

## ΒΙΟΓΡΑΦΙΚΟ ΣΗΜΕΙΩΜΑ

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### EDUCATION

- Ph.D. in Physics, University of Leeds, UK (2005)
- M.Sc. in Polymer Science and Technology, University of Patras and University of Ioannina, Greece (2001)
- B.Sc. in Physics, University of Patras, Greece (1998)

### PROFESSIONAL EXPERIENCE AND APPOINTMENTS

01/2023-present: Senior Researcher, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Greece

06/2019-01/2023: Associate Researcher, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Greece

01/2019-06/2019: Postdoctoral Research Associate, Institute of Chemical Biology, National Hellenic Research Foundation, Greece

09/2015-12/2018: Postdoctoral Research Associate, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Greece

- 04/2015-09/2015: Postdoctoral Research Associate, Institute of Electronic Structure and Laser, Foundation for Research and Technology – Hellas, Greece
- 04/2013-03/2015: Postdoctoral Research Associate, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Greece
- 05/2008-06/2009: Postdoctoral Research Associate, School of Applied Mathematical and Physical Sciences, National Technical University of Athens, Greece
- 02/2006-03/2007: Postdoctoral Research Associate, School of Physics and Astronomy, University of Manchester, UK
- 10/2005-1/2006: Postdoctoral Research Associate, School of Physics and Astronomy, University of Leeds, UK
- 6/2001-12/2001: Marie Curie Studentship, School of Physics and Astronomy, University of Leeds, UK

## **MAIN RESEARCH INTERESTS**

- Nanostructured biomaterials
- Polysaccharide-based nanoparticles
- Biointerfaces
- Biopolymer fluids and hydrogels
- Small angle scattering techniques with neutrons and X-rays
- Rheology and microrheology

## **TEACHING EXPERIENCE**

- Supervision of 3 Postdoctoral Fellows, 3 PhD, 6 MSc, 3 BSc/BEng, 4 Internship Students.
- Laboratory exercise-Physicochemical characterization of nanomaterials and nanoparticles by dynamic light scattering, for the School of Applied Mathematics and Physical Science, National Technical University of Athens, Greece 09/2021-present.
- Structural and Chemical Analysis of Materials, Department of Materials Science and Technology, University of Crete, Greece, 02/2017-07/2017.
- Materials Science, Department of Physics, University of Patras, Greece, 10/2016-02/2017.

- Soft Matter (assistance teaching), Graduate programme of Department of Materials Science and Technology, University of Crete, Greece, 05/2015-06/2015.
- Physics Laboratory, School of Physics and Astronomy, University of Leeds, United Kingdom (during PhD studies), 03/2003-09/2005.
- Assistance teaching-Electromagnetism, School of Physics and Astronomy, University of Leeds, United Kingdom, 03/2003-09/2005.

## PROFESSIONAL AFFILIATIONS & ACTIVITIES

- Member of the Governing Board of the Hellenic Society of Biomaterials.
- Founding member of the Greek Society for Colloids and Interfaces.
- Member of the Hellenic Polymer Society.
- Special Issue Guest Editor in Colloid and Polymer Science.
- Special Issue Guest Editor in Pharmaceutics MDPI.
- Review Editor for Biomedical Nanotechnology Frontiers in Nanotechnology.
- Guest associate/Review editor in Frontiers in Bioengineering and Biotechnology.
- Review Editor for Polymer Chemistry Frontiers in Chemistry.
- Member of the editorial board and special issue editor of Macromol MDPI.
- Reviewer for more than 30 journals (ACS, Elsevier, Springer, RSC, WILEY, MDPI).

## AWARDS AND DISTINCTIONS

- Paper "Bovine serum albumin interactions with cationic surfactant vesicles decorated by a low-molar-mass polysaccharide", A. Papagiannopoulos, Colloids and Surfaces A 537, 495 (2018), featured and highlighted by [Medicine Innovates series](#) as key scientific article contributing to excellence in biomedical research (2018).
- Paper "Tuning the solution organization of cationic polymers through interactions with bovine serum albumin", A. Papagiannopoulos, E. Vlassi, S. Pispas, Physical Chemistry Chemical Physics, 19 (28), 1847 selected by [Advances in Engineering](#) as key scientific article contributing to excellence in science and engineering research (2018).
- Best oral presentation award in the 11<sup>th</sup> Conference of the Hellenic Society of Biomaterials, 23-25 November 2018, Athens.
- Best poster award in the 1st International Conference: From Drug Discovery to Drug Delivery, 13-15 November 2014, Athens.
- Paper, "Microrheology of Polymeric Solutions using X-ray Photon Correlation Spectroscopy", A. Papagiannopoulos, T.A.Waigh, A. Fluerasu, C. Fernyhough and

A. Madsen, *Journal of Physics: Condensed Matter*, 2005, 17, L279-L285 (2005).  
Selected in [European Synchrotron Radiation Facility \(ESRF\) Highlights 2005](#).

- 5<sup>th</sup> position in the Summer School of Advanced Physics in the Physics Department of the University of Crete 1998.

## SELECTED PUBLICATIONS

1. "Protein-induced transformation of unilamellar to multilamellar vesicles triggered by a polysaccharide", A. Papagiannopoulos, A. Sklapani, A. Len, A. Radulescu, E. Pavlova, and M. Slouf, [Carbohydrate Polymers 303, 120478 \(2023\)](#).
2. "Physicochemical properties of electrostatically crosslinked carrageenan/chitosan hydrogels and carrageenan/chitosan/Laponite nanocomposite hydrogels", A. Papagiannopoulos, S.-P. Nikolakis, A. Pamvouxoglou, and E. Koutsopoulou,, [International Journal of Biological Macromolecules 225, 565 \(2023\)](#).
3. "Preparation of trypsin-based nanoparticles, colloidal properties and ability to bind bioactive compounds", A. Papagiannopoulos, D. Selianitis, A. Chroni, J. Allwang, Y. Li, C.M. Papadakis, [International Journal of Biological Macromolecules, 208, 678-687 \(2022\)](#).
4. "Polysaccharide–Protein Multilayers Based on Chitosan–Fibrinogen Assemblies for Cardiac Cell Engineering", M. Kitsara, G. Tassis, A. Papagiannopoulos, A. Simon, O. Agbulut, and S. Pispas, [Macromolecular Bioscience, 22: 2100346 \(2022\)](#).
5. "Nanoformulation of fibrinogen by thermal stabilization of its electrostatic complexes with hyaluronic acid", E. Vlassi, A. Papagiannopoulos, [International Journal of Biological Macromolecules 158, 251 \(2020\)](#).
6. "Reorganizations inside thermally stabilized protein/polysaccharide nanocarriers investigated by small angle neutron scattering", A. Papagiannopoulos, and E. Vlassi, and A. Radulescu, [Carbohydrate Polymers 218, 218 \(2019\)](#).
7. Stimuli-responsive nanoparticles by thermal treatment of bovine serum albumin inside its complexes with chondroitin sulfate, A. Papagiannopoulos, and E. Vlassi, [Food Hydrocolloids, 87, 602 \(2019\)](#).
8. "Modification of xanthan solution properties by the cationic surfactant DTMAB", K. Sotiropoulos, and A. Papagiannopoulos, [International Journal of Biological Macromolecules 105 \(1\), 1213 \(2017\)](#).
9. "Particle tracking microrheology of the power-law viscoelasticity of xanthan solutions", A. Papagiannopoulos, K. Sotiropoulos, and S. Pispas, [Food Hydrocolloids 61, 201 \(2016\)](#).
10. "Solution Structure and Dynamics of Cartilage Aggrecan", A. Papagiannopoulos, T.A. Waigh, T. Hardingham, and M. Heinrich, [Biomacromolecules 7 \(7\), 2162 \(2006\)](#).