

Curriculum vitae

- *Name* : Karatasos Kostas
- *Year of Birth* : 1969
- *Professional Status* : Assistant Professor at the Chemical Engineering Department, Aristotle University of Thessaloniki, Greece
- *Institutional Address* :
University of Thessaloniki,
Department of Chemical Engineering
Section of Chemistry, Physical Chemistry Lab
P.O BOX 420, 54124 Thessaloniki, Greece
- *Nationality* : Greek
- *University graduation date* :1991
- *Background* : B.S in Physics (first honours degree, National Scholarship for Excellency) , MSc in Physical Chemistry (first honours degree), PhD in Polymer Science (first honours degree, Research Scholarship, Foundation for Research and Technology Hellas – FORTH))
- *Institute of Graduation* : University of Crete, Heraklion Crete, Greece
- *Brief CV since Graduation* : Un. Of Crete, M.Sc. in Physical Chemistry 1993, Un. Of Crete, Chemistry Dept. Ph.D. 1997, Dec1997-Feb2000 Post Doctoral Fellow, University of Leeds, UK, March 2000-June 2001 Post Doctoral Fellow at Libre Universite Brussels , Belgium August 2001 – August 2002 military service September 2002-February 2003 Visiting Professor, Materials Science and Engineering Department, University of Crete. March 2003-April 2008, Lecturer at Aristotle University of Thessaloniki, Chemical Engineering Department, April 2008 – now, Assistant Professor at Aristotle University of Thessaloniki, Chemical Engineering Department, Sabbatical leave, February 2010 – June 2010 (Molecular Simulation Engineering Laboratory, Department of Materials and Natural Resources, University of Trieste, Italy)

Areas of interest

- Statics, Dynamics and Thermodynamics of polymeric materials
- Molecular recognition and self-assembly in soft matter
- Glass transition and critical phenomena in soft matter
- Polymer-based Composite materials
- Biopharmaceutical applications of polymers

Teaching/Student supervision

Teaching

Physical Chemistry (University of Crete, Chemistry Dept. Visting Professor)
Introduction to computer science (University of Crete, Materials Science and Technology Dept., Visiting Professor)
Physical Chemistry Labs (University of Thessaloniki, Chem. Engineering Dept.)
Thermodynamics and Kinetics of Materials (Univ. of Thessaloniki, MSc. Course in “Advanced Materials” post graduate programme)
Computational Materials Science (Univ. of Thessaloniki, Chem. Engineering Dept.)

Student supervision

2 PhDs finished (principal supervisor), 2Msc finished (Single Supervisor), currently (2011) supervising 3 PhD Students (1 as principal supervisor, 2 as co-supervisor).
Participation in the examination committees of ~50 undergraduate students ,7 MSc students and 10 PhD students

Publications in refereed journals

1. "Coordinated X-ray and optical observation of Scorpius X-1"

- T. Augusteijn, K. Karatasos, M. Papadakis, G. Paterakis, S. Kikuchi, N. Brosch, E. Leibowitz, P. Hertz, K. Mitsuda, T. Dotani, W.H.G Lewin, M. van der Klis, J. van Paradijs
Astron. & Astroph. ,**265**, 117-182 (1992)
2. **"Local and Global Chain Dynamics in Diblock Copolymer Melts"**
G .Fytas, S.H. Anastasiadis, K. Karatasos, and N. Hadjichristidis
Physica Scripta,**T49** ,237 (1993)
 3. **"Composition Fluctuation effects on Dielectric Normal Mode Relaxation in Diblock Copolymers. I Weak Segregation Regime"**
K. Karatasos, S. H. Anastasiadis, G.Fytas, A. N. Semenov, M. Pitsikalis, and N. Hadjichristidis
Macromolecules **27** ,3543 (1994)
 4. **"Composition Fluctuation Effects on Dielectric Normal Mode Relaxation in Diblock Copolymers.II Disordered State in the proximity to the ODT and Ordered State"**
K. Karatasos, S.H. Anastasiadis, G.Floudas, G.Fytas, S.Pispas, N. Hadjichristidis, T. Pakula
Macromolecules ,**29**, 1326, (1996)
 5. **"Computer Simulation of the Static and Dynamic Behavior of Diblock Copolymer Melts"**
T. Pakula, K. Karatasos, S. H. Anastasiadis, G. Fytas
Macromolecules , **30**, 8463 (1997)
 6. **"Ordering and viscoelastic relaxation in multiarm star polymer melts"**
D. Vlassopoulos, T. Pakula, G. Fytas, J. Roovers, K. Karatasos, N. Hadjichristidis
Europhysics Letters, **39**, 617(1997)
 7. **"Segmental dynamics and incompatibility in Hard/Soft Binary Polymer Blends"**
K. Karatasos, G. Vlachos, D. Vlassopoulos, G. Fytas ,G. Meier, A. Du Chesne
Journal of Chem. Phys., **108**, 5997 (1998)
 8. **"Depolarized light scattering from critical polymer blends"**
A.N. Semenov, A.E. Likhtman, D. Vlassopoulos, K. Karatasos, G. Fytas
Macromolecular Theory and Simulation **8**(3), 179 (1999)
 9. **"Segmental Dynamics of Miscible PI/PVE Blends: Comparison of the Predictions of a Concentration Fluctuation Model to Experiment"**
S. Kamath, R. H. Colby, S. K. Kumar, K. Karatasos, G.Floudas, G. Fytas, J. Roovers
Journal of Chem. Phys., **111**, 6121 (1999)
 10. **"On the Loops to Bridges Ratio in Ordered Triblock Copolymers: An investigation by Dielectric Relaxation Spectroscopy and Computer Simulations"**
K. Karatasos, S. H. Anastasiadis, H. Watanabe and T. Pakula
Macromolecules, **33**, 523 (2000)
 11. **"Nanoscale confinement effects on local dynamics"**
S. H. Anastasiadis, K. Karatasos, G. Vlachos, E. Manias, E. P. Giannelis
Phys. Rev. Lett., **84**(5), 915 (2000)
 12. **"Effects of density on the local dynamics and conformational statistics in polyethylene: a Molecular Dynamics Study"**
K. Karatasos, D. B. Adolf, S. Hotston
J. Chem. Phys. (2000) **112**(19), 8695, (2000)
 13. **"Slow modes in local polymer dynamics"**
K. Karatasos and D. B. Adolf
J. Chem. Phys. (Communication) **112**(19), 8225,(2000)
 14. **"Short length-scale dynamics of Polyisobutylene by molecular dynamics simulations"**
K. Karatasos, F. Saija and J.-P. Ryckaert
Physica B **301**, 119, (2001) (corresponding author)

15. **"Polyisobutylene dynamics revisited"**
K. Karatasos, and J.-P. Ryckaert
Macromolecules **34**, 7232 (2001) (Communication) (corresponding author)
16. **"An Investigation into the local segmental dynamics of Polyethylene: an isothermal/isobaric molecular dynamics study "**
S. Hotston, D. B. Adolf, K. Karatasos
J. Chem. Phys. **115**(5), 2359, (2001)
17. **"Statics and Dynamics of model dendrimers as studied by molecular dynamics simulations"**
K. Karatasos, D. B. Adolf and G. R. Davies
J. Chem. Phys. **115**,5310 (2001) (corresponding author)
18. **"Methyl dynamics and β -relaxation in polyisobutylene: comparison between experiments and molecular dynamics simulations"**
K. Karatasos, J. -P. Ryckaert, R. Ricciardi and F. Lauprêtre
Macromolecules **35**, 1451 (2002) (corresponding author)
19. **"Segmental Dynamics of Atactic Polypropylene as Revealed by Molecular Simulations and Quasielastic Neutron Scattering"**
O. Ahumada, D. Theodorou, A. Triolo, V. Arrighi, K. Karatasos, and J.-P. Ryckaert
Macromolecules, **35**, 7110 (2002)
20. **" Local Dynamics of Polyethylene and its Oligomers :
A Molecular Dynamics Interpretation of the Incoherent Dynamic Structure
Factor "**
G. Ariedi, K. Karatasos, J.-P. Ryckaert, V. Arrighi , F. Saggio, A. Triolo A. Desmedt, J. Pieper,
and A. E. Lechner
Macromolecules **36**, 8864 (2003)
21. **"Static and dynamic behavior in model dendrimer melts: toward the glass transition"**
K. Karatasos
Macromolecules **38**, 4472-4483 (2005)
22. **"Glass Transition in Dendrimers"**
K. Karatasos
Macromolecules 39,4619-4626 (2006)
23. **"Segmental Dynamics under severe Connectivity Constraints: the Dendrimer Case"**
K. Karatasos, A.V. Lyulin
Journal of Chemical Physics (2006) **125**, 184907 (corresponding author)
24. **"Computational polymer dynamics via DL_POLY"**
Adolf DB, Butler SN, Drew PM, Hotston S, Karatasos K
MOL SIMULAT 32 (12-13): 1017-1023 OCT-NOV 2006
25. **"Non-Gaussianity of Glassy Dynamics by Cage-to-Cage Motion"**
B. Vorselaars, A.V. Lyulin, K. Karatasos and M. A. J. Michels
Phys. Rev. E., Art. No. 011504 Part 1 JAN 2007
26. **"Effects of Topology and Size on Statics and Dynamics of Complexes of
Hyperbranched Polymers with Linear Polyelectrolytes"**
G. K. Dalakoglou, K. Karatasos, S.V.Lyulin, A.V.Lyulin
Journal of Chemical Physics, Art. No. 214903 (2007) (corresponding author)
27. **"Self Organization in Dendrimer Polyelectrolytes"**
K.Karatasos

- 28. “Structural Effects in Overcharging in Complexes of Hyperbranched Polymers with Linear Polyelectrolytes”**
S.V. Lyulin, K. Karatasos, A. Darinskii, S. Larin, and A. Lyulin
Soft Matter **2008**, 4, (3), 457 (Communication)
- 29. “Shear induced effects in Hyperbranched-Linear Polyelectrolyte Complexes”**
G. K. Dalakoglou, K. Karatasos, S.V.Lyulin, A.V.Lyulin
Journal of Chemical Physics, 129, 034901 (2008) (corresponding author)
- 30. “Brownian dynamics simulations of complexes of hyperbranched polymers with linear polyelectrolytes: Effects of the strength of electrostatic interactions on static properties”**
G. K. Dalakoglou, K. Karatasos, S.V.Lyulin, A.V.Lyulin
Journal of Materials Science B, **2008**, 152, 114 (corresponding author)
- 31. Investigation of Thermodynamic Properties of Hyperbranched Poly (ester amide) by Inverse Gas Chromatography**
G. S. Dritsas, K. Karatasos and C. Panayiotou
Journal of Polymer Science Part B: Polymer Physics **2008**, 46, 2166
- 32. “Dynamics of counterions in Dendrimer Polyelectrolyte Solutions”**
K. Karatasos and M. Krystallis
Journal of Chemical Physics **2009**, 130, 114903
- 33. “Molecular dynamics simulations of a hyperbranched poly(esteramide) : statics, dynamics and hydrogen bonding”**
I. Tanis, D. Tragoudaras, K.Karatasos and S. H. Anastasiadis
Journal of Physical Chemistry B, **2009**, 113 (16), 5356
- 34. “Electrostatically-driven Ordering in Model Dendrimer Polyelectrolytes: Effects of Concentration”**
K. Karatasos and M. Krystallis
Macromol. Symp. , **2009**, 278, 32–39
- 35. “Association of a weakly acidic anti-inflammatory drug (ibuprofen) with a poly(amidoamine) dendrimer as studied by molecular dynamics simulations”**
I. Tanis and K.Karatasos
Journal of Physical Chemistry B, **2009**, 113, 10984–10993.
- 36. “Molecular dynamics simulations of polyamidoamine dendrimers and their complexes with linear poly(ethyleneoxide) at different pH conditions: static properties and hydrogen bonding”**
I. Tanis and K.Karatasos
Physical Chemistr Chemical PhysicsB, **2009** 11, 10017–10028
- 37. “Investigation of Thermodynamic Properties of Hyperbranched Aliphatic Polyesters by Inverse Gas Chromatography”**
G. Dritsas, K. Karatasos and C. Panayiotou
Journal of Chromatography A, 1216, (51), 8979-8985, **2009**
- 38. Local Dynamics and Hydrogen Bonding in Hyperbranched Aliphatic Polyesters**
I. Tanis and K. Karatasos
Macromolecules, 42, 9581 , **2009**
- 39. Modeling of Hyperbranched Polyesters as Hosts for the Multifunctional Bioactive Agent Shikonin**

I. Tanis, K. Karatasos, A. N. Assimopoulou and V. P. Papageorgiou
(corresponding author)
Physical Chemistry Chemical Physics, 13, 10808, 2011

40. Aspects of PAMAM-based Dendrimer/siRNA complexation as studied by computer simulations: effects of pH and generation on dendrimer structure and siRNA binding

K. Karatasos, P. Posocco, E. Laurini, and S. Pricl (corresponding author)
Macromolecular Bioscience, 2012, 12, p. 225

41. Simulation of a symmetric binary mixture of charged dendrimers under varying electrostatic interactions: static and dynamic aspects

K. Karatasos and I. Tanis (corresponding author)
Macromolecules, 2011, 44, pp 6605

42. Chimeric advanced drug delivery nano systems (chi-aSSnSs) for shikonin combining dendritic and liposomal technology

K. N. Kontogianopoulos, A. N. Assimopoulou, S. Hatziantoniou, K. Karatasos, C. Demetzos and V. P. Papageorgiou
International Journal of Pharmaceutics, 2012, 422, (1-2), 381-389

43. Conformational effects in non-stoichiometric complexes of two hyperbranched molecules with a linear polyelectrolyte

G. Dalakoglou, K. Karatasos, S. Lyulin, S. Larin, A. Darinskii, A. Lyulin
Polymers 2012. 4,(1), 240-255

h-factor: 16 (source: Web of Science+Scopus)

Number of Citations: over 850 (source: Web of Science and Scopus, October 2011)

Chapters in books

1. G.Fytas, K. Chrissopoulou, S. H. Anastasiadis, D. Vlassopoulos and K. Karatasos
"Photon Correlation Spectroscopy of Interactive Polymer Systems"
NATO ASI, "Light Scattering and Photon Correlation Spectroscopy" (E.R. Pike, ed.) Kluwer, N.Y (1997)
2. P. Posocco, E. Laurini, M. Fermeglia, K. Karatasos, S. Pricl
"Multiscale modeling of dendrimers and dendrons for drug and nucleic acid delivery"
In preparation, Royal Society of Chemistry (2011)

Reviewer in International Journals:

1. Macromolecules
Recognized as among the top 25% of the reviewers of "Macromolecules" worldwide
2. Journal of Chemical Physics, (also adjudicator)
3. Nanotechnology
4. Macromolecular Theory & Simulations
5. Journal of Polymer Science Part B: Polymer Physics
6. Physica B
7. Modelling and Simulation in Materials Science and Engineering
8. Journal of Physics: Condensed Matter
9. J. Phys. D: Appl. Phys
10. Rheologica Acta
11. New Journal of Physics
12. European Polymer Journal E
13. Journal of Organic Chemistry
14. Chemistry - A European Journal
15. Journal of Physical Chemistry B
16. Measurement Science and Technology
17. Journal of Materials Chemistry

18. Journal of Physical Chemistry Letters
19. Journal of Polymer Research
20. European Physical Journal E - Soft Matter & Biological Physics
21. Molecules
22. Polymers
23. Journal of Drug Delivery Science and Technology
24. Soft Matter
25. ACS Applied Materials & Interfaces

Reviewer in International Organizations

European Science Foundations (ESF)

Journals' editorial Board

Journal of Mechanical Behavior of Materials (Local Editorial Committee)

Invited Talks

1. **"Segmental dynamics and morphology in phase separated binary polymer blends"**
DIELECTRICA 98, Monte de Caparica, Portugal, June 1998
2. **"Short scale dynamics in Polyisobutylene"**
Eindhoven University of Technology, The Netherlands, *June 2004*
3. **"Statics and dynamics of model dendrimers in dilute solutions : a molecular dynamics study "**
Free University of Brussels, Physics Department, Polymer Physics Group
Belgium, June 2004
4. **"Topological Aspects in Local Polymer Dynamics"**
CECAM workshop on Simulating deformed glasses and melts: From simple liquids to polymers Organizers: A.V. Lyulin (Eindhoven), J.P. Wittmer (Strasbourg), D. Long (Paris) *CECAM, Lyon, France, 12-14 September 2005*
5. **"Local Dynamics and Glass Transition in Polymers: the dendrimer case"**
HPC-Europa, Third Translational Access and Mobility Workshop (TAM ' 06) , Barcelona, Spain, June 14-16, 2006 (invited)
6. **"Controlling Self Organization in Dendrimer Polyelectrolytes"**
HPC-Europa, Fourth Translational Access and Mobility Workshop (TAM ' 07) , Bolonia, June 13-15, 2007 (invited)
7. **"Electrostatically-Driven Self-Organization in Dendrimer Polyelectrolytes"**
6th International Symposium Molecular Order and Mobility in Polymer Systems June 2 - 6, 2008, St. Petersburg Russia
8. **"Glass transition in "soft colloidal" systems: the dendrimer case"**
Workshop on "Colloidal Gels and Glasses",
Crete, Aldemar Knossos Royal Village, Hersonissos, 13/6/2008
9. **"Molecular Dynamics of Dendrimers"**
1st (ESF) International Training School in "*Computer Simulation Methods of Dendrimers*"
12-14 April 2010, Eindhoven, The Netherlands (*plenary talk*)
10. **Dendrimers and Hyperbranched Polymers: new insight from computer simulations**
Materials Science and Technology Department, University of Crete
25 February 2011 (*invited*)
11. **Modeling Hyperbranched Polymers for Drug and Gene Delivery Applications**

8th International Conference on Nanosciences & Nanotechnologies 12-15 July,
Thessaloniki, Greece (*invited*)

Conference proceedings (refereed)

1. S.H. Anastasiadis, K. Karatasos, G.Fytas, S.Pispas, M.Pitsikalis, N.Hadjichristidis
A.N Semenov, J.E.L Roovers, and T.Pakula
"Composition Fluctuation Effects on Dielectric Normal Mode Relaxation in Diblock Copolymer Melts"
Polymer Prepr., Amer. Chem. Soc, Div. Polym. Chem. 35(1),608 (1994)
2. S.H. Anastasiadis, K. Karatasos, G.Fytas, S.Pispas, M.Pitsikalis, N.Hadjichristidis
A.N Semenov, J.E.L Roovers, and T.Pakula
Polymer Prepr., Amer. Chem. Soc, Div. Polym. Chem. 35(1),615 (1994)
3. S. H. Anastasiadis, K. Karatasos, G. Vlachos, E. Manias, and E. P. Giannelis
"Confinement Effects on the Local Motion in Nanocomposites"
In "Dynamics in Small Confining Systems IV", J. M. Drake, G.
S. Grest, J. Klafter, and R. Kopelman, Eds., Materials Research
Society Symposium Proceedings, Vol. 543, p. 125-130, Pittsburgh, PA, (1999).
4. S. H. Anastasiadis, K. Karatasos, G. Vlachos, E. Manias, and E. P. Giannelis
"Local Dynamics under Severe Confinement in Nanocomposites"
Polym. Mater. Sci. Eng., Amer. Chem. Soc. 82, 211 (2000)

Conference proceedings (non-refereed)

1. K. Karatasos, S.H. Anastasiadis, A.N Semenov, N.Hadjichristidis, G.Fytas, J.E.L Roovers, and
T.Pakula
General meeting 94, American Physical Society, March 1994, Pittsburgh, P.A.U.S.A.
Bull. Amer. Phys. Soc. 39, 696 (1994)
2. K. Karatasos, S.H. Anastasiadis, G.Fytas, and T.Pakula
General Meeting 95, American Physical Society, March 1995, San Jose, C.A, U.S.A,
Bull. Amer. Phys. Soc. 40, 52, (1995)
3. G.Fytas, K. Karatasos, S.H. Anastasiadis, D. Vlassopoulos, G. Floudas, A.N. Semenov, S Pispas,
M.Pitsikalis, N.Hadjichristidis, H.Watanabe, and T.Pakula
General Meeting 95, American Physical Society, March 1995, San Jose, C.A, U.S.A,
Bull. Amer. Phys. Soc. 40, 614 (1995)
4. T.Jian, K. Karatasos, S.H. Anastasiadis, G.Fytas, K. Chrissopoulou, K. Adamczyk, A.N. Semenov,
S.Pispas, M.Pitsikalis, N.Hadjichristidis, and J.E.L Roovers
General Meeting 95, American Physical Society, March 1995, San Jose, C.A, U.S.A,
Bull. Amer. Phys. Soc. 40, 624, (1995)
5. K. Karatasos, Spiros H. Anastasiadis, George Fytas Sanat K. Kumar, Ralph H. Colby
5th European symposium on Polymer Blends, Maastricht May 1996, The Netherlands
Extended Abstracts, p. 383, 1996
6. K. Karatasos, G. Vlachos, D. Vlassopoulos, G. Fytas, and S. H. Anastasiadis
Bull. Amer. Phys. Soc. 42, 523 (1997)
7. K. Karatasos, S. H. Anastasiadis, G. Vlachos, E. Manias and E. P. Giannelis
General Meeting 1998, APS, Los Angeles, March 1998
Bull. Amer. Phys. Soc. 43, 811 (1998).
8. K. Karatasos, S. H. Anastasiadis, T. Pakula and H. Watanabe
General Meeting 1999, APS, Atlanta, March 1999, USA
Bull. Amer. Phys. Soc. 44, 755 (1999).

9. K. Chrissopoulou, K. Karatasos, S. H. Anastasiadis, E.P. Giannelis, and B. Frick
4th Panhellenic Chemical Engineering Scientific Conference Proceedings, Patras, p. 341, 2003
10. K. Chrissopoulou, K. Karatasos, S. H. Anastasiadis, E.P. Giannelis, and B. Frick
4th Panhellenic Chemical Engineering Scientific Conference Proceedings, Patras, p. 81, 2003
11. K. Chrissopoulou, K. Karatasos, S.H. Anastasiadis, E.P. Giannelis and B. Frick,
"Dynamics in Intercalated Polymer-Clay Nanocomposites"
11th European Conference on Composite Materials May 31 - June 3, 2004 Phodes,
Greece (Conference Proceedings, Vol 1/2 , p. 81)
12. K. Karatasos
5th Panhellenic Chemical Engineering Scientific Conference Proceedings, Thessaloniki,
p. 285, 2005
13. K. Karatasos
General Meeting 2006, APS, Baltimore, March 2006
Bull. Amer. Phys. Soc. **51**(1), 1574(2006).
14. K. Karatasos
HPC-EUROPA Science and Supercomputing in Europe, 2005, p 719
15. K. Karatasos
Book of Abstracts, 6th Hellenic Conference on Polymers, Patras, 2-5 November 2006,
p. 100
16. K. Karatasos
HPC-EUROPA Science and Supercomputing in Europe, June 2007, pp
17. K. Karatasos
3rd International Workshop on "Nanosciences & Nanotechnologies" (NN06)
July 2006, Thessaloniki, Greece, Proceedings, pp 22
18. G.K. Dalakoglou, K. Karatasos, S. Lyulin, A. Lyulin
6th Panhellenic Chemical Engineering Scientific Conference Proceedings, Athens,
p. 1269, 2007
19. G.K. Dalakoglou, K. Karatasos, S. Lyulin, A. Lyulin
4th International Workshop on "Nanosciences & Nanotechnologies" (NN07)
July 2007, Thessaloniki, Greece, Abstract Book, pp 136, 2007
20. G.S. Dritisas, I. Tanis, K. Karatasos, C. Panayiotou
4th International Workshop on "Nanosciences & Nanotechnologies" (NN07)
July 2007, Thessaloniki, Greece, Abstract Book, pp 171, 2007
21. K. Karatasos
Soft, Complex, and Biological Matter Conference (SOCOBIM), Citta del Mare,
Terrasini, Sicily, Italy,
July 2007, Conference Proceedings, pp 124
22. I. Tanis and K. Karatasos
Proceedings, XXII Panhellenic Conference in Solid State and Materials
Science (Athens 23-26 Sep. 2007), pp 169
23. K. Karatasos, G. Dalakoglou, I. Tanis, M. Krystallis
1st HellasGrid Forum,
Athens, 10-11 January 2008, Book of Abstracts, p. 55-56
24. S. Lyulin, A. Lyulin, S. Larin, A. Darinskii, K. Karatasos
Hyper-Nano 2008, May 26-28, Fodele, Crete, Greece, Book of Abstracts, p.48

25. G.K. Dalakoglou, K. Karatasos, S.V. Lyulin, A.V. Lyulin
Hyper-Nano 2008, May 26-28, Fodele, Crete, Greece, Book of Abstracts, p.67
26. G.S. Dritsas, K. Karatasos, C. Panayiotou
Hyper-Nano 2008, May 26-28, Fodele, Crete, Greece, Book of Abstracts, p.68
27. D. Tragoudaras, I. Tanis, K. Karatasos, S. Anastasiadis
Hyper-Nano 2008, May 26-28, Fodele, Crete, Greece, Book of Abstracts, p.69
28. K. Karatasos
6th International Symposium in Molecular Order and Mobility in Polymer Systems
St. Petersburg, 2-6 June 2008, Russia. Book of Abstracts, L004
29. S.V. Lyulin, K. Karatasos, S.V. Larin, A.A. Darinskii, A.V. Lyulin
6th International Symposium in Molecular Order and Mobility in Polymer Systems
St. Petersburg, 2-6 June 2008, Russia. Book of Abstracts, P-067
30. G. K. Dalakoglou, K. Karatasos, S.V. Lyulin, A.V. Lyulin
5th International Conference on Nanosciences and Nanotechnologies (N&N08)
Thessaloniki 14-16 July 2008 , Book of Abstracts, P 39
31. K. Karatasos and M. Krystallis
1st International Conference “From Nanoparticles & Nanomaterials to Nanodevices
& Nanosystems”
Halkidiki, Greece, June 16-18, 2008
32. I.Tanis, K. Karatasos
7th Hellenic Polymer Conference, Ioannina, September 28th - October 1st 2008
Book of Abstracts, P. 28
33. G. S. Dritsas, I. Tanis, M. Stournara, K. Karatasos, C. Panayiotou
7th Hellenic Polymer Conference, Ioannina, September 28th - October 1st 2008
Book of Abstracts, P. 32
34. S. Fotiadou, D. Tragoudaras, I. Tanis, K. Chrissopoulou, K. Karatasos, B. Frick and
S.H. Anastasiadis
XXIV Panhellenic Conference on Solid State Physics and Materials Science
Heraklion, Crete, September 21-24, 2008, Book of Abstracts, P. 62-63
35. K. Karatasos and M. Krystallis
7th Panhellenic Scientific Conference in Chemical Engineering, Patras, 3-5 June 2009,
Book of Abstracts, page
36. K. Karatasos and I. Tanis,
6th International Dendrimer Symposium , Stockholm, June 14-18, 2009
Electronic Abstracts, page 98
37. KOSTAS KARATASOS, SABRINA PRICL , PAOLA POSOCCO,ERIK LAURINI
**A MOLECULAR DYNAMICS SIMULATION STUDY ON SI-RNA/TEA-PAMAM
DENDRIMER COMPLEXATION**
**8TH HELLENIC POLYMER SOCIETY SYMPOSIUM , HERONISSOS CRETE, 24 – 29 OCTOBER,
2010, BOOK OF ABSTRACTS, PAGE**
38. S. Pricl, P. Posocco, M. Fermeglia, K. Karatasos, L. Peng and D. K. Smith
AIChE Annual Meeting, 2010, Salt Lake City, November 7-10, 2011
<http://aicheproceedings.org/2010/Fall/?page=15933> (607g)
39. S. Pricl, P. Posocco, E. Laurini, M. Fermeglia, K. Karatasos, L. Peng and D. K.
Smith

40. K. Karatasos, P. Posocco, E. Laurini and S. Pricl
Computational study of complexes of Dendrimers with siRNA for gene delivery applications
8th Panhellenic Scientific Chemical Engineering Congress, (electronic abstracts)
Thessaloniki 26 - 28 May 2011, Greece

Participation in international conferences/meetings

1. S.H. Anastasiadis, K.Karatasos, G.Fytas, S.Pispas, M.Pitsikalis, N.Hadjichristidis
A.N Semenov, J.E.L Roovers, and T.Pakula
“Composition Fluctuation Effects on Dielectric Normal Mode Relaxation in Diblock Copolymers”
Polymer Prepr., Amer. Chem. Soc. Div. Polym. Chem. 35(1),615 (1994)
2. G.Fytas, S.H Anastasiadis, K.Karatasos, and N. Hadjichristidis
“Segmental and Chain Dynamics in Disordered Diblock Copolymers”
13th General Conference of the Condensed Matter Division of the European Physical Society and The Deutsche Physikalische Gesellschaft, Μάρτιος 1993, Regensburg, Germany
3. K.Karatasos, S.H. Anastasiadis, G.Fytas, N.Hadjichristidis, and J.E.L Roovers
“Dielectric Chain Relaxation in Poly(styrene-*b*-isoprene) Diblock Copolymer Melts near The Order-Disorder Transition”
3rd International Discussion Meeting on Relaxation in Complex Systems, Ιούνιος 1993, Alicante, Spain
4. K.Karatasos, S.H. Anastasiadis, G.Fytas, N.Hadjichristidis, A.N Semenov, and J.E.L Roovers
“Dielectric Chain Relaxation in Poly(styrene-*b*-isoprene) Diblock Copolymer Melts near The Order-Disorder Transition”
6th International Symposium on Polymer Analysis and characterization, Ιούλιος 1993, Αγία Πελαγία Κρήτης, Ελλάδα
5. S.H. Anastasiadis, K.Karatasos, G.Fytas, S.Pispas, M.Pitsikalis, N.Hadjichristidis, A.N Semenov , J.E.L Roovers, and T. Pakula
“Composition Fluctuation Effects on Dielectric Normal Mode Relaxation in Diblock Copolymers”
20th National Meeting, American Chemical Society, Μάρτιος 1994, San Diego, C.A, U.S.A, Polym. Prep., Amer. Chem. Soc., Div. Polym. Chem.. 35(1) ,608 (1994)
6. K.Karatasos, S.H. Anastasiadis, A.N Semenov, N.Hadjichristidis, G.Fytas, J.E.L Roovers, and T.Pakula
“Composition Fluctuation Effects on Dielectric Normal Mode Relaxation in Diblock Copolymers”
General meeting 94, American Physical Society, Μάρτιος 1994, Pittsburgh, P.A.U.S.A. Bull. Amer. Phys. Soc. 39,696 (1994)
7. K.Karatasos, S.H. Anastasiadis, G.Fytas, and T.Pakula
“Computer Simulation of the Static and Dynamic Behavior of Diblock Copolymers near The Ordering Transition”
General Meeting 95, American Physical Society, Μάρτιος 1995, San Jose, C.A, U.S.A, Bull. Amer. Phys. Soc. 40, 1995
8. G.Fytas, K.Karatasos, S.H. Anastasiadis, D. Vlassopoulos, G. Floudas, A.N. Semenov, S Pispas, M.Pitsikalis, N.Hadjichristidis, H.Watanabe, and T.Pakula

“Dielectric Normal Mode Relaxation in Diblock Copolymers in the Disordered and in the Ordered State”

General Meeting 95, American Physical Society, Μάρτιος 1995, San Jose, C.A, U.S.A, Bull. Amer. Phys. Soc. 40, 1995

9. T.Jian, K.Karatasos, S.H. Anastasiadis, G.Fytas, K. Chrissopoulou, K. Adamczyk, A.N. Semenov, S.Pispas, M.Pitsikalis, N.Hadjichristidis, and J.E.L Roovers
“Relaxation of Composition Fluctuations in Diblock Copolymer Melts near the Order-Disorder Transition Investigated by Polarized Dynamic Light Scattering”
General Meeting 95, American Physical Society, Μάρτιος 1995, San Jose, C.A, U.S.A, Bull. Amer. Phys. Soc. 40, 1995
10. K.Karatasos, G.Floudas, G.Fytas, J.E.L Roovers
“Effect of Concentration Fluctuations on the Segmental Relaxation in homogeneous diblocks PIP-b-PVE”
Workshop on Non Equilibrium Phenomena in Supercooled Fluids, Glasses and Amorphous Materials, Pisa Fall 1995
11. K. Karatasos , S.H. Anastasiadis, G. Fytas, A. N. Semenov , S. Pispas, M. Pitsikalis, N. Hadjichristidis, T. Pakula
"Chain relaxation in diblock copolymer melts investigated by Dielectric Spectroscopy and Monte Carlo computer simulations"
Fourth mediteranean school and symposium on Science and Technology of advanced polymer based material. Fodele-Crete Greece 5-9 June 1995
12. *3rd Patras University Euroconference on Complex Materials, Patras ,Greece, September 22- 26, 1995*
13. *Como Summer School on Monte Carlo and Molecular Dynamics of condensed matter systems Como 1-31 July 1995*
14. K.Karatasos, S.H Anastasiadis, F.Kremer, H. Watanabe
"Determination of Loops to Bridges Ratio in Triblock Copolymers by Dielectric Spectroscopy"
March 96 Meeting of The American Physical Society
15. K.Karatasos, S.H Anastasiadis, F.Kremer, H. Watanabe
Nato-Asi Conference (Cambridge) March 1996 **"Theoretical Challenges on Complex Systems"**
16. K. Karatasos, Spiros H. Anastasiadis, George Fytas Sanat K. Kumar, Ralph H. Colby
"Concentration Fluctuation Induced Dynamic Heterogeneities in Polymer Blends"
5th European symposium on Polymer Blends, Maastricht May 1996, The Netherlands Extended Abstracts, p. 383, 1996
17. K. Karatasos , S.H Anastasiadis, H.Watanabe, T. Pakula
XII Hellenic Conference in Solid State Physics , 15-18 September 1996
18. K. Karatasos, S.H. Anastasiadis, F. Kremer, H.Watanabe, T. Pakula
"On the Loops to Bridges Ratio in Ordered Triblock Copolymer Melts"
The sixth European Polymer Federation Symposium, Crete Greece October 7-11 1996
19. D. Vlassopoulos, K. Karatasos, G. Fytas, T. Pakula and J. Roovers
"Complex Viscoelastic Relaxation in Multiarm Star Polymers"
67th Annual Meeting of the Society of Rheology, Galveston, TX, Bebruary 1997
20. K. Karatasos, G. Vlachos, D. Vlassopoulos, G. Fytas, S. H. Anastasiadis
"Dielectric Studies on the Dynamics of Phase Separated Binary Polymer Blends"
General Meeting 1997, APS, Kansas City, MO, March 1997
21. K. Karatasos , G. Vlachos, D. Vlassopoulos, G. Fytas and G. Meier
International Discussion on Relaxations in Complex Systems Vigo, Spain June 30 - July 11, 1997

22. G. Fytas, G. Petekidis, D. Vlassopoulos, K. Karatasos, T. Pakula, A. N. Semenov, and J. Roovers
"Dynamics of Multiarm Star Polymers in the Ordering Region" invited
3rd International Discussion on Relaxations in Complex Systems, Vigo, Spain June 30- July 11, 1997
23. K. Karatasos, S. H. Anastasiadis, G. Vlachos, E. Manias and E. P. Giannelis
"Effects of confinement on the segmental dynamics"
General Meeting 1998, APS, Los Angeles, March 1998
 Bull. Amer. Phys. Soc. 43, 811 (1998).
24. K. Karatasos
"Segmental dynamics and morphology in phase separated binary polymer blends"
Workshop, DIELECTRICA 98, Monte de Caparica, Portugal, June 1998
25. S. H. Anastasiadis, K. Karatasos, G. Vlachos, E. Manias, and E. P. Giannelis
"Confinement Effects on the Local Motion in anocomposites"
1998 Fall Meeting of the Materials Research Society, December 1998, Boston, MA, U.S.A.
26. K. Karatasos, G. Floudas, G. Fytas, S. Kamath, R. H. Golby, S. K. Kamath and J. E. L. Roovers
"Component dynamics of miscible polymer blends : comparison of the predictions of a concentration fluctuation model to experiment"
Polymer & Colloid 99, Advanced Study Institute, Les Houches, France, 1999
27. K. Karatasos, S. H. Anastasiadis, T. Pakula and H. Watanabe
"Bridges vs Loops in Ordered Triblocks : Dielectric Spectroscopy and Computer Simulations"
General Meeting 1999, APS, Atlanta, March 1999, USA
 Bull. Amer. Phys. Soc. 44, 755 (1999).
28. S. H. Anastasiadis, K. Karatasos, G. Vlachos, E. Manias, and E. P. Giannelis
"Local Dynamics in Nanocomposites"
International Workshop on Dynamics in Confinement, January 2000, Grenoble, France
29. S. Hotston, K. Karatasos, and D. B. Adolf
"Effects of pressure and temperature on the static and dynamic properties via NPT Molecular Dynamics Simulations"
General Meeting 2000, APS, Minneapolis, March 2000, USA
30. S. H. Anastasiadis, K. Karatasos, G. Vlachos, E. Manias and E. P. Giannelis
"Local Dynamics Under Severe Confinement in Nanocomposites "
ACS, Division of Polymeric Materials : Science and Engineering, San Francisco Spring Meeting, 2000 (invited)
 Polym. Mater. Sci. Eng., Amer. Chem. Soc. 82, 211 (2000).
31. K. Karatasos, J-P. Ryckaert, V. Arrighi, A. Triolo
"Local Dynamics in PIB and aPP melts: Molecular Dynamics Simulations vs Experiment"
QENS 2000, The 5th International Conference on Quasi-Elastic Neutron Scattering
 September 2000, Edinburgh, Scotland
32. J.P. Ryckaert, G. Ariedi and K. Karatasos
"On the use of conic constraints to freeze hydrogen vibrations in full atomic simulations of polymers: local dynamics of Polypropylene and Polyisobutylene."
ESF workshop on Multiscale Modeling of Macromolecular Systems
 Max Planck Institute for Polymer Research Mainz, Germany, 4-6 September 2000
33. K. Chrissopoulou, S. H. Anastasiadis, R. Krishnamoorti, K. Karatasos, G. Vlachos, E. Manias and E. P. Giannelis
"Polymer Dynamics under Nanoscopic Confinement"

Euroconference on Chains @ Interfaces 2001, January 2001, Ivora, Portugal

34. K. Karatasos and J.-P. Ryckaert
"Local dynamics of polyisobutylene revisited"
Belgian Polymer Group, General Meeting 2001, 16-17 March, Sunparks Mol, Belgium
35. K. Karatasos, and D.B. Adolf
"Effect of Density on Local Segmental Polymer Dynamics: A Molecular Dynamics Study"
General Meeting, American Physical Society, March 2001, Seattle, USA
36. S. Hotston, D. B. Adolf and K. Karatasos
"An NPT molecular dynamics study simulation of the response of the local segmental dynamics of melt polyethylene to pressure as a function of temperature"
General Meeting, American Physical Society, March 2001, Seattle, USA
37. K. Karatasos, D.B. Adolf and G. R. Davies
"Dynamics of model dendrimers as studied by molecular dynamics simulations"
Polymer '01 The New Polymer: Design, Development and Applications 9-11 April 2001 Bath UK
38. K. Karatasos and J.-P. Ryckaert
4th International Discussion Meeting on Relaxations in Complex Systems
"Methyl dynamics and β -relaxation in polyisobutylene as studied by molecular dynamics simulations"
June 17-24 2001, Hersonissos, Crete, Greece
39. K. Karatasos and J.-P. Ryckaert
XVIII Hellenic Solid State and Material Science Conference, 15-18 September, 2002 Heraklion, Crete, Greece
"Polyisobutylene local dynamics revisited"
40. K. Chryssopoulou, K. Karatasos, S. H. Anastasiadis, E. Giannelis and B. Frick
XVIII Hellenic Solid State and Material Science Conference, 15-18 September, 2002 Heraklion, Crete, Greece
"Dynamics of polymeric chains under strong confinement: motion in the nanometer scale"
41. O. Ahumada, V. Arrighi, D.B.N. Coutrot, K. Karatasos, J.-P. Ryckaert, D. Theodorou, A. Triolo
QENS 2002. The 6th International Conference on Quasielastic Neutron Scattering.
4th - 7th September 2002, Potsdam - Berlin, Germany.
"Effect of Tacticity on the Dynamics of Polypropylene Melts"
42. K. Karatasos, J.-P. Ryckaert
Jülich Soft Matter Days 19 - 22 November 2002, Kerkrade, NL
43. Kahle, S.; Monkenbusch, M.; Richter, D.; Ryckaert, J. P.*; Karatasos, K.*; Koza, M.*
Segmental dynamics in polyisobutylene: comparison between neutron scattering and computer simulations
Jülich Soft Matter Days 2002, Kerkrade, Niederlande, 19.11.2002 - 22.11.2002
44. Kahle, S.; Monkenbusch, M.; Richter, D.; Ryckaert, J. P.*; Karatasos, K.*; Koza, M.*
Segmental dynamics in polyisobutylene: Comparison between neutron scattering and computer simulations
HGF Workshop Kondensierte Materie : Forschungszentrum Jülich, Jülich, 06.11.2002
45. K. Chryssopoulou, K. Karatasos, S. H. Anastasiadis, E. P. Giannelis, B. Frick
"Dynamics under severe confinement in intercalated polymer-clay"

nanocomposites: Motion in the nanometer scale"

2nd International Workshop on 'DYNAMICS IN CONFINEMENT', January 2003,
Grenoble, France

46. K. Karatasos, D. B. Adolf and G. Davies
"Static and dynamic properties of model dendrimers"
3rd Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean, 13-15 May 2003, Sani, Chalkidiki
47. K. Chrissopoulou, K. Karatasos, S. H. Anastasiadis, E. P. Giannelis, B. Frick
« **Effects of strong spatial confinement in polymer chain dynamics** »
4th Hellenic conference in Chemical Engineering, Patras, May 2003
48. Marras, S, Zoubourtikoudis, I, Karatasos, K, Sikalidis, K and Panayiotou, K.
"Development of novel nanocomposite biodegradable polymer materials "
XX Panhellenic Conference in Solid State Physics and Materials Science
Ioannina, September 2004, Greece
49. K. Chrissopoulou, K. Karatasos, S.H. Anastasiadis, E.P. Giannelis and B. Frick,
"Dynamics in Intercalated Polymer-Clay Nanocomposites"
11th European Conference on Composite Materials May 31 - June 3, Rhodes, Greece
(Conference Proceedings, Vol 1/2 , p. 81)
50. JP Ryckaert, G. Ariedi, K. Karatasos
"Local Dynamics in Polymer Melts : From Individual Jumps to Diffusive Coarse-Grained Dynamics"
Conference on Computational Physics 2004 Genoa Italy, 1-4 September 2004
(Invited)
51. Ryckaert, J.-P., Ariedi G. , Karatasos K.
"From local dynamics to conformational diffusion in polymer melts well above Tg"
N2M2 Neutron and Numerical Methods 2, Institute Laue Langevin, September 2004,
Grenoble, France (invited)
52. K. Karatasos
"Statics and dynamics in model dendrimer melts: toward the glass transition"
5th Panhellenic Scientific Conference in Chemical Engineering
Thessaloniki, May 26-28 2005, Greece
- 53 . K. Karatasos
"Topological Aspects in Local Polymer Dynamics"
CECAM workshop on Simulating deformed glasses and melts: From simple liquids to
polymers Organizers: A.V. Lyulin (Eindhoven), J.P. Wittmer (Strasbourg), D. Long
(Paris) *CECAM, Lyon, France, 12-14 September 2005 (invited)*
54. K. Karatasos
"Statics and Dynamics in Model Dendrimer Melts"
2006 APS March Meeting, March 13-17, Baltimore, Maryland, U.S.A.
55. AERC 2006, Third Annual European Rheology Conference, April 27-29, Hersonissos,
Crete, 2006
56. K. Karatasos
"Local Dynamics and Glass Transition in Polymers: the dendrimer case"
HPC-Europa, Third Translational Access and Mobility Workshop (TAM ' 06) ,
Barcelona, Spain, June 14-16, 2006
57. K. Karatasos
"Glassy Behavior in Nanoscale Dendritic Polymers"
3rd Workshop on Nanoscience & Nanotechnologies (N&N06), 10-12 July, 2006,

58. K. Karatasos
“Local Scale Dynamics in Model Dendrimer Melts”
6th Hellenic Conference on Polymers, Patras, 3-5 November 2006
59. G.K. Dalakoglou, K. Karatasos, S. Lyulin, A. Lyulin
“Brownian Dynamics Simulations of Complexes of HYperbranched Polymers with Linear Polyelectrolytes”
6th Panhellenic Chemical Engineering Scientific Conference, Athens, May 2007
60. K. Karatasos
“Controlling Self Organization in Dendrimer Polyelectrolytes”
HPC-Europa, Fourth Translational Access and Mobility Workshop (TAM ‘ 07) ,
Bologna, Italy, June 13-15, 2007 (*invited*)
- 60b. I. Tanis, K. Karatasos
“Atomistic molecular dynamics simulations of dendrimers and their complexes with linear polyelectrolytes”
HPC-Europa, Fourth Translational Access and Mobility Workshop (TAM ‘ 07) ,
Bologna, Italy, June 13-15, 2007
61. G.K. Dalakoglou, K.Karatasos, S.V.Lyulin, A.V.Lyulin
“Brownian Dynamics Study of Hyperbranched Polymers and their Complexes with Linear Polyelectrolytes: Effects of Topology and Electrostatic Interactions”
4th International Workshop on “Nanosciences & Nanotechnologies - NN07,
July 16-18, Thessaloniki, Greece, 2007
- 61b. G.S. Dritsas, I. Tanis, K. Karatasos, C. Panayiotou
“Investigation of Thermodynamic Properties of a Poly(amidoamine) Dendrimer by Inverse Gas Chromatography and Computer Simulations”
4th International Workshop on “Nanosciences & Nanotechnologies - NN07,
July 16-18, Thessaloniki, Greece, 2007
62. K. Karatasos
“Controlling self-organization in Dendrimer Polyelectrolytes”
Soft, Complex, and Biological Matter Conference Citta del Mare, Terrasini, Sicily
July 2007
63. I. Tanis and K. Karatasos
“Atomistic molecular dynamics simulations of dendrimers and their complexes with linear polyelectrolytes”
XXIII Panhellenic Conference in Solid State and Materials Science,
23-26 September 2007, Athens, Greece
64. K. Karatasos, G. Dalakoglou, I. Tanis and M. Krystallis
“Computer Simulations in Complex Polymeric Systems”
1st HellasGrid User Forum Meeting, Athens 10-11 Jan. 2008
65. S. Lyulin, A. Lyulin, S. Larin, A. Darinskii, K. Karatasos
“Charged dendrimers and their complexes with linear polyelectrolytes: insight from coarse-grained molecular dynamics simulations”
Hyper-Nano 2008, May 26-28, Fodele, Crete, Greece
- 65b. G.K. Dalakoglou, K. Karatasos, S.V. Lyulin, A.V. Lyulin
“Shear-induced effects in complexes formed by hyperbranched polymers and linear polyelectrolytes”
Hyper-Nano 2008, May 26-28, Fodele, Crete, Greece
- 65c. G.S. Dritsas, K. Karatasos, C. Panayiotou

- “Investigation of thermodynamic properties of hyperbranched poly(ester amide) by inverse gas chromatography”**
Hyper-Nano 2008, May 26-28, Fodele, Crete, Greece
- 65d. D. Tragoudaras, I. Tanis, K. Karatasos, S. Anastasiadis
“Molecular dynamics simulations of a hyperbranched poly(ester amide), Hybrane “
Hyper-Nano 2008, May 26-28, Fodele, Crete
66. K. Karatasos
“Electrostatically-driven self-organization in dendrimer polyelectrolytes”
6th International Symposium in Molecular Order and Mobility in Polymer Systems
St. Petersburg, 2-6 June 2008, Russia.
- 66b. S.V. Lyulin, K. Karatasos, S.V. Larin, A.A. Darinskii, A.V. Lyulin
“Charge inversion in complexes of hyperbranched polymers and oppositely charged linear polyelectrolytes”
6th International Symposium in Molecular Order and Mobility in Polymer Systems
St. Petersburg, 2-6 June 2008, Russia.
67. K. Karatasos
“Glass transition in "soft colloidal" systems: the dendrimer case”
Workshop on “Colloidal Gels and Glasses”,
Crete, Aldemar Knossos Royal Village, Hersonissos, 13/6/2008
68. G. K. Dalakoglou, K. Karatasos, S.V. Lyulin, A.V. Lyulin
Modelling of Complexes of Hyperbranched Polymers with Linear Polyelectrolytes in Shear Flows
5th International Conference on Nanosciences and Nanotechnologies (N&N08)
Thessaloniki 14-16 July 2008 ,
69. K. Karatasos and M. Krystallis
Self-Ordering in Model Dendrimer Polyelectrolytes
1st International Conference “From Nanoparticles & Nanomaterials to Nanodevices & Nanosystems”
Halkidiki, Greece, June 16-18, 2008
70. I.Tanis, K. Karatasos
Molecular dynamics of PAMAM dendrimers and their complexes with linear polymers in aqueous solutions
7th Hellenic Polymer Conference, Ioannina, September 28th - October 1st 2008
- 70b. G. S. Dritsas, I. Tanis, M. Stournara, K. Karatasos, C. Panayiotou
Investigation of thermodynamic properties of polyethylene glycol by inverse Gas chromatography and computer simulations
7th Hellenic Polymer Conference, Ioannina, September 28th - October 1st 2008
71. S. Fotiadou, D. Tragoudaras, I. Tanis, K. Chrissopoulou, K. Karatasos, B. Frick and S.H. Anastasiadis
Structure and dynamics of hyperbranched polymers: A comparison between experiment and simulation
XXIV Panhellenic Conference on Solid State Physics and Materials Science
Heraklion, Crete, September 21-24, 2008, Book of Abstracts, P. 62-63
72. Karatasos and M. Krystallis
STATICS AND DYNAMICS IN COULOMBIC-DRIVEN ORDERING IN MODEL DENDRIMER POLYELECTROLYTES: A MOLECULAR DYNAMICS SIMULATION STUDY
7th Panhellenic Chemical Engineering Scientific Conference, Patras, 3-5 June 2009

73. K. Karatasos and I. Tanis
Complexes of Poly(amidoamine) dendrimers in aqueous solutions as studied by molecular dynamics simulations
 6th International Dendrimer Symposium 2009, Stockholm, Sweden, 14-18 June 2009
74. KOSTAS KARATASOS, SABRINA PRICL , PAOLA POSOCCO,ERIK LAURINI
A MOLECULAR DYNAMICS SIMULATION STUDY ON SI-RNA/TEA-PAMAM DENDRIMER COMPLEXATION
8TH HELLENIC POLYMER SOCIETY SYMPOSIUM , HERSONISSOS CRETE, 24 – 29 OCTOBER, 2010
75. Pricl, P. Posocco, M. Fermeglia, K. Karatasos, L. Peng and D. K. Smith
The Sound of Silence. Multiscale Molecular Simulations and Experiments in Developing Nanocarrier/Nucleic Acid Systems
 AIChE Annual Meeting, 2010, Salt Lake City, November 7-10, 2010
76. S. Pricl, P. Posocco, E. Laurini, M. Fermeglia, K. Karatasos, L. Peng and D. K. Smith
When virtual and real meet: computational/experimental evidences for designing efficient nanovectors for siRNA/DNA delivery
 NanoTechItaly 2010, Venice, October 20-22, 2010
77. K. Karatasos, P. Posocco, E. Laurini and S. Pricl
Computational study of complexes of Dendrimers with siRNA for gene delivery applications
 8th Panhellenic Scientific Chemical Engineering Congress,
 Thessaloniki 26 - 28 May 2011, Greece
78. K. Karatasos
Modeling Hyperbranched Polymers for Drug and Gene Delivery Applications
 8th International Conference on Nanosciences & Nanotechnologies 12-15 July,
 Thessaloniki, Greece

Research Projects

1. PENED 2003 (No. 03ED716), Greek General Secretariat for Research and Technology(25%), and European Union(75%) “*Study of polyelectrolytic solutions of dendrimers and hyperbranched polymers ,as solubility enhancement agents and as vehicles for drug delivery and controlled/release purposes* ” 2005-2008 Budget: 198000 €(Scientific coordinator)
2. “*Colloidal Systems in Non-Ergodic States*” (COSINES) 2006-2010 (ToK Marie Curie Grant) , Coordinator : FORTH (Dr. G. Petekidis)
3. “*Biomedical Applications of Dendrimers*” , COST TD0802 Action, ESF, 2008-2012 (Member of the Management Committee)

Other Grants/Fellowships

1. Greek National Scholarship Foundation Fellowship 1988,1989,1990,1991.
2. European Community, Erasmus 1991
3. FO.R.T.H-IESL, Graduate Research Fellowship 1992-1997
4. *HPC-Europa*, Personal,Computer Time Grant (20000 CPU hours) *Septemper 2005*
5. *HPC-Europa*, , Personal,Computer Time Grant (20000 CPU hours) *January 2007*

6. European Science Foundation (ESF) grant for the organization of the ESF international exploratory workshop "HYPER-NANO 2008" Grant: 14000 €(**Principal Organizer**)
7. Greek Ministry for National Education and Religious Affairs, grant for the organization of "HYPER-NANO 2008" Grant: 5000 €(**Principal Organizer**)
8. *HPC-Europa 2*, , Personal, Computer Time Grant (40000 CPU hours) *March 2010*

Conference/Meeting Organization

1. *International Workshop*, under the auspices of the European Polymer Federation and the European Science Foundation (Funding Body)
 “*Hyperbranched polymers as novel materials for nanoscale applications : insight from experiment, theory and simulations (HYPER-NANO)*” May 26-28, 2008,
 Fodele, Grete, Greece
 Web-site: <http://users.auth.gr/~kkaratas/workshop>
Organizers: K.Karatasos (principal), A.V.Lyulin
2. 1st International Training School, “*Computer Simulation Methods for Dendrimers*” , 12-10 April 2010, Eindhoven, The Netherlands (funded by ESF)
Organizers: A.V.Lyulin (principal), K.Karatasos (Co-organizer)
 Web-site:<http://physlamp.phys.tue.nl/COST/>
3. Member of the Organization Committee of the International School in *Dendrimers as Composites of Advanced Drug Delivery nano Systems αDDnSs*. *Biomedical Applications* October 4-9, Athens, 2011, Greece (under the auspices of and funding from the European Science Foundation)

Participation in international collaborative projects

1. Brite-Euram: Reactive Blends : a new way for improved and recycled materials
2. NATO's Scientific Affairs: Science for Stability Programme
3. Brite-Euram: Polymer Blends with optimized properties : influence of Processing and additives on phase behavior
4. TMR network "New routes to understanding polymer materials using experiments and realistic modeling"
5. PENED 2003 “Study of polyelectrolytic solutions of dendrimers and hyperbranched polymers and their complexes with linear polyelectrolytes, as vehicles for drug delivery and controlled/release agents” (Scientific coordinator)
6. Marie-Curie Host Fellowship for the Transfer of Knowledge (ToK) “*Colloidal Systems in Non-Ergodic States*” (*COSINES*),, 2006-2010
7. COST Action TD0802 European Science Foundation (Network) “*Biomedical applications of Dendrimers*” (2009-2013) (National Representative in the Management Committee)

Visits to international research institutes

- 4/1991-7/1991 University of Amsterdam, Astronomical Institute «Anton Pannekoek» .
- 2/1994-3/1994 Max-Planck Institute fur PolymerForschung
- 5/1995 National Institute of Standards and Technology (USA)
- 6/1995 University of Leipzig
- 9/2000 Institute Laue-Langevin, Grenoble, France
- 12/2000 Herriot-Watt Univeristy, Edinburgh, Scotland
- 11/2003 Universite Libre Des Bruxelles
- 6/2004 Technical University of Eindhoven
- 9/2005 Technical University of Eindhoven
- 1/2007 Center for Self Organization of Molecular Species (SOMS), Leeds, UK
- 2/2010-6/2010 University of Trieste, Italy

Other Qualifications

Experimental Techniques : Dielectric Spectroscopy, Dynamic Light Scattering, Differential Scanning Calorimetry (DSC), Neutron Scattering

Computer Operating systems: Unix (including experience in HPC Facilities), Linux, Ms-Windows

Experience in usage of simulation packages: DL_POLY,DL_PROTEIN, Accelrys Materials Studio, NAMD

Programming Languages : C, FORTRAN, Pascal