Iasi

1992-2000: “Petru Poni” Institute of Macromolecular Chemistry, Inorganic Polymers Department, Iasi – **researcher**;

SCIENTIFIC PRODUCTION

132 ISI publications (**H-factor** = **21** ISI Web of Science, **24** google scholars); 1 book; 8 book's chapters; 20 *in-extenso* studies at international conferences; 5 invention patents (an European patent and four Romanian patents).

PROJECTS

30 projects: ●5 projects as project coordinator (two with international financing); ●the others as member; ●7 projects founded by international entities (between them an FP7 project, a COST project –ESNAM-, a Swiss-Romanian research project).

AWARDS

“C. D. Nenitescu” Price of the Romanian Academy, 2007

Honorary Degree of The Romanian Chemical Society, 2022

AREAS OF INTEREST

- Low molecular and macromolecular multifunctional siloxane compounds;
- Siloxanes with special properties: surfactants, liquid crystals, phase transfer agents, ligands;
- Nanocomposites;
- Silicone materials for biomedical, electromechanical and catalytic applications
- Chemical modification of polysiloxanes
- Sensors and actuators based on silicone materials

SELECTED SCIENTIFIC ARTICLES

- Racles C, Bele A, Vasiliu AL, Sacarescu L (2022) Emulsion Gels as Precursors for Porous Silicones and All-Polymer Composites—A Proof of Concept Based on Siloxane Stabilizers. *Gels*, 8, 377
- Racles C, Zaltariov MF, Coroaba A, Silion M, Diac C, Dascalu A, Iacob M, Cazacu M (2021) New heterogeneous catalysts containing platinum group metals recovered from a spent catalytic converter. *Applied Organometallic Chemistry* 35(12), e6417

- Racles C, Ursu C, Dascalu M, Asandulesa M, Tiron V, Bele A, Tugui C, Teodoroff-Onesim S (2020) Multi-stimuli responsive free-standing films of DR1- grafted silicones. Chemical Engineering Journal 401, 126087
- Racles C, Asandulesa M, Tiron V, Tugui C, Vornicu N, Ciubotaru BI, Mičušík M, Omastova M, Vasiliu AL, Ciomaga C (2021) Elastic composites with PDMS matrix and polysulfone-supported silver nanoparticles as filler, Polymer 217, 123480
- Racles C, Dascalu M, Bele A, Tiron V, Asandulesa M, Tugui C, Vasiliu AL, Cazacu M (2017) All-silicone elastic composites with counter-intuitive piezoelectric response, designed for electromechanical applications. J. Mater. Chem. C, 5, 6997-7010
- Racles C, Zaltariov MF, Iacob M, Silion M, Avadanei M, Borgan A (2017) Siloxane-based metal-organic frameworks with remarkable catalytic activity in mild environmental photodegradation of azo dyes. Applied Catalysis B: Environmental, 205, 78-92

03.07.2023

Alcelly