



Dr. Ana-Maria MACSIM

Research Assistant

Affiliation: *Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania*

Email: macsim.ana@icmpp.ro

Research topics

Experience in using NMR spectroscopy for structure determination of organic compounds, polymers and supramolecular systems. Studies that include detailed structural characterization of nitrogen containing heterocyclic compounds, of phosphorous containing heterocyclic compounds, of silicon compounds polysiloxanes and polysilanes, Schiff bases, polysaccharides. These studies involve optimizing the experimental parameter sets and adapting them to each particular case, using bidimensional ^1H - ^{13}C correlations over one or several bonds, ^{13}C NMR, ^{29}Si NMR, ^{31}P NMR. Experienced in using NMR spectroscopy for analyzing plant extracts like juices obtained from various fruits, vegetables or plants.

Scientific research

Author and co-author of 45 articles published in ISI journals (14 in Q1 zone and 25 in Q2 zone), 13 communications, 28 posters. Since 2008 until now she was involved in 11 national projects as a member in the research teams, H = 12 in SCOPUS, 349 citations.

Visibility

<https://orcid.org/0000-0002-5107-6369>

<https://www.brainmap.ro/ana-maria-macsim>, (Brainmap ID: U-1700-036D-9489)

<https://www.scopus.com/authid/detail.uri?authorId=37070924500>

Relevant publications

1. C. Hamciuc, Tachita Vlad-Bubulac, D. Serbezeanu, **A. M. Macsim**, G. Lisa, I. Anghel, I. E. Sofran- **Effects of phosphous and boron compounds on thermal stability and flame retardancy properties of epoxy composites**, *Polymers*, 14, 4005 1-15, 2022, **Q1**, (IF₂₀₂₄ =4.7), <https://doi.org/10.3390/polym14194005>.

2. M. Damoc, R. I. Tigoianu, A. C. Stoica, **A. M. Macsim**, M. Dascalu, S. Shova, M. Cazacu- **Micellization turned on dual fluorescence and room temperature phosphorescence by pseudo-ESIPT in thiadiazole derivatives**, *Journal of Physical Chemistry C*, 127, 99-109, 2023, **Q1**, (IF₂₀₂₄ =3.3), DOI: [10.1021/acs.jpcc.2c07651](https://doi.org/10.1021/acs.jpcc.2c07651)

3. R. I. Baron, G. Biliuta, **A. M. Macsim**, M. V. Dinu, S. Coseri - **Chemistry of hydroxypropyl cellulose oxidized by two selective oxidants**, *Polymers*, 15, Article 3930/1-16, 2023, **Q1**, (IF₂₀₂₄ =4.7), <https://doi.org/10.3390/polym15193930>.

4. A. C. Stoica, M. Damoc, A. Bele, A. Dascalu, **A. M. Macsim**, S. Shova, M. Dascalu, M. Cazacu - **A 3D coordination polymer of Cd(II) with conformationally flexible mixed ligands as an active filler for silicone elastomers**, *Reactive and Functional Polymers*, 197, Article 105876/1-13, 2024, **Q1**, (IF₂₀₂₄ =4.966), <https://doi.org/10.1016/j.reactfunctpolym.2024.105876>.

5. M. Damoc, C. Ursu, V. Tiron, G. Bulai, A.-C. Stoica, **A.-M. Macsim**, C.-D. Varganici, A. Bele, M. Dascalu, M. Cazacu - **Thermal actuators relying on elastomers-dispersed liquid crystals. From imines with supramolecular chirality and ferroelectricity to soft robots** - *ACS Applied Materials & Interfaces*, 2025, **Q1**, (IF₂₀₂₄ =8.3), [10.1021/acsami.4c18088](https://doi.org/10.1021/acsami.4c18088).