

GEORGE PETEKIDIS

Biography:

Born on 9 March 1967
Nationality: Greek
Marital status: married, with 2 sons
Languages: Greek, English

Institutional Address:

Department of Materials Science and Technology, University of Crete.

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Institute of Electronic Structure and Laser,

Foundation for Research and Technology-Hellas

P.O. 1527, Vassilika Vouton, 71110, Heraklion, Crete, Greece

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Research Area: Experimental Soft Condensed Matter Physics with emphasis on Colloidal systems

Professional experience:

12/2011-present: Associate Professor, Department of Materials Science and Technology, University of Crete.

5/2006 - 12/2011: Assistant Professor (tenure, 3/2010), Department of Materials Science and Technology, University of Crete.

7/2004 – 5/2006: Associated Researcher (Grade C) Institute of Electronic Structure and Laser, Foundation for Research and Technology-Hellas, Heraklion, Crete, Greece.

9/2002 – 8/2005: Adjunct Associate Professor (Visiting Professorship), Department of Materials Science and Technology, University of Crete.

10/2002 - 9/2003: Individual Marie Curie Research Fellow (return type), Host Institute: Institute of Electronic Structure and Laser, Foundation for Research and Technology-Hellas, Heraklion, Crete, Greece.

Project title: “*Structural and Dynamic Behavior of Suspensions of Soft Colloids under Shear Flow*”

2/2002 - 9/2002: Research Fellow of the Institute of Electronic Structure and Laser, Foundation for Research and Technology-Hellas, Heraklion, Crete, Greece.

4/2001 - 1/2002: Research Fellow of the Department of Physics and Astronomy, University of Edinburgh, UK.

4/1999 - 4/2001: Individual **Marie Curie Research Fellow**, Project Head: Prof. P.N. Pusey.

Host Institute: Department of Physics and Astronomy, University of Edinburgh, UK.

Project title: “*Dynamics and structural rearrangements of colloidal suspensions under oscillatory shear strain by diffusive wave spectroscopy*”

3/1998 - 3/1999: National service in the Greek Army.

1/1998 - 3/1998: Research Fellow of the Institute of Electronic Structure and Laser Foundation for Research and Technology – Hellas, Heraklion, Crete, Greece.

Education:

9/1990 - 12/1997: Graduate studies, Department of Physics, University of Crete, Heraklion, Greece

2/1993 - 12/1997: PhD, Polymer Physics, Advisor: Prof. G. Fytas.

Dissertation: “*Dynamics and Conformation of Hairy-Rod Polymers in Isotropic Solutions*”

6/1994 Master’s Degree in Physics

1/1990-8/1990: Graduate student with the theoretical physics group of the Department of Physics, University of Thessaloniki.

9/1984 - 9/1989: Diploma in Physics, University of Thessaloniki, Greece.

1984: Graduation from the 24th public Lyceum in Thessaloniki.

Teaching Experience:

Department of Materials Science and Technology, University of Crete

1) Autumn 2002 semester: *Introduction to Materials I* (1st year class core course, at the level of: W.D. Callister, Jr. Materials Science and Engineering, An introduction, 5th edition, John Willey and Sons, New York, 1999),

2) Spring 2003 and 2004 semester: *Physics Labs II* (Electricity and Optics, 2nd year core lab course),

3) 2005- currently: *Introduction to Materials II: Polymers, Colloids and Biomaterials* (2nd year class core course, at the level of: I. W. Hamley, Introduction to soft Matter, John Willey and Sons and R.A.L. Jones, Soft Condensed Matter, Oxford University Press.)

4) 2005-currently: *Introduction to Colloidal Dispersions* (4th year undergraduate and 1st year graduate optional course; books used: R. J. Hunter, Foundations of Colloid Science, Oxford, University Press, New York, 2001 and W.B. Russel, D.A. Saville, W.R.Schowalter, Colloidal Dispersions, Cambridge University Press, 1989)

5) 2006: Supervising graduate reading course for 5 post-graduate students on Dynamic Light Scattering (following material from: B.J. Berne and R. Pecora, Dynamic Light Scattering, with applications to chemistry, biology and physics, Wiley: NY, 1976.

6) Spring semester 2008: 8 hours lectures in the 3rd year optional course *Surface and Nanomaterials Science* (given by I. Remediakis)

Department of Physics, University of Crete

1990-1997: Assistant in several physics laboratories, and courses. Participated in teaching and grading of undergraduate courses: *Quantum mechanics, Thermodynamics, Statistical physics, Atomic physics and Electromagnetism.*

Department of Chemistry, University of Crete

Lectured at the core course “*Physical Chemistry*” in the Chemistry Department of the University of Crete (given by Prof. G. Fytas during the autumn 2002 semester)

Student supervising:

1) Koundourakis Nikos, (1995-1996), Diploma work, «*Study of clusters of wormlike polymers in solution*», Department of Chemistry, University of Crete (supervised during PhD, with Profs. G. Fytas and D. Vlassopoulos).

2) Paul Smith, (2000 - 2004), PhD thesis, “*Colloidal gels under flow*” Department of Physics and Astronomy, University of Edinburgh (with Profs. P.N. Pusey, W.C.K. Poon, and S.U. Egelhaaf).

3) Peter Donnelly (2001-2002), Diploma thesis, “*Kinetic study of transient colloid-polymer gels*”, Chemistry Department, University of Edinburgh (with Profs. W.C.K. Poon, and S.U. Egelhaaf).

4) Stiakakis Manolis, (2002-2005), PhD thesis, “*Dynamics and Rheology of Multiarm Star polymers and mixtures*” Department of Chemistry, University of Crete (co-supervised with Prof. D. Vlassopoulos).

5) Makrakis Stelios, (2002-2004) Master’s thesis, “*Dynamics and Rheology of Diblock Multiarm Star polymers*” Department of Physics, University of Crete (co-supervised with Prof. D. Vlassopoulos).

6) Voudouris Panagiotis (2003-2006) Master thesis, “*Dynamics of colloid-polymer mixtures near a wall*”, Chemistry Department, University of Crete (co-supervised with Dr. B. Lopinnet).

7) Christina Christopoulou (2005-2006) Diploma work, “”, Department of Materials Science and Technology, University of Crete, (co-supervised with Prof. D. Vlassopoulos),

8) Andreas Pamvouksoglou (2005-2006) Diploma work, “*Viscoelastic response of micelles with chemically crossed linked cores*”, Department of Materials Science and Technology, University of Crete, (co-supervised with Prof. D. Vlassopoulos),

9) Nikos Koumakis (2005-2007) Master’s thesis, “*Shear induced crystallization of colloidal glass*”, Department of Materials Science and Technology, University of Crete, and (2007- 2011), “*Mechanisms of Yielding and Flow in Colloidal Glasses, Crystals and Gels*” PhD thesis.

10) Vassiliki Michailidou (2005-2008) PhD thesis, Department of Materials Science and Technology, University of Crete, “*Dynamics of Polymers Colloids and mixtures near surfaces*” (co-supervised with Prof. G. Fytas)

11) Andreas Pamvouksoglou (2006-2009) Master's thesis, Department of Materials Science and Technology, University of Crete, "Slow dynamics, rheology and ageing of suspensions of soft colloids" and (2009-), PhD thesis

Post-Doctoral Collaborators:

- 1) Dr. Florian Ozon, (2002-2003), "Dynamic light scattering and rheology of star polymer solutions", (with Prof. D. Vlassopoulos)
- 2) Dr. Vincent Carrier, (2003-2005), "Nonlinear Rheology and Ageing of Soft Colloidal glasses", (with Prof. D. Vlassopoulos)
- 3) Dr. Arnaud Le Grand, (2006-2007) "Yielding and microscopic rearrangements in glasses of hard and soft colloids",
- 4) Dr. Pierre Ballesta, (2008-2010) "Flow of colloidal glasses and gels. Slip and shear banding and Ageing" (with Prof. W.C.K. Poon, and Dr. Rut Besseling, University of Edinburgh)
- 5) Dr. Frederic Renou (2008 - 2009) "Large amplitude oscillatory shear in glasses of star-like micelles" (with Dr. J. Steltbrink, FJZ, Juelich)
- 6) Dr. Andreas Poulos (2009 -) "Ageing and rheology of star-like micelle glasses" (with Dr. J. Steltbrink, FJZ, Juelich)
- 7) Dr. Sylvain Mazoyer (12/2009-) "Microscopic rearrangements in colloidal glasses, gels and polymer-colloid nanocomposites by LS echo"

Meeting's Organization:

- *From Hard to Ultra-soft Colloids: Colloids and polymeric assemblies near to and far from equilibrium*, June 25-27, 2004, Hersonissos, Crete, Greece (member of the Organizing Committee).
- *3rd Annual European Rheology Conference*, Hersonissos, Crete, April 2006 (member of the organizing committee).
- Combined SoftComp/Cosines and IFPRI workshop on *Colloidal glasses and gels*, Hersonissos Crete, June 2008.
- *Playing colloidal Mikado II*, Luxembourg, 2011 (member of the organising committee)
- *6th International Meeting, Hellenic Society of Rheology*, 28-29 June Athens, 2011 (member of the organizing committee)

Fellowships-Awards:

- Graduate Student Fellowship (EMY) (1990), Theory division of the Department of Physics, University of Thessaloniki.
- "Distinguished student" award: 2nd "Advanced Physics Summer School of University of Crete (1990)
- Graduate Student Fellowship: (1990-1997) University of Crete and Foundation for Research and Technology-Hellas.
- Marie Curie Research Fellow (1999-2001)
- Marie Curie Research Fellow (return type) (2002-2003)

Visits/appointments to institutions abroad:

- November-December 1995: Penn. State University, USA, Prof. S. Kumar, «*Study of clusters of wormlike polymers in solution by Monte-Carlo simulations*»
- June 2004, July 2005, June-July 2006 and June-July 2007, Visiting Scientist, Department of Physics, University of Edinburgh, UK
- July-August 2008, Visiting Scientist, FJZ, Juelich, Germany
- July-August 2009, Visiting Scientist, Department of Chemical Engineering, Caltech, USA
- October-November 2008, on sabbatical absence, Visiting Scientist, FJZ, Juelich, Germany
- July 2010, Visiting Scientist, Department of Chemical Engineering, Caltech, USA

Reviewing Activities:

New Journal of Physics, Macromolecules, Colloid and Polymer Science, J. Phys.: Condens. Matt., J. Rheology, Langmuir, Rheologica Acta, Physical Review Letters, Physical Review E, European Polymer Journal, European Physical Journal E, Soft Matter, J. Chemical Physics, Nanotechnology

Professional Affiliations:

Member of

1. Hellenic Physical Society (1989 - present)

2. American Physical Society (American Institute of Physics) (1995-)
3. The Society of Rheology (American Institute of Physics) (2002-)
4. Hellenic Society of Rheology (2003-)
5. Marie Curie Fellows (2000-)

Participation in research programs - funding:

1. Brite-Euram (BE-4490-90) (1992-95): “*Development and characterization of melt-processible rigid-rod polymers with improved mechanical properties*”
2. PENED-40 (Greek General Secretariat for Research and Technology) (1996-98): “*Dynamics and rheology of stiff Polymers*”
3. Individual Marie Curie Research Grant (ERBFMBICT983380) (1999-2001): “*Dynamics and structural rearrangements of colloidal suspensions under oscillatory shear strain by diffusive wave spectroscopy*” (with P.N. Pusey, University of Edinburgh)
4. RTN 1999 “*From Hard to ultrasoft colloids (HUSC)*” (2000-2004), EU- Research Training Networks.
5. Individual Return Marie Curie Research Grant (HPMF-CT-2002-01959) (2002-2003): “*Structural and Dynamic Behavior of suspensions of Soft Colloids under oscillatory shear strain*” (**Principal Investigator**)
6. PLATON 2002, Greek-French collaborative program (2003-2005): “*Ageing in Nanoscopic Colloidal Systems*” with Laboratoire Matière Molle et Chimie, ESPCI, CNRS, Paris, France (Dr. Michel Cloitre) budget: 15K Euro (**Principal Investigator**)
7. PLATON 2003, Greek-Polish collaborative program (2004-2006): “*Dynamics and Flow in novel Nanocomposite Mixtures of Colloids and Branched Polymers*” with Molecular Biophysics Lab, Institute of Physics, A. Mickiewicz University, Poznan, Poland, budget: 12K Euro
8. Network of Excellence (EU) (2004-2009) ‘*SOFTCOMP*’, approximate budget: 120K Euro
9. PENED 2003 “*Colloidal Systems in Non-Ergodic states: Flow and Ageing*” A 3-year proposal submitted to the Greek General Secretariat for Research and Technology, budget: 90K Euro (**Principal Investigator**)
10. May 2005: Marie Curie Host Fellowships for the Transfer of Knowledge Marie (ToK) “*Colloidal Suspensions In Non-Ergodic States*” ‘*COSINES*’ A 4-year European Union funding, approximate budget: 638K Euro. (**Principal Investigator**)
11. September 2008: FP7-NMP-2007-SMALL “*Toolbox for directed and controlled self-assembly of nanocolloids*” ‘*NANODIRECT*’ A 4-year European Union funding.
12. January 2011: FP7-Infrastructure “*European Soft Matter Infrastructure*” *ESMI* A 4-year European Union funding.
13. Thales 2011: “*Complex Visco-elastic and Visco-plastic materials: From Microscopic Structure and Dynamics to Macroscopic Flow*”, total budget 600K Euro (**Principal Investigator**)

Current Research Interests:

Colloids

- Dynamics and structure of colloidal dispersions in equilibrium and under shear.
- Rheology of colloidal glasses and colloid-polymer gels.
- Effects of inter-particle interactions on the structure, dynamics and rheology.
- Slow dynamics and ageing of colloidal glasses and gels
- Colloidal dynamics in confinement

Instrumentation

- Development of new techniques combining rheology, light scattering and microscopy for the study of soft matter out of equilibrium.

Experimental Techniques:

- Static and dynamic light scattering - Photon Correlation Spectroscopy.
- Evanescent Wave Dynamic Light Scattering.
- Fabry-Perot Interferometry.

- Linear and Non-linear Rheology.
- Diffusing-Wave Spectroscopy.
- Two Colour and 3D Dynamic Light Scattering.
- Light Scattering Echo, Light scattering under shear.
- Multispeckle DLS and DWS
- Experience in other techniques: Optical and Confocal Microscopy, Raman Scattering, Monte-Carlo and Brownian Dynamics simulations.

Recent and current collaborations:

- 1) Soft condensed matter group, School of Physics, University of Edinburgh, UK (P.N. Pusey, W.C.K. Poon, R. Besseling)
- 2) University of Berlin, Germany, (Prof. M. Ballauff)
- 3) Universite' Montpellier II, France, (Dr. Luca Cipelletti)
- 4) Laboratoire Matière Molle et Chimie, ESPCI, CNRS, Paris, France (Dr. Michel Cloitre)
- 5) Institut für Theoretische Physik II, Heinrich-Heine-Universität Düsseldorf, Germany, (Prof. C. Likos)
- 6) Institut für Theoretische Physik II, Heinrich-Heine-Universität Düsseldorf, Germany, (Prof. S. U. Egelhaaf)
- 7) Weiche Materie/IFF, Forschungszentrum Jülich, Germany (Prof. Dr. J. K. G. Dhont, Dr. P. Lang, Dr. P. Lettinga)
- 8) Neutron Scattering, Forschungszentrum Jülich, Germany (Dr. J. Stellbrink)
- 9) Molecular Biophysics Lab, Institute of Physics, A. Mickiewicz University, Poznan, Poland, (Dr. J. Gapinski)
- 10) School of Engineering and Electronics, University of Edinburgh, UK (Dr. V. Koutsos)
- 11) Department of Chemical Engineering, CALTECH, USA (Prof. J. Brady)
- 12) Department of Physics, University of Konstanz, (Prof. M. Fuchs)

PUBLICATIONS IN REFEREED JOURNALS

Citations: 932, h factor=18, *denotes corresponding authors where applicable

1. G. Petekidis, G. Fytas and H. Witteler
 “Orientation fluctuations in concentrated solutions of hairy-rod polymers”
 Colloid & Polymer Science 272: 1457 (1994)
2. H. Furuya, S. Okamoto, A. Abe, G. Petekidis and G. Fytas
 “Dipole Moment and Optical Anisotropy studies of Mesogenic Twin Compounds, α,ω -Bis[(4,4'-cyanobiphenyl)oxy]alkanes”
 J. Phys. Chem. 99: 6483 (1995)
3. G. Voyatzis, G. Petekidis, D. Vlassopoulos, E. Kamitsos and A. Bruggeman
 “Molecular Orientation in Polyester Films using Polarized Laser Raman and Fourier Transform Infrared Spectroscopies and X-Ray Diffraction”
 Macromolecules 29: 2244 (1996)
4. U. Tiesler, M. Rehahn, M. Ballauff, G. Petekidis, D. Vlassopoulos, G. Maret and H. Kramer
 “Analysis of the conformation of a Stiff-Chain Polyester by Measurements of the Magnetic Birefringence in solution”
 Macromolecules 29: 6832 (1996)
5. G. Petekidis, D. Vlassopoulos, P. Galda, M. Rehahn and M. Ballauff
 “Determination of Chain conformation of Stiff Polymers by Depolarized Rayleigh Scattering in solution”
 Macromolecules 29: 8948 (1996)
6. G. Petekidis, D. Vlassopoulos, G. Fytas, N. Kountourakis and S. Kumar
 “Association Dynamics in solutions of Hairy-Rod polymers”
 Macromolecules 30: 919 (1997)
7. R. Seghrouchni, G. Petekidis, D. Vlassopoulos, G. Fytas, A.N. Semenov, J. Roovers and G. Fleischer
 “Controlling the dynamics of soft spheres: From polymeric to colloidal behaviour”
 Europhys. Lett. 42: 271 (1998)
8. G. Petekidis, D. Vlassopoulos, G. Fytas and G. Fleischer
 “Dynamics of Hairy-Rod Polymers: Semidilute Regime”
 Macromolecules 31: 1406 (1998)
9. G. Petekidis, D. Vlassopoulos, G. Fytas, R. Rulkens and G. Wegner
 “Orientation Dynamics and Correlations in Hairy-Rod Polymers: Concentrated Regime”
 Macromolecules 31: 6129 (1998)
10. G. Petekidis*, D. Vlassopoulos*, G. Fytas, R. Rulkens, G. Wegner and G. Fleischer
 “Diffusion Dynamics of Hairy-Rod Polymers in Concentrated Solutions”

- Macromolecules 31: 6139 (1998)
11. B. Loppinet, G. Petekidis, G. Fytas, R. Rulkens, and G. Wegner “*Dynamics of Adsorbed Hairy-Rod Polymer Solutions*”
Langmuir 14: 4958 (1998)
12. G. Petekidis, G. Fytas*, U. Scherf, K. Mullen and G. Fleischer
“*Dynamics of Poly(p-phenylene) Ladder Polymers in Solution*”
J. Polym. Sci. Part B: Polymer Phys. 37: 2211 (1999)
13. G. Petekidis*, D. Vlassopoulos, G. Fytas, G. Wegner and G. Fleischer
“*Dynamics of Wormlike Polymers in Solution: Self-Diffusion and Zero-Shear Viscosity*”
Macromolecules 33: 9630 (2000)
14. G. Petekidis, P.N. Pusey, A. Moussaïd, S. U. Egelhaaf and W. C. K. Poon
“*Shear-induced yielding and ordering in concentrated particle suspensions*”
Physica A 306, 334 (2002)
15. G. Petekidis*, L. A. Galloway, S. U. Egelhaaf*, M. E. Cates and W. C. K. Poon
“*Mixtures of Colloids and Wormlike Micelles: Phase Behaviour and Kinetics*”
Langmuir 18, 4248 (2002)
16. G. Petekidis*, A. Moussaïd and P.N. Pusey
“*Rearrangements in Hard-Sphere Glasses under Oscillatory Shear Strain*”
Phys. Rev. E, 66, 051402, (2002)
17. B. Loppinet, G. Fytas, G. Petekidis, T. Sato, G. Wegner
“*On the origin of the heterogeneous orientation dynamics of semiflexible polymers in solutions*”
The European Physical Journal E, 8, 461 (2002)
18. G. Petekidis*, D. Vlassopoulos and P.N. Pusey
“*Yielding and Flow of Colloidal Glasses*”
Faraday Discuss., 123, 287, (2003)
19. R. Penciu, H. Kriegs, G. Petekidis, G. Fytas and E.N. Economou
“*Phonons in Colloidal Systems*”
J. Chem. Phys. 118, 11, 5224, (2003)
20. G. Petekidis*, J. Gapinski, P. Seymour, J.S. Van-Duijneveldt, D. Vlassopoulos and G. Fytas
“*Dynamics of core-shell colloids in concentrated suspensions*”
Phys. Rev. E, 69, 042401, (2004)
21. G. Petekidis, D. Vlassopoulos and P.N. Pusey
“*Yielding and Flow of Sheared Colloidal Glasses*”
J. Phys-Condens. Mat. 16, S3955 (2004)
22. H. Kriegs, G. Petekidis, G. Fytas, R. Penciu, E.N. Economou and A.B. Schoefield,
“*Phonons in colloidal suspensions: A volume fractions study*”
J. Chem. Phys. 121, 7849, (2004)
23. F. Bossard, C. Tsitsilianis*, S. N. Yannopoulos, G. Petekidis and V. Sfika
“*A Novel Thermo-thickening Phenomenon Exhibited by a Triblock Polyampholyte in Aqueous Salt-free Solutions*”
Macromolecules 38, 2883, (2005)
24. E. Stiakakis, G. Petekidis, D. Vlassopoulos, C. N. Likos, H. Iatrou, N. Hadjichristidis and J. Roovers,
“*Depletion and cluster formation in soft colloid-polymer mixtures*”
Europhys. Lett. 72, 664, (2005)
25. C. N. Likos*, C. Mayer, E. Stiakakis and G. Petekidis,
“*Clustering of soft colloids due to polymer additives*”
J. Phys-Condens. Mat. 17, S3363 (2005)
26. L. Xie, M. J. Biggs*, D. Glass, A. S. McLeod, S. U. Egelhaaf and G. Petekidis
“*Granular temperature distribution in a gas fluidized bed of hollow microparticles prior to onset of bubbling*”
Europhys. Lett. 74, 268 (2006)
27. K. Pham, G. Petekidis, D. Vlassopoulos, S.U. Egelhaaf, P.N. Pusey, and W.C.K Poon
“*Yielding of colloidal glasses*”
Europhys. Lett. 75, 624, (2006)
28. F. Ozon, G. Petekidis and D. Vlassopoulos*
“*Signatures of nonergodicity transition in a soft colloidal system*”
Industrial and Engineering Chemistry - Research, 45, 6946 (2006)
29. J. Tommaseo, G. Petekidis, W. Steffen, G. Fytas, A.B. Schoefield and N. Stefanou,
“*Hypersonic Acoustic Excitations in Binary Colloidal Crystals: Big versus Small Hard Sphere Control*”

- J. Chem. Phys. 126, 014707 (2007)
30. E. Glynos, A. Chremos, G. Petekidis, P. Camp and V. Koutsos*
“Polymer-like to Soft Colloid-like Behavior of Regular Star Polymers Adsorbed on Surfaces”
 Macromolecules, 40, 6947 (2007)
31. P. Smith, G. Petekidis*, S. U. Egelhaaf and W. C. K. Poon*
“Yielding and crystallisation of Colloidal Gels under oscillatory shear”
 Phys. Rev. E, 76, 041402 (2007)
32. A. Le Grand and G. Petekidis* *“Effects of particle softness on the rheology and yielding of colloidal glasses”*
 Rheologica Acta, 47, 579 (2008)
33. K. Pham, G. Petekidis*, D. Vlassopoulos, S.U. Egelhaaf, W.C.K Poon* and P.N. Pusey
“Yielding behaviour of repulsion- and attraction-dominated colloidal glasses”
 J. Rheology, 52, 649 (2008)
34. P. Voudouris, B. Loppinet* and G. Petekidis*
“Particle Dynamics within a Wetting Layer in a Colloid-Polymer Mixture”
 Phys. Rev. E, 77, 051402 (2008)
35. N. Koumakis, A.B. Schofield and G. Petekidis*
“Effects of shear induced crystallization on the rheology of Hard sphere colloids”
 Soft Matter 4, 2008-2018 (2008)
36. P. Ballesta, R. Besseling, L. Isa, G. Petekidis and W.C.K Poon
“Slip and flow of glassy hard sphere colloidal suspensions”
 Phys. Rev. Lett. 101, 258301 (2008)
37. V. Carrier and G. Petekidis*
“Non-linear rheology of colloidal glasses of soft core-shell particles”
 J. of Rheology 53, 245-273, (2009)
38. V. N. Michailidou, G. Petekidis*, J. W. Swan, J. Brady
“Dynamics of Hard sphere colloidal particles near a wall”
 Phys. Rev. Lett. 102, 068302 (2009)
39. G. Brambilla, D. El Masri, M. Pierno, L. Berthier, L. Cipelletti*, G. Petekidis, A. B. Schofield
“Probing the Equilibrium Dynamics of Colloidal Hard Spheres above the Mode-Coupling Glass Transition”
 Phys. Rev. Lett. 102, 085703 (2009)
40. M. Laurati, G. Petekidis, N. Koumakis, A. B. Schofield, J. Brader, M. Fuchs and S. U. Egelhaaf
“Structure, Dynamics and Rheology, of Colloid-Polymer mixtures: from Liquids to Gels”
 J. Chem. Phys. 130, 134907 (2009)
41. D. El Masri, G. Brambilla, M. Pierno, G. Petekidis, A. B. Schofield, L. Berthier and L. Cipelletti
“Dynamic Light Scattering measurements in the activated regime of dense colloidal hard spheres”
 J. Stat. Mech. P07015, (2009)
42. C. Christopoulou, G. Petekidis, B. Erwin, M. Cloitre and D. Vlassopoulos
“Aging and yield behaviour in model soft colloidal glasses”
 Phil. Trans. R. Soc. A 367, 5051-5071, (2009)
43. S. Rogers, P. T. Callaghan, G. Petekidis and D. Vlassopoulos
“Time-dependent rheology of colloidal star glasses”
 J. Rheology, 54, 133-158, (2010)
44. E. Stiakakis, A. Wilk, J. Kohlbrecher, D. Vlassopoulos and G. Petekidis*
“Slow Dynamics, Aging and Crystallization of multiarm star glasses”
 Phys Rev. E, 81, 020402, (rapid communication), (2010)
45. E. van Ruymbeke, A. Pamvouxoglou, D. Vlassopoulos, G. Petekidis, G. Mountrichas, S. Pispas
“Rheological behaviour of stable, responsive diblock copolymer micelles”
 Soft Matter, 6, 881, (2010)
46. F. Renou, J. Stellbrink and G. Petekidis*,
“Yielding processes in a soft colloidal glass under large amplitude oscillatory shear (LAOS)”
 J. Rheology 54(6), 1219-1242, (2010)
47. Wilk, S. Huißmann, E. Stiakakis, J. Kohlbrecher, D. Vlassopoulos, C. N. Likos, G. Meier, J. K. G. Dhont, G. Petekidis,
 R. Vavrin
“Osmotic shrinkage in star-linear polymer mixtures”
 European Physical Journal E, 32, 127 (2010)
48. G. Brambilla, D. El Masri, M. Pierno, L. Berthier, L. Cipelletti, G. Petekidis, A. B. Schofield
 Phys. Rev. Lett. *Comment reply* 104, 169602, (2010)
49. R. Besseling, L. Isa, P. Ballesta, G. Petekidis, M. E. Cates and W. C. K. Poon

“Shear banding and flow-concentration coupling in colloidal glasses”

Phys. Rev. Lett., 105, 268301, (2010)

50. N. Koumakis and G. Petekidis*

“Two step yielding in attractive colloids: Transition from gels to attractive glasses”

Soft Matter, 7, 2456, (2011)

51. M. Laurati, S.U. Egelhaaf and G. Petekidis*

“Non-linear rheology of colloid-polymer gels”

J. Rheology, 55, 673 (2011)

52. A. Poulos, J. Stellbrink and G. Petekidis

“Large amplitude oscillatory rheology in concentrated suspensions and glasses of starlike micelles”

Submitted to J. Rheology (2011)

53. P. Ballesta, G. Petekidis, L. Isa, W. C. K. Poon and R. Besseling

“Wall Slip and Flow of concentrated Hard-sphere colloidal suspensions”

in press J. Rheology (2011)

54. N. Koumakis, A. Pamvouxoglou, A. Poulos, and G. Petekidis*

“Direct comparison of the rheology of hard and soft particle glasses”

Soft Matter 8, 4271-4284 (2012)

55. N. Koumakis, M. Laurati, S.U. Egelhaaf, J. F. Brady and G. Petekidis*

“Yielding of hard sphere glasses during start-up shear”

Phys Rev. Lett. 108, 098303 (2012) *Editors choice*

56. M. Laurati, K. J. Mutch, N. Koumakis, J. Zausch, C.P. Amann, A.B. Schofield, G. Petekidis, J.F. Brady, J. Horbach, M. Fuchs and S. U. Egelhaaf

“Transient dynamics in dense colloidal suspensions under shear: Shear rate dependence”

Submitted to J. Phys. Cond. Matt. (2012)

In preparation (should be submitted the next 6 months):

B. Derakhshandeh, G. Petekidis, W.Y. Hamad and S.G. Hatzikiriakos,

“Ageing, Yielding and Rheology of Nanocrystalline Cellulose Suspensions”

Target journal: J. Rheol.

V. N. Michailidou, J. Swan, J. Brady, P. R. Lang, J. K. G. Dhont and G. Petekidis

“Measurement of anisotropic Brownian motion near an interface by evanescent wave dynamic light scattering”

Target journal: Phys Rev. E

A. Pamvouxoglou, K. Ohno and G. Petekidis

“Structure and dynamics of concentrated suspensions of soft colloids”

Target journal: Macromolecules

P. Ballesta, N. Koumakis, R. Besseling, W. C. K. Poon, and G. Petekidis,

“Slip of attractive colloids under shear”

Target journal: Soft Matter

N. Koumakis, M. Laurati, S.U. Egelhaaf, J. F. Brady and G. Petekidis

“Relation of the Microscopic structure with the macroscopic stress in a transient flow of Hard sphere colloidal glasses”

Target journal: J. Rheology

N. Koumakis, J. F. Brady and G. Petekidis

“Stresses and particle rearrangements in a shear induced Hard sphere crystal”

Target journal: Phys Rev. E

A. Le Grand and G. Petekidis

“Particle rearrangements during shear induced melting of colloidal glasses by LS –echo”

Target journal: Europhys. Lett.

E. Stiakakis, L. Cipelletti, A.B. Schofield and G. Petekidis

“Ageing in Hard Sphere glasses by Diffusive Wave Spectroscopy”

Target journal: Phys Rev E

N. Koumakis, G. Petekidis, M. Ballauff, J. M. Brader, S. U. Egelhaaf, M. Fuchs, J. Horbach, M. Kruger, M. Laurati, K. Mutch, M. Siebenburger, Th. Voigtmann, and J. Zausch
"Residual Stresses in Glasses and a History-Dependent Length Scale"
Target journal:

Editorial type: General discussion

FARADAY DISCUSSIONS Volume: 123 Pages: 303-322 (2003)

CONFERENCE PROCEEDINGS

1. D. Vlassopoulos, G. Petekidis, G. Voyiatzis, E. I. Kamitsos, Y. Yiannopoulos and A. Bruggeman, "Raman and FTIR Studies of the Effects of Draw Ratio and Side Chain Length on the Molecular Orientation of Polyester Films", ACS Division of Polymeric Materials: Science & Engineering, Preprint, Orlando National Meeting, 1996.
2. G. Petekidis, D. Vlassopoulos and G. Fytas, "Dynamic Behavior of Isotropic Solutions of Rigid-Rod Polymers", Proceedings of the XIIth Panhellenic Solid State Physics Conference, Heraklion, Crete, Greece, 1997.
3. K. Andrikopoulos, G. Voyiatzis, G. Petekidis, D. Vlassopoulos, S. H. Anastasiadis and G. Fytas, "The Use of Raman Spectroscopy to the Study of Molecular Orientation of Elongated Polymers", Proceedings of the XIIth Panhellenic Solid State Physics Conference, Heraklion, Crete, Greece, 1997.
4. G. Petekidis, D. Vlassopoulos, G. Fytas, R. Rulkens, and G. Wegner, "Dynamics and Rheology of Hairy-Rod Polymers" Proceedings of the 5th European Rheology Conference, Portoroz, Slovenia, September 1998. Progress and Trends in Rheology V Editors: Emri I, 429-430, 1998.
5. V. Carrier, G. Petekidis, F. Ozon, D. Vlassopoulos, P.N. Pusey, and M. Ballauff "Yielding and rearrangements in colloidal glasses with varying interparticle interactions", Proceedings of the XIVth International Congress on Rheology, Seoul, Korea, 2004.
6. N. Koumakis and G. Petekidis "Rheological transitions in colloid-polymer mixtures: from glass to gel" Proceedings of the XVth International Congress on Rheology, Monterey, USA, 2008.

CONFERENCE PRESENTATIONS (oral/presenter)

1. G. Petekidis, G. Voyatzis, D. Vlassopoulos, E. Kamitsos and A. Bruggeman, "Molecular Orientation in Polyester Films using Polarized Raman and FTIR spectroscopies and X-ray Diffraction", 3rd Euroconference of the University of Patras on Composite Materials Patras, September 1995.
2. G. Petekidis, D. Vlassopoulos, and G. Fytas, "Dynamic Behavior of Isotropic Solutions of Rigid-Rod Polymers" XII Panhellenic Condensed Matter Conference, Heraklion, Crete, September 1996.
3. G. Petekidis, A. Moussaïd and P.N. Pusey "Colloidal Glasses under Shear Strain" General March Meeting 2001, American Physical Society, March 2001, Seattle, USA, 2001.
4. G. Petekidis, A. Moussaïd, P.N. Pusey. "Shear Induced Yielding and Ordering in Concentrated Particle Suspensions" **Invited talk** International Conference on "Complex materials in external fields", August 2001, Manchester, UK.
5. G. Petekidis, D. Vlassopoulos and P.N. Pusey **Invited talk** "Yielding and Flow of Colloidal Glasses", Faraday Discussion 123: Non-Equilibrium Behaviour of Colloidal Dispersions, Edinburgh, UK, September 2002.
6. G. Petekidis, D. Vlassopoulos and P.N. Pusey "Dense suspensions of colloidal particles under shear flow", Society of Rheology 74th Annual Meeting, Minneapolis, USA, 13-17 October 2002.
7. G. Petekidis, V. Carrier, D. Vlassopoulos, P. N. Pusey and M. Ballauff, "Rearrangements and Yielding in Concentrated Suspensions of Hard and Soft Colloids" General March Meeting 2004, American Physical Society, Montreal, Quebec, Canada, March 2004.
8. G. Petekidis, "Dynamics in Suspensions of Soft Particles" From Hard to UltraSoft Colloids "Colloids and Polymeric assemblies near to and far from equilibrium", Koutouloufari, Crete, Greece, June 2004.
9. V. Carrier, F. Ozon, G. Petekidis, D. Vlassopoulos, P. N. Pusey and M. Ballauff,

- “Rearrangements and Yielding in Glasses of Hard and Soft Colloids*
4th International meeting of the Hellenic Society of Rheology, Athens, Greece, June 2004.
10. G. Petekidis
“Colloidal Glasses of Soft and Hard particles under Shear”, **Invited talk**
Juelich Soft Matter Days 2004, Kerkrade, Holland, November 2004.
11. G. Petekidis, D. Vlassopoulos, K. Pham, S.U. Egelhaaf, W.C.K Poon, P. N. Pusey
“Yielding and flow of colloidal glasses and gels”
Society of Rheology 77th Annual Meeting, Vancouver, Canada, 16-20 October 2005.
12. G. Petekidis, D. Vlassopoulos, K. Pham, W.C.K Poon, S.U. Egelhaaf, P. N. Pusey,
“Yielding and flow of colloidal glasses and gels”
XXI Panhellenic Condensed Matter Conference, Cyprus, September 2005
13. P. Voudouris, B. Loppinet and G. Petekidis
“Wetting layer dynamics in colloid polymer mixtures by evanescent wave dynamic light scattering”
General March Meeting 2007, American Physical Society, Denver, Colorado, USA, 5-9 March 2007.
14. G. Petekidis, D. Vlassopoulos, C. Christopoulou, N. Koumakis, A. Le Grand
“Viscoelastic properties and ageing of concentrated colloidal suspensions”
4th Annual European Rheology Conference, AERC07, Napoli, Italy, 12-14 April 2007.
15. G. Petekidis, V. Michailidou, P. Voudouris, B. Loppinet
“Colloidal Dynamics near a Hard Wall by evanescent wave dynamic light scattering”
International Soft Matter Conference 2007, Aachen, Germany, 1-4 October 2007
16. N. Koumakis and G. Petekidis
“Rheological measurements of colloidal glasses and shear-induced crystals coupled with LS echo”
Society of Rheology 79th Annual Meeting, Salt Lake City, USA, 7-11 October 2007.
17. G. Petekidis
“Simultaneous oscillatory rheology with dynamic light scattering-echo”
XVth International Congress on Rheology, Monterey, California, USA, August 3-8, 2008
18. G. Petekidis, **Invited talk**
“Colloids as model systems for the study of the dynamics and rheology of glasses and gels”
XXIV Panhellenic Conference on Solid State Physics & Materials Science, Heraklion, Crete, September 21-24, 2008.
19. G. Petekidis
“Yielding mechanisms and particle rearrangements in colloidal glasses and gels”
7th Hellenic Polymer Conference, Ioannina, September 28-October 1, 2008.
20. E. Stiakakis, A. Wilk, J. Kohlbrecher, D. Vlassopoulos and G. Petekidis
“Slow Dynamics and Ageing in concentrated multiarm Stars: New routes to equilibrium?”
13th IACIS International Conference on Surface and Colloid Science and the 83rd ACS Colloid & Surface Science Symposium, New York, June 14 – 19, 2009
21. P. Ballesta, N. Koumakis and G. Petekidis
“Shear induced ageing and slow dynamics in hard sphere glasses”
Society of Rheology 81st Annual Meeting, Madison, USA, 18-22 October 2009
22. N. Koumakis and G. Petekidis
“Complex yielding transition from an attractive glass to a colloidal gel”
Society of Rheology 81st Annual Meeting, Madison, USA, 18-22 October 2009
23. F. Renou, N. Koumakis, P. Ballesta, and G. Petekidis
“Yielding response of frustrated colloids with varying inter-particle interactions under Large Amplitude Oscillatory Shear.”
Viscoplastic Fluids: From Theory to Application, Limassol, Cyprus, 1-5 November 2009
24. E. Stiakakis, A. Wilk, J. Kohlbrecher, D. Vlassopoulos and G. Petekidis
“Slow dynamics, ageing and crystallization of a multiarm star glass: New routes to equilibrium?”
APS, March meeting, 14-19 March 2010, Portland, USA
25. N. Koumakis, G. Petekidis and J. Brady
“Yielding of colloidal glasses and gels”
APS, March meeting, 14-19 March 2010, Portland, USA
26. G. Petekidis **Invited talk**
“Dynamics of hard sphere colloids near a wall”
International workshop, "Playing Colloidal Mikado", 27-29 May, 2010, Luxemburg.
27. F. Renou, A. Poulos, N. Koumakis, J. Stellbrink and G. Petekidis
“Yielding of colloidal glasses under large amplitude oscillatory shear (LAOS)”
Society of Rheology 82nd Annual Meeting, Santa Fe, USA, 24-28 October 2010
28. N. Koumakis M. Laurati, S.U. Egelhaaf and G. Petekidis

- “Rheology and microscopic dynamics of hard sphere glasses during a start up flow”*
Society of Rheology 82nd Annual Meeting, Santa Fe, USA, 24-28 October 2010
29. G. Petekidis **Invited talk**
“Yielding mechanisms and particle rearrangements in colloidal glasses and gels under shear.”
APS, March meeting, 21-25 March 2011, Dallas, USA
30. A. Poulos, N. Koumakis, J. Stellbrink and G. Petekidis
“Nonlinear viscoelasticity and yielding of soft colloidal glasses probed by Large Amplitude Oscillatory Shear”
Annual European Society of Rheology Meeting, Suzdal, Russia, 10-14 May 2011
31. N. Koumakis, G. Petekidis and J. F. Brady
“Yielding of colloidal glasses and gels”
Hellenic Society of Rheology Conference, 28-29 June Athens, 2011
32. N. Koumakis A. S. Poulos and G. Petekidis
“Yielding of hard and soft colloidal glasses under large amplitude oscillatory shear”
Society of Rheology 83rd Annual Meeting, Cleveland, USA, 9-13 October 2011
33. P. Ballesta and G. Petekidis
“Time evolution of Colloidal glasses under constant stress”
Society of Rheology 83rd Annual Meeting, Cleveland, USA, 9-13 October 2011
34. G. Petekidis **Invited talk**
“How do colloidal glasses and gels flow under shear”
Nano-S&T, BIT’s 1st Annual World Congress of Nano-S&T, 23-26 October 2011, Dalian, China
35. N. Koumakis and G. Petekidis
“Complex oscillatory yielding of simple hard sphere glasses”
APS, March meeting, 27 February – 2 March, 2012, Boston, USA
36. N. Koumakis, J. F. Brady and G. Petekidis
“Shear induced diffusion in hard sphere glasses”
APS, March meeting, 27 February – 2 March, 2012, Boston, USA

SEMINARS

1. G. Petekidis *“Yielding in glasses of polymer colloids”*
Department of Materials Science and Engineering, Ioannina, May 2002.
2. G. Petekidis *“Rheology of concentrated colloidal suspensions”*
Matiere Molle & Chimie ESPCI, Paris, March 2003.
3. G. Petekidis *“Dynamics of concentrated colloidal suspensions”*
HUSC 6th meeting, From Hard to Ultrasoft Colloids, Poznan, Poland, May 2003.
4. G. Petekidis *“Non-Thermal melting of a Colloidal Glass (To shear or to add polymer?)”*
IESL-FORTH, Crete, March 2004.
5. G. Petekidis *“Light Scattering and Rheological Techniques for the study of colloidal glasses and gels”*
Department of Materials Science and Technology, University of Crete, June 2005.
6. G. Petekidis *“Rheology, particle rearrangements and yielding of soft matter glasses”*
School of Engineering and Electronics, University of Edinburgh, Edinburgh, June, 2006.
7. G. Petekidis *“Dynamics and rheology of multiarm stars and mixtures with linear polymers”*
Department of Physics, Heinrich-Heine-Universität Düsseldorf, Duesseldorf, July 2006.
8. G. Petekidis *“Surface dynamics in a wetting layer of a colloid-polymer mixture”*
SoftComp meeting, Leuven, Belgium, January 2007
9. G. Petekidis *“Colloidal glasses and gels under shear”*
Department of Chemical Engineering, Caltech, March 2007.
10. N. Koumakis and G. Petekidis,
“Rheology, Ageing and Particle Rearrangements in Shear Induced Colloidal Crystals”
SoftComp meeting, Leuven, Belgium, January 2008
11. G. Petekidis, *“Dynamics, Rheology and Ageing in model Colloidal Systems”*,
Colloquia of the Department of Materials Science and Technology, Crete, January 2009
12. G. Petekidis, *“Effects of inter-particle interactions in the mechanism of yielding in a colloidal glass”*
SoftComp Annual meeting, Venice, May 2009
13. G. Petekidis *“Slow Dynamics and Ageing in concentrated multiarm Stars: New routes to equilibrium?”*
Department of Chemical Engineering, Caltech, July, 2009
14. E. Stiakakis, A. Wilk, J. Kohlbrecher, D. Vlassopoulos and G. Petekidis *“Slow Dynamics and Ageing in concentrated multiarm Stars: New routes to equilibrium?”*

Nanodirect Meeting, Leuven, Belgium, 1-2 October, 2009

15. G. Petekidis “*Using model colloidal systems to understand the mesoscopic world*”

Department of Materials Science and Technology, University of Crete, March 2011.

16. G. Petekidis, “*Rheology and microscopic dynamics of colloidal glasses under shear*”

Center for Molecular & Engineering Thermodynamics, Department of Chemical Engineering, Delaware, March, 2011

17. G. Petekidis, “*FORTH polymer & Colloids research activities*”

OMNOVA Solutions Inc., Akron, USA, 14 October, 2011

18. G. Petekidis, “*Flow of colloidal glasses and gels*” Department of Chemical Engineering, Yale University, USA, March 2012

CONFERENCE PRESENTATIONS (other):

1. G. Petekidis, D. Vlassopoulos, and M. Ballauff,

“*Chain conformation of Rod-like Polyester using Depolarized Light Scattering*”

4th Mediteranean School and Symposium of Science and Technology of Advanced Polymeric Materials, (MEDNET), Fodele, Crete, June 1995.

2. G. Petekidis, N. Kountourakis, D. Vlassopoulos, and G. Fytas,

“*Self Assembly Of Hairy-Rod Polymers in Solution*”

NATO ASI Conference “*Solvents and Self Organization of Polymers,*”, Antalia, Turkey, August, 1995.

3. G. Petekidis, N. Kountourakis, D. Vlassopoulos, and G. Fytas,

“*Coupling of Concentration and Orientation Fluctuations in Isotropic Solutions of Hairy-Rod Polymers*”

Material Research Society Conference, Boston, USA, November, 1995.

4. G. Petekidis, N. Kountourakis, D. Vlassopoulos, and G. Fytas,

“*Dynamics of Association in Concentrated Solutions of Hairy-Rod Polymers*”

General Conference of the American Physical Society, St. Louis, USA, March, 1996.

5. G. Petekidis, D. Vlassopoulos, and G. Fytas,

“*Aggregation Dynamics in Solutions of Rigid-Rod Polymers*”

NATO ASI Conference, “*Theoretical Challenges in Complex Fluid Dynamics*”, Cambridge, UK, March-April, 1996.

6. G. Voyatzis, K. Adricopoulos, G. Petekidis, D. Vlassopoulos, S. H. Anastasiadis,

“*Molecular Orientation in Industrial Poly(vinyl chloride) Samples by Resonance Micro-Raman Spectroscopy*”,

12th European Symposium on Polymer Spectroscopy (ESOPS-12), Lyon-Villeurbanne, France, 1996.

7. D. Vlassopoulos, K. Adricopoulos, G. Petekidis, G. Voyatzis, E. Kamitsos, Y. Yiannopoulos and A. Bruggeman, “*Raman and FTIR studies of the effect of Draw Ratio and Side-Chain Length on the Molecular Orientation of Polyester Films*”,

General Conference of the American Chemical Society, Orlando, Florida, USA, August, 1996.

8. K. Adricopoulos, G. Voyatzis, G. Petekidis, D. Vlassopoulos, and S. H. Anastasiadis,

“*The Use of Raman Spectroscopy to the study of Molecular Orientation of Elongated Polymers*”,

6th Symposium of the European Polymer Society on Polymeric Materials -EPF96, Agia Pelagia, Crete, October, 1996.

9. G. Petekidis, D. Vlassopoulos, G. Fytas, R. Rulken, G. Wegner, M. Ballauff,

“*Dynamic Behavior of Isotropic Solutions of Stiff Macromolecules in Isotropic Solutions*”,

6th Symposium of the European Polymer Society on Polymeric Materials -EPF96, Agia Pelagia, Crete, October, 1996.

10. G. Petekidis, N. Kountourakis, D. Vlassopoulos, G. Fytas, and S. Kumar,

“*Association Dynamics in Solutions of Hairy-Rod Polymers*”,

6th Symposium of the European Polymer Society on Polymeric Materials -EPF96, Agia Pelagia, Crete, October, 1996.

11. D. Vlassopoulos, G. Petekidis, R. Seghrouchni, G. Fytas, A.N. Semenov and J. Roovers,

“*Dynamics of Multiarm Star Polymer Solutions.*”

71st ACS Symposium on Colloidal Materials, Newark, USA, June-July, 1997.

12. G. Fytas, G. Petekidis, D. Vlassopoulos, K. Karatasos, T. Pacula, A.N. Semenov and J. Roovers,

“*Dynamics of Multiarm Star Polymers in the Ordering Region*”,

3rd International Conference on Relaxation processes in complex materials, Vigo, Spain, June-July, 1997.

13. D. Vlassopoulos, G. Petekidis, G. Fytas, A. N. Semenov and J. Roovers,

“*Dynamics of Multiarm Star Polymer Solutions*”,

69th Annual Meeting of the Society of Rheology, Columbus, OH, October 1997.

14. G. Petekidis, D. Vlassopoulos, G. Fytas, R. Rulken and G. Wegner,

“*Orientation Fluctuations in Hairy-Rod Polymers*”,

General APS Meeting, Los Angeles, USA, March 1998.

15. G. Petekidis, D. Vlassopoulos, G. Fytas, R. Rulken, and G. Wegner,

- “*Dynamics and Rheology of Hairy-Rod Polymers*”,
5th European Rheology Conference, Portoroz, Slovenia, September 1998.
16. D. Vlassopoulos, G. Petekidis, L. Hilliou, G. Fytas, R. Rulken, and G. Wegner,
“*Dynamics and Rheology of Hairy-Rod Polymers*”,
70th Annual Meeting of the Society of Rheology, Monterey, CA, October 1998.
17. B. Loppinet, G. Petekidis, D. Vlassopoulos, G. Fytas, G. Wegner, T. Sato, and A. Teramoto,
“*Orientation Dynamics in Liquid Crystalline Polymer Solutions*”,
European Conference on Liquid Crystals, ECLC 99, Hersonissos, Crete, Greece, April 1999.
18. D. Vlassopoulos, G. Petekidis, B. Loppinet, G. Fytas, G. Wegner, T. Sato, and A. Teramoto,
“*Diffusion, Orientation and Rheology in Hairy-Rod Polymers*”,
Europhysics Conference on Macromolecular Physics, Eurorheo 99-1, “*Rheology, Rheo-Physics and Flow-Induced Structures of Liquid Crystalline Polymers, Surfactants and Block Copolymers*”, Sophie-Antipolis, France, May 1999.
19. G. Petekidis, D. Vlassopoulos, G. Fytas, G. Wegner, and G. Fleischer,
“*Dynamics of Stiff Polymers in Solutions.*”
NATO Summer School “*Soft and Fragile Matter*”, St Andrews, Scotland, July, 1999.
20. G. Petekidis, D. Vlassopoulos, G. Fytas, G. Wegner, and G. Fleischer,
“*Dynamics of Stiff Polymers in Solutions.*”
European Conference on Interfaces and Colloidal Systems, Agia Pelagia, Crete, September, 1999.
21. G. Petekidis, A. Moussaïd, M.D. Haw, A. Schofield, S. Egelhaaf and P.N. Pusey
“*Structure and Dynamics of Colloidal Suspensions under Shear*”
18th General Conference of the Condensed Matter Division of the European Physical Society, Montreux, Switzerland, 13-17 March 2000.
22. G. Petekidis, A. Moussaïd and P.N. Pusey
“*Structure and Dynamics of Colloidal Suspensions under Shear*”
International Workshop on: Scattering Studies of Mesoscopic Scale Structure and Dynamics in Soft Matter, Messina, Italy, November 22-25, 2000.
23. G. Petekidis, A. Moussaïd, P.N. Pusey
“*Structural Rearrangements in Colloidal Suspensions under Shear Strain*”
4th International Discussion Meeting on Relaxations in Complex Systems, 17-23 June 2001, Hersonissos, Crete.
24. P.N. Pusey, G. Petekidis, A. Moussaïd, M.D. Haw, A. Schofield, S. Egelhaaf and W.C.K. Poon.
“*Shear Induced Yielding and Ordering in Concentrated Particle Suspensions*”
Invited talk, 21st IUPAC international conference on Statistical Physics”, July 2001, Cancun, Mexico.
25. P. Smith, G. Petekidis, P.N. Pusey, W.C.K. Poon, S.U. Egelhaaf,
“*Oscillatory shear of Colloid-Polymer gels*”
International Conference on “*Complex materials in external fields*”, Manchester, UK, August, 2001
26. E. Stiakakis, G. Petekidis, D. Vlassopoulos, J. Roovers,
“*Depletion attraction in mixtures of multiarm stars and linear polymers in solution*”
European Colloid and Interface Science conference, ECIS03, Florence, Italy, September 2003.
27. G. Petekidis, D. Vlassopoulos,
“*Simultaneous Dynamic Light Scattering and Dynamic Rheometry*”
European Colloid and Interface Science conference, ECIS03, Florence, Italy, September 2003.
28. E. Stiakakis, D. Vlassopoulos, G. Petekidis, J. Roovers, and C. Likos, “*Glass-like Kinetic Transitions and Osmotic Interactions in Mixtures of Soft Colloidal Spheres and Polymers*”,
XIXth Panhellenic Solid State Physics – Materials Science Conference, Thessaloniki, Greece, September 2003.
29. E. Stiakakis, G. Petekidis, D. Vlassopoulos, and J. Roovers,
“*Soft Colloid – Polymer Mixtures: Kinetic Transitions and Osmotic Interactions*”,
75th Annual Meeting of the Society of Rheology, Pittsburgh, PA, October 2003.
30. G. Petekidis, F. Ozon, D. Vlassopoulos, P.N. Pusey, M. Ballauff,
“*Rearrangements and Yielding in Concentrated Suspensions of Hard and Soft Colloids*”
Juelich Soft Matter Days 2003, Kerkrade, Holland, November 2003.
34. G. Petekidis, D. Vlassopoulos, and P. N. Pusey,
“*Yielding and Flow of Colloidal Glasses*”, invited
Colloidal Dispersions in External Fields (CODEF), Bonn, Germany, March-April 2004.
35. G. Petekidis, D. Vlassopoulos, P.N. Pusey and M. Ballauff
“*Rheology and Dynamics in Glasses of Hard and Soft Colloids*”,
Colloidal Dispersions in External Fields (CODEF), Bonn, Germany, March-April 2004.
36. G. Petekidis, E. Stiakakis, D. Vlassopoulos, J. Roovers, H. Iatrou, N. Hadjichristidis and C. N. Likos

- “Depletion attraction in mixtures of multiarm stars and linear polymers in solution”*
Colloidal Dispersions in External Fields (CODEF), Bonn, Germany, March-April 2004.
37. G. Petekidis, V. Carrier, F. Ozon, D. Vlassopoulos, P. N. Pusey and M. Ballauff,
“Rearrangements and Yielding in Glasses of Hard and Soft Colloids”,
European Colloid and Interface Science Conference, ECIS04, Almeria, Spain, September 2004.
38. E. Stiakakis, G. Petekidis, D. Vlassopoulos, C. N. Likos, J. Roovers, H. Iatrou and N. Hadjichristidis
“Depletion attraction in mixtures of multiarm stars and linear polymers in solution, oral
European Colloid and Interface Science Conference, ECIS04, Almeria, Spain, September 2004.
39. D. Vlassopoulos, G. Petekidis, M.E. Hegelson, N.J. Wagner, S. Rogers, P. Callaghan
Yielding Mechanisms in Colloidal Glasses, oral
5th International Meeting of the Hellenic Society of Rheology (HSR 2007), Rhodes, July 2007
40. N. Koumakis and G. Petekidis
Rheology and microscopic rearrangements of colloidal glasses and shear induced crystals oral
5th International Meeting of the Hellenic Society of Rheology (HSR 2007), Rhodes, July 2007
41. N. Koumakis, G. Petekidis, D. Vlassopoulos, K. Pham, S.U. Egelhaaf, W.C.K. Poon and P.N. Pusey,
Rheology of Attractive hard sphere glasses and gels oral
5th International Meeting of the Hellenic Society of Rheology (HSR 2007), Rhodes, July 2007
42. C. Christopoulou, G. Petekidis, D. Vlassopoulos,
Ageing and Yielding in a soft colloidal glass. oral
5th International Meeting of the Hellenic Society of Rheology (HSR 2007), Rhodes, July 2007
43. E. van Ruymbeke, A. Pamvouoglou, D. Vlassopoulos, G. Petekidis, G. Mountrichas, S. Pispas
Viscoelastic Response of Micelles with Chemically Cross-linked Cores, oral
Annual Panhellenic Conference on Solid State Physics and Materials Science, Athens, 22 September 2007
44. V. N. Michailidou, G. Petekidis, J. K. G. Dhont and P. R. Lang
“Dynamics of Hard Spheres close a wall as studied by Evanescent Wave Dynamic Light Scattering”
International Soft Matter Conference 2007, Aachen, Germany, 1-4 October 2007
45. G. Petekidis, C. Christopoulou, N. Koumakis, A. Le Grand, D. Vlassopoulos, A. Wittemann and M. Ballauff
“Effects of inter-particle interactions on the nonlinear rheology and ageing of colloidal glasses”
International Soft Matter Conference 2007, Aachen, Germany, 1-4 October 2007
46. A. Le Grand, G. Petekidis, A. Wittemann, M. Ballauff
“Non-linear rheology and ageing of hard and soft colloidal glasses”
Society of Rheology 79th Annual Meeting, Salt Lake City, USA, 7-11 October 2007.
47. C. Christopoulou, A. Le Grand, G. Petekidis and D. Vlassopoulos
“A phenomenological classification of colloidal glasses based on their yielding”
XVth International Congress on Rheology, Monterey, California, USA, August 3-8, 2008
48. N. Koumakis and G. Petekidis
“Rheological transitions in colloid-polymer mixtures: from glass to gel”
XVth International Congress on Rheology, Monterey, California, USA, August 3-8, 2008
49. R. Besseling, P. Ballesta, W.C.K. Poon, L. Isa and G. Petekidis
“Imaging slip and shear banding in the rheology of hard-sphere colloidal glasses”
XVth International Congress on Rheology, Monterey, California, USA, August 3-8, 2008
50. V. N. Michailidou and G. Petekidis
“Dynamics of Hard Spheres close to a hard wall as studied by Evanescent Wave Dynamic Light Scattering”
7th Hellenic Polymer Conference, Ioannina, September 28-October 1, 2008.
51. A. Pamvouksoglou, G. Petekidis and Ohno
“Dynamics and rheology in suspensions and glasses of soft colloids.”
7th Hellenic Polymer Conference, Ioannina, September 28-October 1, 2008.
52. E. Stiakakis, A. Wilk, D. Vlassopoulos and G. Petekidis
“Slow Dynamics and Ageing in concentrated multiarm Stars: New routes to equilibrium?”
Julich Soft Matter days, Bonn, Germany, 2008.
53. N. Koumakis, E. Stiakakis and G. Petekidis
“Rheology, Slow Dynamics and Ageing of colloid-polymer glasses and gels”
Julich Soft Matter Days, Bonn, Germany, 10-13 November, 2009.
54. N. Koumakis, G. Petekidis and J. Brady
“Yielding of colloidal glasses and gels”
Gordon Conference, 21-25 February 2010, Ventura, California, USA