



## Dr. A.C. Alina Ghilan

(UEFISCDI ID (UEF-iD): U-1700-037T-5945)

E-mail: [diaconu.alina@icmpp.ro](mailto:diaconu.alina@icmpp.ro)

Researcher ID: I-9039-2016

ORCID: 0000-0001-8010-7921

**Alina Ghilan** is responsible for the operation of the equipment from LAMINAST laboratory Zetasizer Nano ZS and MasterSizer 2000, devices for zeta potential and particle size distribution analysis. She has also experience in materials characterization using methods such as: FT-IR spectroscopy, NMR spectroscopy, electron microscopy, rheological measurements, thermal analysis, near-infrared chemical imaging and also in the evaluation of physico-chemical features of materials in correlation with their biological characteristics (capacity to retain and release specific therapeutic agents, in vitro dissolution tests and in vivo studies). Her research activity is mainly devoted to the design of magnetic polymer composites, nanocomposites and hydrogels for biomedical applications.

**Scientific record:** Articles published in international peer-reviewed journals (ISI ranked and included in international data bases): **33** (out of which 8 articles as main author). Articles/Studies published full-text in international conference volumes: **265 citations:** (without self-citation) of the published papers in international ISI ranked journals, Hirsch index, **H= 6** in SCOPUS, **H= 9** in ISI Web of Science databases, **H= 10** in Google Scholar). Patents (national): **3 patent** application at OSIM Bucharest. Research and development projects based on national grants: **4 projects as member** of the project.

### SELECTED SCIENTIFIC ARTICLES

1. A. Ghilan, A.P. Chiriac, L.E. Nita, Magnetic composites based on bovine serum albumin and poly(aspartic acid), *Polym Eng Sci*, 59, 7, 1409-1415, 2019, IF: 2.428.
2. A.P. Chiriac, A. Ghilan, I. Neamtu, L.E Nita, A.G. Rusu, V.M. Chiriac Advancement in the biomedical applications of the (nano) gel structures based on particular polysaccharides, *Macromol Biosci*, 19 (9), 1900187, 2019, IF: 4.979.
3. A. Diaconu (Ghilan), L.E. Nita, A.P. Chiriac, M. Butnaru, Investigation of the magnetic field effect upon interpolymeric complexes formation based on bovine serum albumin and poly(aspartic acid), *Int J Biol Macromol*, 119, 974-981, 2018, IF: 6.953.
4. A. Diaconu (Ghilan), L.E. Nita, M. Bercea, A.P. Chiriac, Hyaluronic acid gels with tunable properties by conjugating with a synthetic copolymer, *Biochem Eng J*, 125, 135-143, 2017, IF: 3.978.
5. L.E. Nita, A.P. Chiriac, A.G. Rusu, M. Bercea, A. Diaconu (Ghilan), N. Tudorachi, Interpenetrating polymer network systems based on poly(dimethylaminoethyl methacrylate) and a copolymer containing pendant spiroacetal moieties, *Mat Sci Eng C-Mater*, 87, 22-31, 2018, IF: 7.328.