

Sunday Sept. 28

17:00 - 20:00 Registration – Welcome Party

Monday Sept. 29	Tuesday Sept. 30	Wednesday Oct. 1
08:15 - 09:15 Registration	Session 5: BIOPOLYMERS Presiding: M. Kosmas, A. Andreopoulos	Session 9: POLYMER DYNAMICS Presiding: D. Vlassopoulos, V. Mavrantzas
09:15 – 09:30 Opening Remarks	09:00 – 09:40 IL6 M. Muthukumar “Packaging biological macromolecules and delivery”	09:00 – 09:40 IL10 D.N. Theodorou “From chemical structure to physical properties of polymers via hierarchical modeling”
Session 1: NANOTECHNOLOGY Presiding: N. Hadjichristidis, G. Floudas	09:40 – 10:00 O12 A. Gitsas “Self-assembly and dynamics of poly(γ -benzyl-L-glutamate) embedded into nanoporous alumina templates”	09:40 – 10:00 O27 V. Raptis “A poly(dimethylsiloxane) quantum mechanical force-field: Molecular dynamics calculations for the prediction of physical properties”
09:30 – 10:10 IL1 E.L. Thomas “Periodic polymers for photonics, phononics and mechanics”	10:00 – 10:20 O13 H. Iatrou “Vesicles from well-defined block copolypeptides”	10:00 – 10:20 O28 V. Harmandaris “Structure and dynamics of entangled polystyrene melts through hierarchical multi-scale dynamic simulations”
10:10 – 10:30 O1 M. Pitsikalis “Synthesis and characterization of amphiphilic block copolymers. Association behavior in aqueous solutions. Potential use of the micellar structure as drug carriers”	10:20 – 10:40 O14 P. Papadopoulos “Hierarchies in the structural organization of spider silk – a quantitative model”	10:20 – 10:40 O29 G. Tsolou “Topological and dynamical mapping of atomistic simulation data onto the tube model for entangled polymer melts”
10:30 – 10:50 O2 E. Pefkianakis “Synthesis and characterization of polymeric [Ru ²⁺] complexes and their application as dyes in solar cells”	10:40 – 11:00 O15 S. Chaitidou “Synthesis of molecularly imprinted polymers via precipitation polymerization from the selective separation of peptides”	10:40 – 11:00 O30 A. Rissanou “Molecular dynamics simulations of diblock-arm star copolymers”
10:50 - 11:10 Coffee Break – (Conference Photo)	11:00 – 11:20 Coffee Break	11:00 – 11:20 O31 I.G. Economou “Atomistic simulations of poly(dimethylsiloxane) permeability properties to gases and n-alkanes”
Session 2: POLYMER SYNTHESIS Presiding: J. Kallitsis, C. Tsitsilianis	Session 6: SURFACES AND INTERFACES Presiding: G. Floudas, C. Panayiotou	11:20 – 11:40 Coffee Break
11:10 – 11:50 IL2 N. Hadjichristidis “Well-defined complex macromolecular architectures by anionic polymerization high vacuum techniques”	11:20 – 12:00 IL7 H.-J. Butt “Single polymer binding: Towards a universal adhesive”	Session 10: POLYMER TECHNOLOGY Presiding: C. Papispyrides, I. Simitzis
11:50 – 12:10 O3 G. C. Vougioukalakis “Vinyl polymerization of norbornene with a novel nickel (II) diphosphinoamine/methylaluminoxane catalytic system”	12:00 – 12:20 O16 D. Vlassopoulos “Viscoelasticity of semifluorinated alkanes at the air-water interface”	11:40 – 12:00 O32 E. Mitsoulis “Steady capillary flow of polytetrafluoroethylene (PTFE) paste: Experiments and simulations”
12:10 – 12:50 IL3 J. Mays “Novel ion-containing polymers via post-polymerization chemistry”	12:20 – 12:40 O17 C. Toprakcioglu “Adsorption of oligomers and polymers in nanoporous alumina”	12:00 – 12:20 O33 D. S. Achilias “Thermal degradation kinetics of light-cured dimethacrylate resins used as biomaterials in dental applications”
12:50 - 13:10 O4 M. Vamvakaki “Responsive microgel particles”	12:40 – 13:00 O18 B. Loppinet “Dynamics of zwitterion terminated polystyrene at a glass-solution interface studied by evanescent wave dynamic light scattering”	12:20 – 12:40 O34 P.A. Tarantili “Study of polyblends containing plastics used in electrical and electronic applications”
13:10 – 13:30 O5 N. Zafeiropoulos “Smart multifunctional hybrid microgels”	13:00 - 13:20 O19 G. Kritikos “Theoretical study of adsorption of star-polymers by mean-field theory”	12:40 - 13:00 O35 C. Tsiptsias “Porous materials from polysaccharide gels processed by supercritical CO ₂ ”
	13:20 – 13:40 O20 G. Sakellariou “A general approach to surface initiation polymerizations from multi-wall carbon nanotubes”	13:00 – 13:20 O36 L. Zoumpoulakis “Chemical modification of carbon fibers and its evaluation based on their composites with epoxy resin”

13:30 - 15:00 Lunch Break	13:40 – 15:00 Lunch Break	13:20 – 14:20 Lunch Break
Session 3: COLLOIDS/GELS Presiding: D.N. Theodorou, C. Kiparissides	Session 7: SURFACES AND NANOCOMPOSITES Presiding: S.H. Anastasiadis, C. Galiotis	14:20 - 14:40 O37 S.N. Vouyiouka “ <i>Post-polymerization in the solid state of sulfonated nylon 66 copolymers</i> ”
15:00 – 15:40 IL4 G. Fytas “ <i>Tailoring sound propagation by mesoscopic engineering of soft matter</i> ”	15:00 – 15:40 IL8 M. Stamm “ <i>Polymer brushes for functional surfaces</i> ”	14:40 - 15:00 O38 I. Raptis “ <i>Evaluation of a polymer based chemocapacitive sensor array for the detection of vapor analytes and their mixtures</i> ”
15:40 – 16:00 O6 I. Bitsanis “ <i>Simulations of temperature induced ageing and crystallization in dense suspensions of ultrasoft colloids</i> ”	15:40 – 16:00 O21 P. Pissis “ <i>Dynamics of poly(propylene oxide) amines intercalated in clay</i> ”	15:00- 15:20 O39 G.C. Psarras “ <i>Electrical response of polymer matrix-titanium carbide composites</i> ”
16:00 - 16:20 O7 G. Petekidis “ <i>Yielding mechanisms and particle rearrangements in colloidal glasses and gels</i> ”	16:00 – 16:20 O22 K. Chrissopoulou “ <i>Crystallization behavior in polymer/layered silicate nanocomposites</i> ”	15:20 -15:40 Best Poster Award - Closing Remarks (Award Committee: D. N. Theodorou, N. Hadjichristidis, G. Fytas)
16:20 – 16:40 O8 G. Staikos “ <i>Hydrogen-bonded interpolymer complexes soluble at low pH</i> ”	16:20 – 16:40 O23 K. Triantafyllidis “ <i>The use of aliphatic di/triamines (Jeffamines) as clay surface modifiers for the preparation of epoxy-clay nanocomposites</i> ”	
16:40 – 17:00 Coffee Break	16:40 – 17:00 Coffee Break	
Session 4: SELF-ASSEMBLY Presiding: G. Fytas, C. Toprakcioglu	Session 8: NANOCOMPOSITES Presiding: A. Avgeropoulos, P. Pissis	
17:00 – 17:40 IL5 P. Alexandridis “ <i>Block copolymer-directed nanomaterials synthesis and organization</i> ”	17:00 – 17:40 IL9 M.R. Bockstaller “ <i>Tailoring the physical properties of nanocomposite materials- Why structure matters</i> ”	
17:40 – 18:00 O9 S. Pispas “ <i>Self-assembled nanostructures from block copolymers and vesicle-forming surfactant in aqueous solutions</i> ”	17:40 – 18:00 O24 A. Horechyy “ <i>Synthesis and selective segregation of Fe₃O₄ nanoparticles inside of the poly-2vinylpyridine domain of poly(styrene-b-2vinylpyridine)</i> ”	
18:00 – 18:20 O10 E. Ioannou “ <i>Effect of Lithium salt concentration on the self-assembly of PEO-based block copolymer electrolytes</i> ”	18:00 – 18:20 O25 E. Pavlopoulou “ <i>Impregnation of pH-responsive polymeric matrices with metal nanoparticles</i> ”	
18:20 – 18:40 O11 D. Tasis “ <i>Fabrication of nanoobjects from star-shaped copolymers</i> ”	18:20 - 18:40 O26 G. Bokias “ <i>Complexation of anionic polyelectrolytes with Cu²⁺ ions and/or cationic surfactants: Design of the polymer architecture to control the behavior in aqueous solution</i> ”	
18:40 – 20:00 Poster Session I	18:40 – 20:00 Poster Session II	
	21:00 – Conference Dinner	

POSTERS

A. SYNTHESIS / POLYMER TECHNOLOGY

- [1] **O.-N. Ciocoiu** “Contribution to obtain the graft copolymers of alginic acid with pnipam”
- [2] **I. Manolakis** “High-temperature iminisation of crystalline poly(aryl ether ketones) using aromatic/aliphatic amines”
- [3] **S.G. Nanaki** “Synthesis, characterization and enzymatic hydrolysis of poly(propylene adipate)-co-poly(ϵ -caprolactone) block copolymers”
- [4] **D.N. Bikiaris** “Synthesis, solid state and enzymatic degradation of novel poly(propylene-co-ethylene succinate)s”
- [5] **E. Kaditi** “ β -Lactam functionalized amphiphilic block copolymers from poly(isoprene- β -ethylene oxide) copolymers”
- [6] **A. Mateescu** “Responsive polymer brushes on flat surfaces by surface-initiated polymerization”
- [7] **V.A. Kosma** “On the formation of apatite aggregates through precipitation from polymer-containing solutions”
- [8] **D.S. Achilias** “A kinetic investigation of the vinyl neo-decanoate bulk free-radical polymerization over the full monomer conversion”
- [9] **S. Rangou** “Synthesis and characterization of 2nd generation dendritic terpolymer”
- [10] **G. Evangelou** “Synthesis of poly(α -methylstyrene- β -4-hydroxystyrene) diblock copolymers via anionic polymerization”
- [11] **C. Ntaras** “Synthesis of graft copolymers with divinyl-terminated poly(dimethylsiloxane) and polystyrene (“grafting to” approach)”
- [12] **M. Constantinou** “Synthesis of block copolymers with poly(methyl methacrylate) and 2-(Trimethylsilyloxy) ethyl methacrylate [PMMA- β -(TMS-HEMA)]”
- [13] **N. Politakos** “Synthesis, molecular and morphological characterization of modified diblock copolymers with organic acid chloride derivatives”
- [14] **K. Misichronis** “Synthesis, molecular and morphological characterization of linear triblock terpolymers where one of the blocks is poly(cyclohexadiene)”
- [15] **G. Zapsas** “Synthesis and characterization of linear tetrablock quaterpolymers consisting of polystyrene, polybutadiene, polyisoprene and poly(methyl methacrylate)”
- [16] **P. Georgopoulos** “Nanostructures from well defined diblock copolymers of polystyrene (PS) and poly(dimethylsiloxane) (PDMS)”
- [17] **E. Grana** “Thiophene conducting copolymers”
- [18] **A. Tomou** “Incorporation of Magnetic Nanoparticles in a PI_{3,4}- β -PB_{1,4} polymeric matrix”
- [19] **A. Enotiadis** “Intercalation of an amphiphilic diblock copolymer in layered materials”
- [20] **I. Kalamaras** “Synthesis and characterization of proton exchange membrane nanocomposites for high temperature fuel cells”
- [21] **K.P. Koutroumanis** “Crosslinked 2-carboxybenzylchitosan: Synthesis, characterization and potential use for transdermal delivery of fluconazole”
- [22] **S. Papadaki** “Synthesis of copolyesters based on adipic acid, glycolic acids and 1,4-butanediol and their hydrolytic degradation”
- [23] **A.C. Boussia** “Low temperature process for the production of long chain aliphatic polyamides”
- [24] **Th. Vasilakopoulos** “Synthesis of symmetric and asymmetric miktoarm star copolymers (PI)₂(PEO)₂”
- [25] **N. Petzetakis** “Titanium catalyzed ring opening polymerization of lactides. A route to novel macromolecular architectures”
- [26] **A. Nikopoulou** “Synthesis of well defined graft polymers”
- [27] **A. Touris** “New approach to ‘click chemistry’ - Combination of ‘click chemistry’ and anionic polymerization”
- [28] **E. Driva** “Controlled functional nanoparticles”
- [29] **M. Gkikas** “Synthesis of water soluble polypeptides containing (L-) Proline”
- [30] **L.-F. Arakelian** “Synthesis and characterization of triblock copolymers by combination of anionic and atom transfer radical polymerization”
- [31] **A.K. Andreopoulou** “Terpyridine-ruthenium complexes for the decoration of CNTs, semiconducting oligomers and polymers”
- [32] **D. Triantou** “Synthesis of copolymers based on benzene and biphenyl and their characterization by XRD and DSC”
- [33] **P. Georgiou** “Electrochemical surface treatment of laboratorily produced carbon fibers by cyclic voltammetry”
- [34] **I. Zuburtikudis** “Nanofiller effect on the thermal response of poly(3-hydroxybutyrate) nanocomposites and isoconversional kinetic analysis of the thermal degradation”
- [35] **D. Kontziampasis** “Periodic nanodot formation on polymers with plasmas: Towards plasma-directed polymer self-assembly?”
- [36] **C. Kiparissides** “Stochastic prediction of the exact topological characteristics of LDPE produced in Tubular reactors”
- [37] **C. Kiparissides** “Effect of reaction conditions and catalyst design on the rheological properties of polyolefins produced in gas-phase olefin polymerization reactors”
- [38] **C. Kiparissides** “Modeling of industrial catalytic olefin polymerization slurry reactors”

- [39] **E. Voyiatzis** “Viscoelastic tube inflation under constant rate of growth”
- [40] **D. Papapetros** “On-line monitoring of the industrial formaldehyde resin production”
- [41] **M.M. Karabela** “Effect of the concentration of silane-coupling agent on physical properties of dental resin-nanocomposites”
- [42] **G. Karadimos** “Plain and modified phase inversion membranes for gas separation”
- [43] **N.M. Barkoula** “Effect of the environmental degradation on the viscoelastic response of nano modified epoxies and CFRPs”
- [44] **D.-E. Baciú** “Synthesis and characterization of acrylic bone cements reinforced with bioceramics”
- [45] **I. Raptis** “Processing effects on the dissolution properties of thin polymer based chemically amplified photoresist films”
- [46] **A. Pikasi** “Electrical properties of polymeric carbons produced from the precursor system of novolac resin – naphthakene/catalyst – olive stones biomass”
- [47] **Z. Ioannou** “Novolac resin and lignocellulosic materials as precursors for carbonaceous adsorbents”
- [48] **K. Papadimitriou** “New high temperature polymer electrolyte membranes. Influence of the chemical structure on their properties”
- [49] **A. Tsimpliaraki** “The effect of nanoclay content on the electrospun fibrous structure of biodegradable polymer nanocomposites”
- [50] **M. Siskos** “Type II photoinitiator systems based on novel fluorenone and fluorene chromophores. A mechanistic study by Laser flash photolysis”

B. NANOTECHNOLOGY / SELF-ASSEMBLY / COLLOIDS / BIOPOLYMERS / SURFACES AND INTERFACES / NANOCOMPOSITES / POLYMER DYNAMICS

- [1] **G. Choudalakis** “Measurements of free volume in polymer nanocomposite coatings using positron annihilation lifetime spectroscopy”
- [2] **E. Anyfantakis** “Light-induced micro-fiber formation in transparent polymer solutions”
- [3] **P. Voudouris** “Does Brillouin light scattering probe the primary glass transition process?”
- [4] **K. Raftopoulos** “A thermal and dielectric study of molecular dynamics in polyurethane-POSS hybrids”
- [5] **A. Kanapitsas** “Dielectric-mechanical and thermal studies of molecular mobility and phase morphology in epoxy-amine/carbon black nanocomposites”
- [6] **A. Pamvouxoglou** “Dynamics and rheology in suspensions and glasses of soft colloids”
- [7] **E. Logakis** “Thermal and electrical properties of multi-walled carbon nanotube nanocomposites prepared by diluting a masterbatch with various types of modified and non-modified polypropylenes”
- [8] **A. Stathopoulos** “Dielectric studies of molecular dynamics in swollen poly(ethyl acrylate) networks with non-polar colvents”
- [9] **S. Soulis** “Dynamic mechanical and tensile properties of thermally oxidized homopolymer pan fibers”
- [10] **G. Tsoukleri** “Synthesis and mechanical properties of A_nB_n star copolymers and $A_n(B-b-C)_n$ star terpolymers”
- [11] **G. Mitsis** “Influence of maleic anhydride component of cured polyesters on their relaxations determined by dielectric spectroscopy (DS) and dynamic mechanical thermal analysis (SMTA)”
- [12] **G. Floudas** “Self-assembly and dynamics of discotic liquid crystals”
- [13] **A. Gitsas** “Effect of architecture on the self-assembly and dynamics of model diblock and star copolypeptides”
- [14] **M. Yiannourakou** “Modeling the lateral aggregation of membrane proteins”
- [15] **M. Karayianni** “Complexation of hen egg with lysozyme with sodium (sulfamate-carboxylate) isoprene polyelectrolytes”
- [16] **A. Hasimi** “Study of the release kinetics of a drug and an MRI contrast agent from poly(vinyl alcohol) matrices”
- [17] **K. Tsougeni** “Wetting, optical property and protein adsorption control of polymer surfaces by plasma nanotexturing”
- [18] **A. Panagopoulou** “Bulk and interfacial dynamics of PDMS/Titania nanocomposites”
- [19] **A. Giannakas** “Synthesis and properties of unmodified LDPE/organosilicate nanocomposites”
- [20] **S. Fotiadou** “Organic-inorganic nanocomposites: A study of the structure and dynamics in confined geometry”
- [21] **Th. V. Kosmidou** “Glass transition, structural characterization and segmental dynamics in epoxy/carbon fillers nanocomposites”

- [22] **C.G. Delides** “Dynamics of epoxy nanocomposites: The effect of filler’s content and the size structure and geometry of the nanoparticles”
- [23] **A. Voulomenou** “Study of silicone rubber nanocomposites reinforced with organophilic montmorillonite”
- [24] **P. Maroulas** “Molecular mobility studies in hybrid PCN clay nanocomposites”
- [25] **P. Efthymiopoulos** “A theoretical study on the size and the shape of linear dendronized polymers in good and selective solvents”
- [26] **M. Kosmas** “On the conformational properties of a DNA chain with loops”
- [27] **A.N. Rissanou** “Collapse transitions in thermosensitive alternating copolymers: A Monte Carlo study”
- [28] **I. Tanis** “Molecular dynamics of PAMAM dendrimers and their complexes with linear polymers in aqueous solutions”
- [29] **C. Vlahos** “Off lattice monte carlo simulations of AB and ABA hybrid star dendritic copolymers”
- [30] **A. G. Koutsoubas** “Neutron reflectivity and computer simulation studies of centrally adsorbed star polymer brushes”
- [31] **Th. E. Raptis** “Detection of diffusive jumps of small penetrants dispersed in polymer systems”
- [32] **G.S. Dritsas** “Investigation of thermodynamic properties of polyethylene glycol by inverse gas chromatography and computer simulations”
- [33] **G. Tsolou** “Atomistic simulations of the sorption of small gas molecules in polyisobutylene”
- [34] **V. Harmandaris** “Studying the Elasticity of Biological Membranes through Theory and Simulations”
- [35] **M. Iakovidis** “Structural and electronic properties of Nb nanowires by tight binding molecular dynamics calculations”
- [36] **M. Gialambouki** “Structural and electronic properties of Ti and TiO₂ on C nanotubes by ab-initio calculations”
- [37] **E. Ioannou** “Lithium ion induced nanophase ordering and ion mobility in ionic block copolymers”
- [38] **C. Mantzaridis** “Reversible self-assembled nanostructures from block polyampholytes”
- [39] **K. Dimitroulopoulos** “Self-assembly in mixed amphiphilic diblock copolymers-zwitterionic surfactants aqueous solutions”
- [40] **S. Papadimitriou** “Self-assembly core-shell PCL-*co*-PSu nanoparticles based on crystalline amorphous moieties for efficient controlled drug release”
- [41] **A. Meristoudi** “Formation of gold nanoparticles in the corona of di- and triblock copolymers”
- [42] **K. Mpoukouvalas** “Charge transport of conjugated polymer coated core-shell nanoparticles”
- [43] **S.I. Marras** “Microcellular nanocomposite polymers prepared with supercritical CO₂: The role of nanoclays on porous structure”
- [44] **A.A. Vassiliou** “Poly(ethylene succinate) nanocomposites with a multifunctional nanofiller: Mechanical properties and biodegradability”
- [45] **C.A. Stergiou** “A new approach of segmental orientation in amorphous epoxy resin/carbon black nanocomposites”
- [46] **D.S. Achilleos** “End-grafted polymer chains onto inorganic nanoparticles”
- [47] **S. Karagiovanaki** “Adsorption of oligomers and polymers in nanoporous alumina”
- [48] **S.K. Papadopoulou** “Fluorinated methacrylic homopolymers: Polymerization, characterization, surface properties and effectiveness for the protection of stone”
- [49] **A. Kakalis** “Fabrication and thermal characterization of a thin poly(L-lactic acid) film with the layer-by layer spin coating process and the use of thickness shear mode resonators”
- [50] **K.E. Christodoulakis** “Colloidal microgel particles carrying acidic or basic moieties”
- [51] **E. K. Oikonomou** “Cu²⁺-induced gelation in aqueous solutions of maleic acid-containing polyelectrolytes”
- [52] **Ch. Pandis** “Hydration properties of nanostructured hydrogels based on poly(2-hydroxyethyl acrylate) and poly(2-hydroxyethyl-co-ethyl acrylate)”
- [53] **G.Z. Kyzas** “Molecularly imprinted polymers (MIPs) as selective sorbents in trichromatic dye mixtures”
- [54] **Z. Iatridi** “pH-controlled quenching of the fluorescence of hydrophobic probes solubilized in ternary poly(acrylic acid) – surfactant-Cu⁺² complexes in aqueous solution”
- [55] **A.A. Stefopoulos** “Development of new semiconducting polymer functionalized carbon nanotubes”