

CURRICULUM VITAE

Dr. Gabriela-Liliana Ailiesei (Maiden name: Darvaru)

Email: gdarvaru@icmpp.ro; darvarug@yahoo.com

Mobile phone: +40745416352



Education, degree and diplomas

- Oct. 2000 – Jun. 2004: Bachelor of Science in Chemistry – “Al. I. Cuza” University of Iasi, Romania, Faculty of Chemistry
- Oct. 2004 – Jun. 2006: Master of Science in Chemistry and Biochemistry of Heterocyclic Compounds – “Al. I. Cuza” University of Iasi, Romania, Faculty of Chemistry
- Nov. 2006 – Oct. 2014: Ph.D. in Macromolecular Chemistry with thesis “NMR Spectroscopy applied in kinetics and reaction mechanisms study”, scientific coordinator: Dr. Virgil Barboiu – “Petru Poni” Institute of Macromolecular Chemistry

Professional experience:

- **Research assistant:** March 2006 – 2020 - “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania; Physics of Polymers and Polymeric Materials Department
: January 2021 – present - Polycondensation and Thermostable Polymers Department

Main objectives: - identification and characterization of new organic and macromolecular compounds by attribution of proton and carbon NMR signals, using different 2D homo- and heteronuclear correlations, offered by NMR technology.

- application of NMR techniques in different type of problems that can be resolved with this spectroscopic method, such as calculation of copolymers composition, calculation of degree of substitution, kinetic and microstructure studies, etc.

- **PhD student:** Nov. 2006 – Oct. 2014 – “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania; Physics of Polymers and Polymeric Materials Department, scientific coordinator: Dr. V. Barboiu

Main objectives: - study of kinetic model and reaction mechanism of 4MP with acrylic acid by identifying intermediaries and final products, using conversion measurements from NMR spectra performed on P4VP and polymer model, 4MP.

- microstructure and reactivity study of PNVI and ionic derivatives, using Bernoulli statistical model and determining the equilibrium constant.

- NMR spectrum-stereoregularity correspondence study on PDMAEMA and quaternized derivatives, by creating and describing the principle of deconvolution method.

Publications, research projects and scientometrics indicators:

BrainMap ID: U-1700-036Q-6324

Publications: 16 articles ISI indexed

Scientific presentations: 7 oral communications and 16 posters

Research projects: member in 4 national projects

Representative publications:

1. M. M. Iftime, **G. L. Ailiesei**, E. Ungureanu, L. Marin
Designing chitosan based eco-friendly multifunctional soil conditioner systems with urea-controlled release and water retention
Carbohydrate Polymers 223 (2019) 115040/1-10.
<https://doi.org/10.1016/j.carbpol.2019.115040>
2. I. Popescu, I. Pelin, **G. L. Ailiesei**, D. L. Ichim, D. M. Suflet
Amphiphilic polysaccharide based on curdlan: synthesis and behavior in aqueous solution
Carbohydrate Polymers 224 (2019) 115157/1-10.
<https://doi.org/10.1016/j.carbpol.2019.115157>
3. M. Nichifor, M. C. Stanciu, G. Mocanu, C. Tuchilus, **G. L. Ailiesei**
Block copolymers containing dextran and deoxycholic acid polyesters. Synthesis, self-assembly and hydrophobic drug encapsulation
Carbohydrate Polymers 223 (2019) 115118/1-9.
<https://doi.org/10.1016/j.carbpol.2019.115118>
4. M. M. Iftime, V. Cozan, A. Airinei, C. Varganici, **G. L. Ailiesei**, D. Tampu, I. Sava
Asymmetric azomethine amines with azobenzene moieties – liquid crystalline and optical properties
Liquid Crystals 46 (10) (2019) 1584-1594.
<https://doi.org/10.1080/02678292.2019.1640903>
5. **G.L. Ailiesei**, V. Barboiu, E.S. Dragan
Contributions to the quaternization description and kinetics illustrated on poly (dimethylaminoethyl methacrylate)
Reactive and Functional Polymers 161 (2021) 104852/1-7.
<https://doi.org/10.1016/j.reactfunctpolym.2021.104852>
6. C.-A. Ghiorghita, L. Ghimici, **G.L. Ailiesei**
Facile synthesis of thiourea-graft-polyethyleneimine and its performance in flocculation of some inorganic particles
Industrial and Engineering Chemistry Research 60 (14) (2021) 5167-5175.
<https://doi.org/10.1021/acs.iecr.1c00555>