

CURRICULUM VITAE

Maria Karayianni

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Education

- Ph.D. in Polymer Science, University of Athens, Greece (2012).
- M.Sc. in Polymer Science, University of Athens, Greece (2007).
- B.S. in Physics, University of Ioannina, Greece (2004).

Research and Teaching Appointments

12/2012 - : Postdoctoral Researcher, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Athens, Greece.

Main Research Interests

- Physicochemical characterization and self-assembly studies of macromolecules in solution: amphiphilic block copolymers, polyelectrolytes, polyelectrolyte block copolymers, proteins, polymeric micelles, polyelectrolyte nanoparticles, protein-polyelectrolyte complexes.
- Preparation protocols for the development of block polyelectrolyte micelles and nanoparticles, as well as electrostatically self-assembled macromolecular complexes.
- Structural studies of proteins.

- Adsorption studies of amphiphilic block copolymer micelles and polyelectrolyte micelles, protein adsorption on polyelectrolyte brushes, protein-polyelectrolyte multilayers.

External Funding

Participant in 4 national research projects in collaboration with academic and industrial organizations.

Conferences and Invited Talks

4 international and 3 national conferences.

Publications

4 original publications in refereed journals, co-author of 1 book chapter.

Selected Recent Publications

1. M. Karayianni, G. Mountrichas, S. Pispas, "Solution Behavior of Poly(sodium(sulfamate-carboxylate)isoprene), a pH Sensitive and Intrinsically Hydrophobic Polyelectrolyte", *J. Phys. Chem. B*, 2010, 114 (33), 10748-10755.
2. M. Karayianni, S. Pispas, G. D. Chryssikos, V. Gionis, S. Giatrellis, G. Nounesis, "Complexation of Lysozyme with Poly(sodium(sulfamate-carboxylate)isoprene)", *Biomacromolecules*, 2011, 12 (5), 1697-1706.
3. M. Karayianni, S. Pispas, "Complexation of stimuli-responsive star-like amphiphilic block polyelectrolyte micelles with lysozyme", *Soft Matter*, 2012, 8 (33), 8758-8769.