

Dr. Alina SOROCEANU

(UEFISCDI ID (UEF-ID): U-1700-036D-9420)

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Brainmap codes: U-1700-036D-9420

Specialist in synthesis and characterization of metal–salen Schiff base complexes with long, high flexible and hydrophobic siloxane type, coordination polymers and supramolecular structures, medicine, biology, crystallization technique, etc. I have experience in materials characterization using methods such as: infrared spectroscopy, proton and carbon nuclear magnetic resonance, single crystal X-ray diffraction, thermogravimetric measurements, X-ray fluorescence, dynamic vapour sorption and surface tension measurements, scanning electron microscopy, atomic force microscopy, differential scanning calorimetry etc.

Scientific contributions:

- **15** scientific referred articles published in ISI journals; **>10** oral communications and **>25** posters at National and International Conferences.
- Member in **4 projects**: "*Synthesis and study of the polymeric metallosiloxanes – new materials for catalysis and nanosciences*", Project POS CCE: ID 570, Cod SMIS-CSNR:12473; "*New coordination networks containing polyfunctional flexible bridges*"-PN-II-ID-PCE-2012-4; Bilateral cooperation-The program of bilateral cooperation Romania-Austria, "*Coordination compounds of 3d metals with Schiff base ligands having siloxane or silane units*" PN-II-CT-RO-AT-2013-1 ; "*Intelligent tools for design, processing and optimization of new PS-POSS-IL (polysulfone-silsesquioxanes impregnated with ionic liquids) type membranes applied in CO₂ gas separation*" PN-III-P2-2.1-PED-2021-3900.
- **Project Leader**: "*Polysiloxane/metal complexes composites with dielectric elastomers properties*" (DE-Comp), **PN-III-P1-1.1-PD-2021-0687**, Contract 33/2022.

Scientific visibility: H-index: 9 (Scopus) and 10 (Google Scholar)

SELECTED SCIENTIFIC ARTICLES

- *The thermal behavior of silicone-based composite materials and the assessment of the gases that result from the thermal degradation process*, **A. Soroceanu**, A.M. Serban, N. Tudorachi, M. Avadanei **2025**, *Materials Science and Engineering: B* 312, 117855 (FI=4.6)
- *Advanced and biomedical applications of Schiff-base ligands and their metal complexes: A review*, **A. Soroceanu**, A Bargan **2022**, *Crystals* 12 (10), 1436 (FI=2.4)
- *Siloxane Matrix MolecularWeight Influences the Properties of Nanocomposites Based on Metal Complexes and Dielectric Elastomer*, **A. Soroceanu**, G. Stiubianu **2021**, *Materials* 14, 3352. (FI = 3.623)
- *Dielectric elastomers based on silicones filled with transitional metal complexes*, G. Știubianu, **A. Soroceanu**, C.-D. Varganici, C. Tugui, M. Cazacu **2016**, *Composites Part B: Engineering*, 93, 236-243 (FI = 9.068).
- *Assessment of some application potentials for copper complexes of the ligands containing siloxane moiety: Antimicrobial, antifungal, antioxidant and redox activity*, **A. Soroceanu**, L. Vacareanu, N. Vornicu, M. Cazacu, V. Rudic, T. Croitori **2016**, *Inorganica Chimica Acta*, 442, 119-123. (FI = 2.264)
- *Charge and Spin States in Schiff Base Metal Complexes with a Disiloxane Unit Exhibiting a Strong Noninnocent Ligand Character: Synthesis, Structure, Spectroelectrochemistry, and Theoretical Calculations*, M. Cazacu, S. Shova, **A. Soroceanu**, P. Machata, L. Bucinsky, M. Breza, P. Raptă, J. Telser, J. Krzystek, V. B. Arion **2015**, *Inorganic Chemistry*, 54 (12), 5691-5706. (FI = 4.7)