Asterios (Stergios) Pispas

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Education

Diploma in Chemistry, University of Athens, Greece (1989)
Ph. D. in Polymer Chemistry, University of Athens, Greece (1994)

Research and Teaching Appointments

2014-	Director of Research, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Athens, Greece.
2009-2014	Senior Researcher, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Athens, Greece.
2004-2009	Associate Researcher, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Athens, Greece.
2001-2004	Visiting Researcher, National Hellenic Research Foundation, Athens, Greece.
1997-2004	Research Associate, Department of Chemistry, University of Athens, Greece.
1994-1995	Post Doctoral Fellow, Department of Chemistry, University of Alabama at Birmingham, USA.

Main Research Interests

- Synthesis and molecular characterization of well defined polymers by anionic polymerization and controlled free radical polymerization.
- Amphiphilic block copolymers and polyelectrolytes.
- Block copolymer self-assembly in solutions.
- Nanoscale complexes from polyelectrolytes, surfactants, proteins and DNA.
- Morphology, bulk properties and phase transitions of block copolymers of various architectures.
- Polymer nanostructures in hybrid materials synthesis.

- Nanostructured organic-inorganic hybrid materials based on polymers.

External Funding Projects

Coordinator or collaborator in 20 national and international research projects in collaboration with academic and industrial organizations.

Conferences and Invited Talks

Over 260 announcements in international and national conferences. 28 invited lectures in academic/research institutions and conferences. Member of the organizing committee of the IUPAC-International Symposium on Ionic Polymerization-IP 2001" (Athens, 2001), the XXIII Panhellenic Conference on Solid State Physics and Materials Science (Athens, 2007) and the ICO-Photonics 2009 Topical Meeting (Delphi, 2009). Member of the scientific committee of the 74th Prague Meeting on Macromolecules (Prague, 2010).

Teaching Activities

Participation in the teaching of four graduate courses in the framework of the Graduate Program "Polymer Science and its Applications" (Department of Chemistry, University of Athens, 1998-2008). Supervision of 12 Ph. D., 18 Masters and 14 honors students and 7 post-doctoral fellows. Member of several Ph.D. and Masters examination committees.

Honors and Awards

The American Institute of Chemists Foundation Award for Outstanding Post-doctoral Fellow (1995).
A. K. Doolittle Award (2003, American Chemical Society).

Professional Affiliations and Activities

Member of the TPCI Scientific Council (2013-). Associate Editor for the European Physical Journal E: Soft Matter (2003-2012). Member of the Editorial Board of The Open Macromolecules Journal (2007-) and of Journal of Materials (2011-).Member of the Advisory Board of REGPOT project POLINNOVA (Institute of Polymers, Bulgarian Academy of Sciences, 2012-). Member of the Association of Greek Chemists and Greek Polymer Society. Reviewer of national and international project proposals. Reviewer for several international journals on macromolecules, materials science and physical chemistry.

Publications

Over 190 original research papers in refereed journals. 13 invited review articles. 25 publications in conference proceedings. Seven chapters in books and encyclopedias. Co-author of two books. Over 5000 citations and h-index=34.

Selected Recent Publications

1. "Metal-free controlled ring-opening polymerization of ε-caprolactone in bulk using tris(pentafluorophenyl)borane as a catalyst", J. Xu, J. Song, S. Pispas and G. Zhang, Polymer Chemistry, 5, 4726 (2014)
2. "Amphiphilic diblock copolymer-based multiagent photonic sensing scheme", L. Athanasekos, A. El Sachat, S. Pispas and C. Riziotis, J. Polym. Sci. Part B; Polym. Phys., 52, 46 (2014)
3. "PEO-b-PCL/DPPC chimeric nanocarriers: self-assembly aspects in aqueous and biological media and drug incorporation", N. Pippa, E. Kaditi, S. Pispas and C. Demetzos, Soft Matter 9, 4073 (2013)
4. "Polyplexes based on cationic polymers with strong nucleic acid binding properties", A. K. Varkouhi, G. Mountrichas, R. M. Schiffelers, T. Lammers, G. Storm, S. Pispas and W. E. Hennik, Eur. J. Pharm. Sci., 45, 459 (2012)
5. "Complexation of stimuli-responsive star-like amphiphilic block polylectrolyte micelles with lysozyme", M. Karayianni and S. Pispas, Soft Matter, 8, 8758 (2012)
6. "Self-assembled nanostructures in mixed anionic-neutral double hydrophilic block copolymer/cationic vesicle-forming surfactant solutions", S. Pispas, Soft Matter, 7, 474 (2011)
7. "How does a star chain (nanooctopus) crawl through a nanopore?", H. Ge, S. Pispas and C. Wu, Polym. Chem., 2, 1071 (2011)
8. "Thermoresponsive core-shell brush copolymers with poly(propylene oxide)-block-poly(ethylene oxide) side chains via a "grafting from" technique", J. Zhao, G. Mountrichas, G. Zhang and S. Pispas, Macromolecules 43, 1771 (2010)
9. "Multicompartment nanoparticles formed by a heparin-mimicking block terpolymer in aqueous solutions", M. Uchman, M. Stepanek, K. Prochazka, G. Mountrichas, S. Pispas, I. K. Voets and A. Walther, Macromolecules 42, 5605 (2009)

10. "Polymer mediated formation of corona-embedded gold nanoparticles in block polyelectrolyte micelles", A. Meristoudi and S. Pispas, Polymer, 50, 2743 (2009)