

## Dr. AC Alexandra Bargan

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Brainmap codes: (UEFISCDI ID (UEF-iD): **U-1700-039Q-1815**)

**Specialist** in the field of chemistry, subdomains polymer chemistry/inorganic chemistry, with 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. The researcher has experience in the field of Schiff bases ligands derived from silicon compounds and their metal complexes, synthesis of functionalized silica nanostructures and preparation of silicone composites. The participation in national and international projects confirms her ability to work in team.

**Scientific record:** Articles published in international peer-reviewed journals (ISI ranked and included in international data bases): **44** (out of which 10 articles as main author and 10 articles as corresponding author; **total impact factor: 71.15**). Articles/Studies published full-text in international conference volumes: **427 citations** (without self-citation) of the published papers in international ISI ranked journals, Hirsch index, **H= 12** in SCOPUS, **H=12** in ISI Web of Science databases, **H=12** in Google Scholar). Research and development projects based on national (10) and international (3) grants: **13 projects, as member** of the project.

### SELECTED SCIENTIFIC ARTICLES

1. **Bargan, A.**, Cazacu, M., Dascalu, M., Macsim, A.M., Soroceanu, A., Macsim, I.F., „Synthesis, structural characterization and properties evaluation of two new zwitterionic siloxane compounds”, *Polyhedron*, 2020, 179, 114356, <https://doi.org/10.1016/j.poly.2020.114356>, F.I. =2.284.
2. **Bargan, A.**, Zaltariov, M.F., Vlad, A., Dumitriu, A.M.C., Soroceanu, A., Macsim, A.M., Dascalu, M., Varganici, C.D., Cazacu, M., Shova, S., „Keto-enol tautomerism in new silatranes Schiff bases tailed with different substituted salicylic aldehyde”, *Arabian Journal of Chemistry*, 2020, 13 (1), 3100-3111, DOI: 10.1016/j.arabjc.2018.09.001, F.I.=3.298.
3. Racles, C., Zaltariov, M.F., Iacob, M., Silion, M., Avadanei, M., **Bargan, A.**, “Siloxane-based metal-organic frameworks with remarkable catalytic activity in mild environmental photodegradation of azo-dyes”, *Applied Catalysis B: Environmental* 205, 78-92, 2017, F.I.=14.229.
4. **Bargan, A.**, Soroceanu, A., Alexandru, M., Stoica, I., Cazacu, M., Shova, S., “A new zwitterionic siloxane compound: structural characterization, the solution behavior and surface properties evaluation”, *Journal of Molecular Liquids*, 196, 319-325, 2014, F.I.=2.515.
5. Drăgan, S., Cazacu, M., **Nistor, A.**, „Ionic organic/inorganic materials. III. Stimuli responsive hybrid hydrogels based on oligo(*N,N*-dimethylaminoethylmethacrylate) and chloroalkyl-functionalized siloxanes (p NA)”, *Journal of Polymer Science Part A: Polymer Chemistry*, 47 (24), 6801-6813, 2009, F.I.=4.07.