Curriculum Vitae

24-Nov-18

GEORGE PETEKIDIS

Biography:
Nationality: Greek,
Born in Thessaloniki, Greece, 9 March 1967
Marital status: married, with 2 sons
Languages: Greek, English

Institutional Address:
Department of Materials Science and Technology, University of Crete.
&
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:

7/2017 - : Full Professor, Department of Materials Science and Technology, University of Crete.
12/2011 - 7/2017: 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)

7) Graduate-level course, Introduction to Soft Matter Science, (Spring semester, 2011 and 2012) (with M.Vamvakaki, G. Fytas and D.Vlassopoulos)

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)

Institute of Physics School (UK IoP Liquids and Complex Fluids),

Series of lectures on Rheology of Colloidal Systems, 9-12 April 2017, Durham, UK

Student supervising:

1) Nikos Koundourakis, (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 Donnely (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) Manolis Stiakakis, (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) Stelios Makrakis, (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) Panagiotis Voudouris (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, *"Ageing and flow in glassy colloidal systems"*, Department of Materials Science and Technology, University of Crete, (co-supervised with Prof. D. Vlassopoulos),

8) Andreas Pamvouksoglou (2005-2006) Diploma work, *"Viscolelastic 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) PhD thesis, *"Mechanisms of Yielding and Flow in Colloidal Glasses, Crystals and Gels"* Department of Materials Science and Technology, University of Crete,

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 - 2014), PhD thesis

12) Esmaeel Moghimi (2012-2016) PhD thesis *"Microscopic Dynamics and Rheology of Colloidal Gels"* Department of Materials Science and Technology, University of Crete

13) Alan Ranjit Jacob (2012- 2016) PhD thesis, *"Yielding and particle rearrangements in hard sphere glasses"* Department of Materials Science and Technology, University of Crete
14) Panagiota Bogri (2013-2018) PhD thesis, *"Dynamics of concentrated colloidal suspensions"* Department of Materials Science and Technology, University of Crete
15) Petros Hatzakis, (2014-2015) Master's thesis Department of Materials Science and Technology, University of Crete, *"Development and Optimization of a High-Resolution Small Angle Light Scattering setup for Rheological applications"* (co-supervised with Prof. D. Papazoglou)
16) Thanasis Athanassiou, (2015-2017) Master's thesis "*Probing Viscoelastic Properties of Complex Fluids by Piezo-Rheometry in the Intermediate Frequency Range" Department* of Materials Science and Technology, University of Crete, (co-supervised with Prof. D. Vlassopoulos)
17) Mohandas (2016-), PhD thesis, Department of Materials Science and Technology, University of Crete

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 -2011) *"Ageing and rheology of star-like micelle glasses"* (with Dr. J. Stellbrink, FJZ, Juelich)
7) Dr. Sylvain Mazoyer (12/2009-10/2010) *"Microscopic rearrangements in colloidal glasses, gels and polymer-colloid nanocomposites by LS echo"*
8) Dr. Ahmed Abdellali (4/2012- 4/2013) *"Ageing and rheology of Hard sphere glasses"*
9) Dr. Ricardo Andrade (10/2014 - 10/2015) *"Shear and extensional rheology of shear thickening suspensions"*
10) Dr. Aris Papagiannopoulos (3/2015- 9/2015) "*Passive and active microrheology in colloidal glasses and gels"*
11) Dr. Apostolos Evagelopoulos (3/2015- 8/2015) *"Brownian Dynamics Simulations in Binary colloidal mixtures"*
12) Dr. Ravi Kumar Pujala (11/2014 – 10/2015)*"Light scattering echo in colloidal glasses and crystals"*
13) Dr. Andreas Pamvouksoglou (11/2014 – 10/2015) *"Slow dynamics and rheology of soft particles"*

Meeting's Organization:
- *From Hard to Ultrasoft 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*, Hersonisos Crete, June 2008.
- *Playing colloidal Mikado II*, Luxembourg, 2011 (member of the organizing committee)
- *6th International Meeting, Hellenic Society of Rheology*, 28-29 June Athens, 2011 (member of the organizing committee)
- *7th International Meeting, Hellenic Society of Rheology, HSR14*, and focused Meeting *"Attractive Colloids & Gels"* 7 - 10 July 2014, Heraklion, Crete, Greece (Chair)
- *The XVIIth International Congress on Rhelogy (ICR2016)* Aug. 8 - 13, 2016, Kyoto, Japan, Suspensions, Colloids, and Granular Materials, Session organizer with Lynden Archer (Cornell University, USA) and Michel Cloitre (ESPCI, France)

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)
- **Friedrich Wilhelm Bessel Research Award (October 2016) Alexander von Humboldt Foundation, Germany**

Visits/appointments to institutions abroad:
- November-December 1995: Penn. State University, USA, Prof. S. Kumar,
- 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
- March-April, Octomber-November 2017, on sabbatical absence, Visiting Professor, Heinrich-Heine University Düsseldorf, Germany
- January-February, 2018, Invited member, Kavli Institute of Theoretical Physics (KITP program: Physics of Dense suspension), Santa Barbara, USA

Reviewing and Editorial Activities:

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

Guest Editor, Special Issue on Colloidal Gels, J. Rheology, 2014

Participation in Committees:

- Member of Ph.D and M.S. theses committees in University of Crete and or external referee in the University of Edinburgh.
- Member of Faculty promotion and selection committees in the Department of Materials Science and Technology of University of Crete.
- Member of the "Metzner" Award committee of the Society of Rheology (US) (2014-2017), president (2016-2017)

Administration:

- Safety officer for the Materials Division of IESL-FORTH (2004-2014)
- Member of the under graduate program committee, Dept. of Materials Science & Technology, Univ. of Crete (2011-2013).
- Member of the web-site committee, Dept. of Materials Science & Technology, Univ. of Crete (2011-2013).
- Member of the Departmental Budget Committee, Dept. of Materials Science & Technology, Univ. of Crete (2011-2013).
- *Vice chairman* of the Department of Materials Science & Technology, University of Crete (February 2013- September 2013 and Sept 2016 -)
- *Chairman of the Department of Materials Science & Technology*, University of Crete (September 2013 – August 2016).
- *President of the Hellenic Society of Rheology* (2014-2017)

Professional Affiliations:

Member of Hellenic Physical Society (1989 - present),
American Physical Society (American Institute of Physics) (1995-)
The Society of Rheology (American Institute of Physics) (2002-)
Hellenic Society of Rheology (2003-) (president 2014 - 2017),
Marie Curie Fellows (2000-)

Participation in research programs - funding:

(total so far as PI: ~2.3 million euro)

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 Laboratore 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', 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, *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. *budget 623K Euro*

12. January 2011: FP7-Infrastructure (FP7–262348) "*European Soft Matter Infrastructure" ESMI* A 4-year European Union funding. *budget 940K Euro*

13. Thales 2011: "*Complex Visco-elastic and Visco-plastic materials: From Microscopic Structure and Dynamics to Macroscopic Flow", "Covisco", total budget 540K Euro* ***(Principal Investigator)*** 4-year Greek funding program (2012-2015)

14. Aristeia II , 2013: *"Relating the Microscopic structure and dynamics to the macroscopic flow of colloidal Soft matter"* "MicroSoft" *total budget 398K Euro* ***(Principal Investigator)*** 2-year Greek funding program (2014-2015)

15. FP-7 SEC-2013 "Lightweight, flexible and smart protective clothing for law enforcement personnel", "SmartPro" *local budget 47K Euro (2014-2017)*

16. Horizon 2020, Initial Training Network '*DiStruc' 'Directed Structure at the Meso-Scale Experiments, Theory and Simulations on Colloidal Rods' total budget 498K Euro* ***(Local Principal Investigator)*** *(2015-2018)*

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, optical tweezers for the study of soft matter out of equilibrium.

Research tools:

- 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
- Optical and Confocal Microscopy
- Optical Tweezers
- Brownian Dynamics simulations

Research 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) Laboratore Matière Molle et Chimie, ESPCI, CNRS, Paris, France (Dr. Michel Cloitre)
5) Institut für Theoretische Physik II, Heinrich-Heine-Universität Düsseldorf, Germany, (Prof. S. U. Egelhaaf)
6) Weiche Materie/IFF, Forschungszentrum Jülich, Germany (Prof. Dr. J. K. G. Dhont, Dr. P. Lang, Dr. P. Lettinga)
7) Neutron Scattering, Forschungszentrum Jülich, Germany (Dr. J. Stellbrink)
8) Molecular Biophysics Lab, Institute of Physics, A. Mickiewicz University, Poznan, Poland, (Dr. J. Gapinski)
9) School of Engineering and Electronics, University of Edinburgh, UK (Dr. V. Koutsos)
10) Department of Chemical Engineering, CALTECH, USA (Prof. J. Brady)
11) Department of Physics, University of Konstanz, (Prof. M. Fuchs)
12) Chemical and Biomolecular Engineering, Cornell University, (Prof. R.N. Zia)

PUBLICATIONS IN REFEREED JOURNALS

Non self-citations: 2651, h-index=31 (Web of Science), *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, a,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. Seghrouschni, 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"

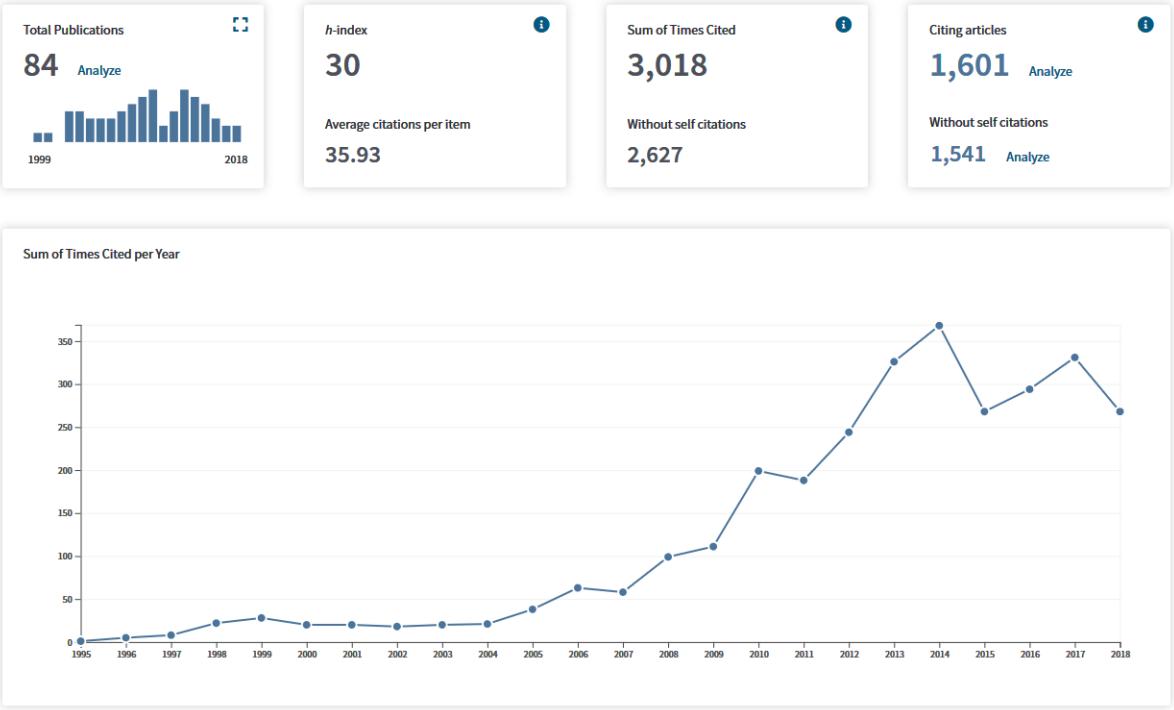
J. Rheology, 52, 649 **(2008)**
34. P. Voudouris, B. Loppinet* and G. Petekidis*
"Particle Dynamics within a Wetting Layer in a Colloid-Polymer Mixture"
Phys. Rev. E, 77, 051402 **(2008)**
35. N. Koumakis, A.B. Schofield and G. Petekidis*
"Effects of shear induced crystallization on the rheology of Hard 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. P. Ballesta, G. Petekidis, L. Isa, W. C. K. Poon and R. Besseling
"Wall Slip and Flow of concentrated Hard-sphere colloidal suspensions"
J. Rheology 56(5), 1005-1037 **(2012)**

53. 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)**
54. 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*
55. 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"
J. Phys. Cond. Matt. 24, 464104 **(2012)**
56. B. Derakhshandeh, G. Petekidis, W.Y. Hamad and S.G. Hatzikiriakos,
"Ageing, Yielding and Rheology of Nanocrystalline Cellulose Suspensions"
J. Rheol. 57, 131 **(2013)**
57. A. Poulos, J. Stellbrink and G. Petekidis*
"Flow of concentrated solutions of starlike micelles under large amplitude oscillatory rheology"
Rheologica Acta 52, 785-800, **(2013)**
58. P. Ballesta, N. Koumakis, R. Besseling, W. C. K. Poon, and G. Petekidis*,
"Slip of gel in colloidal-polymer mixtures under shear"
Soft Matter 9, 3237, **(2013)**
59. T. Sentjabrskaja, E. Babaliari, J. Hendricks, M. Laurati, G. Petekidis and S.U. Egelhaaf
"Yielding of glasses formed by dynamically asymmetric binary colloidal mixtures"
Soft Matter**,** 9 (17), 4524 - 4533 **(2013)**
60. N. Koumakis, J. F. Brady and G. Petekidis*
"Complex oscillatory yielding of model hard sphere glasses"
Phys. Rev. Lett. 110, 178301 **(2013)**
61. M. Ballauff, J. M. Brader, M. Fuchs, S. U. Egelhaaf, J. Horbach, M. Kruger, N. Koumakis, M. Laurati, K. Mutch, G. Petekidis, M. Siebenburger, Th. Voigtmann, and J. Zausch
"Residual Stresses in Glasses"
Phys. Rev. Lett. 110, 215701, **(2013)**
62. V. N. Michailidou, J. Swan, J.F. Brady and G. Petekidis*
"Anisotropic Diffusion of Concentrated Hard-Sphere Colloids near a Hard Wall studied by Evanescent Wave Dynamic Light Scattering"
J. Chem. Phys. 139, 164905, **(2013)**
63. M. Laurati*, S.U. Egelhaaf and G. Petekidis
"Plastic rearrangements of colloidal gels investigated by LAOS and Echo-DWS"
J. Rheology 58, 1395, **(2014)**
64. J. K. Yeganeh, F. Goharpey, E. Moghimi, G. Petekidis, and R. Foudazi
"Controlling the Kinetics of Viscoelastic Phase Separation through Self-Assembly of Spherical Nanoparticles or Block Copolymers"
Soft Matter 10, 9270-9280, **(2014)**
65. A. Poulos*, F. Renou, A. R. Jacob, N. Koumakis and G. Petekidis
"Large amplitude oscillatory shear (LAOS) in model colloidal suspensions and glasses: Frequency dependence and resonance effects"
Rheologica Acta 54, 715-724, **(2015)**
66. N. Koumakis*, E. Moghimi, R. Besseling, W. C. K. Poon, J.F. Brady and G. Petekidis*
"Tuning colloidal gels by shear"
Soft Matter 11, 4640-4648, **(2015)**
67. A. R. Jacob, A. S. Poulos, S. Kim, J. Vermant and G. Petekidis*
"Convective Cage Release in model Hard Sphere glasses"
Phys. Rev. Lett. 115, 218301, **(2015)**
68. J. K. Yeganeh, F. Goharpey, E. Moghimi, G. Petekidis and R. Foudazi
"Manipulating the Kinetics and Mechanism of Phase Separation in Dynamically Asymmetric LCST Blends by Nanoparticles"
Phys. Chem. Chem. Phys**.** 17**,** 27446-27461, **(2015)**
69. P. Ballesta* and G. Petekidis
"Creep and Ageing of Hard Sphere Glasses under constant Stress"
Phys. Rev. E, 93, 042613 **(2016)**
70. N. Koumakis*, J. F. Brady and G. Petekidis

"Amorphous and ordered states of concentrated hard spheres under oscillatory shear"
J. Non-Newtonian Fluid Mechanics, 233, 119-132, **(2016)**
71. N. Koumakis, M. Laurati, A.R. Jacob. K. Mutch, A. Abdellali, A. B. Schofield, S.U. Egelhaaf, J. F. Brady and G. Petekidis *"Start-up Shear of Concentrated Colloidal Hard Spheres: Stresses, Dynamics and Structure"*
J. Rheology 60, 603, **(2016)**
72. E. Moghimi A.R. Jacob, N. Koumakis and G. Petekidis
"Colloidal Gels Tuned by Oscillatory Shear"
Soft Matter, 13, 2371-2383, **(2017)**
73. E. Moghimi, A. R. Jacob and G. Petekidis
"Residual Stresses in Colloidal Gels"
Soft Matter, 13, 7824-7833, **(2017)**
74. Tatjana Sentjabrskaja, Jan Hendricks, Alan R. Jacob, George Petekidis, Stefan U Egelhaaf and Marco Laurati
"Binary colloidal Glasses under transient stress and strain controlled shear"
J. Rheology, 62, 149-159, **(2018)**
75. Yogesh M. Joshi and George Petekidis
"Yield stress fluids and aging" Invited Review
Rheologica Acta, 57, 521-549 **(2018)**
76. Tatjana Sentjabrskaja, Alan R Jacob, Stefan U Egelhaaf, George Petekidis, Thomas Voigtmann and Marco Laurati
"Binary Colloidal Glasses: Linear viscoelasticity and its link to local structure and dynamics"
Submitted to Soft Matter **(2018)**
77. Eleftheria Babaliari, George Petekidis and Maria Chatzinikolaidou
"A precisely flow-controlled microfluidic system for enhanced pre-osteoblastic cell response for bone tissue engineering"
Bioengineering, 5, 66 **(2018)**
78. E. Moghimi, J. Vermant and G. Petekidis
"**Orthogonal superposition rheometry of model colloidal glasses with short-ranged attractions**"
Submitted to J. Rheology

In preparation (should be submitted the next 6 months):
1) A. S. Poulos, A. R. Jacob, S. Kim, J. Stellbrink, J. Vermant, S. Semenov and G. Petekidis
"Orthogonal Superposition rheometry of concentrated solutions of star-like micelles"
Target journal: J. Rheology
2) A. Pamvouxoglou, P. Bogri, G. Naegele, K. Ohno and G. Petekidis
"Structure and dynamics of concentrated suspensions of soft core-shell colloids in the fluid regime"
Target journal: J. Chem. Phys.
3) E. Moghimi and G. Petekidis
"Yielding of repulsive and attractive colloidal glasses during start-up shear flow"
Target journal: J. Rheology
4) Ricardo J. E. Andrade, Alan Jacob, Francisco J. Galindo-Rosales, Laura Campo-Deaño, Qian Huang, Ole Hassager, George Petekidis *"Dilatancy of concentrated hard sphere suspensions under shear and extensional flow"*
Target journal: J. Rheology
5) P. Chatzakis, D. Papazoglou and G. Petekidis
"A Multimodal Light Scattering Apparatus for Rheological Applications"
Target journal: Rev. Scient. Instruments
6) L. Johnson, R. Zia, E. Moghimi and G. Petekidis
"Influence of structure on the linear response rheology of Colloidal Gels"
Target journal: J. Rheology
7) T. Athanasiou, D. Vlassopoulos and G. Petekidis
"High-frequency rheometry of polymer melts and colloidal glasses: validating the loss angle measuring loop"
Target journal: Rheological Acta

Editorial type:
1. General discussion**,** Faraday Discussion, Volume 123, Pages: 303-322, (2003)
2. G. Petekidis "Rheology of Colloidal Gels", J. Rheology **58**, 1085, (2014)



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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.
7. N. Koumakis, P. Ballesta, R. Besseling, W. C. K. Poon, J. F. Brady and G. Petekidis *"Colloidal gels under shear: Strain rate effects"* AIP Conf. Proc. 1518, 365 (2013); doi: 10.1063/1.4794598

CONFERENCE PRESENTATIONS (oral/presenter, 17 Invited talks)

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 Condenced 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 Condenced 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 83nd 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 83nd 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
37. N. Koumakis, M. Laurati, S. U. Egelhaaf,J. F. Brady and G. Petekidis
"Yielding of hard sphere glasses during start-up shear"
The XVIth International Congress on Rheology, August 5-10, 2012, Lisbon, Portugal
38. N. Koumakis and G. Petekidis
"Colloidal Gels under shear"
Micro-structure, setting and Aging of Cement: From Soft Matter Physics to sustainable materials, Monte Verita, Switzerland, 12-16 August 2012
39. G. Petekidis **Invited talk**

"Dynamics, rheology and ageing in concentrated colloidal gel"
XI International Conference on Nanostructured Materials, Rhodes, 26-31 August 2012
40. G. Petekidis, **Invited talk**
"Flow of colloidal glasses and gels"
Workshop in Rouen, France September, 2012
41. N. Koumakis and G. Petekidis,
"*Altering the properties of colloidal gels by shear"*
4th International Symposium on slow dynamics in complex systems, 2-7 December, Sendai, Japan
42. G. Petekidis, **Invited talk**
"Rheology and dynamics of colloidal systems by combined LS-echo and rheometry under oscillatory shear"
In Situ Rheology, 24-25 January 2013, DESY Hamburg, Germany
43. N. Koumakis, J. F. Brady and G. Petekidis,
"Complex yielding of simple hard sphere glasses under oscillatory shear",
Society of Rheology 84th Annual Meeting, 10-14 February 2013, Pasadena, USA
44. N. Koumakis, R. Besseling, W. C. K. Poon, J. F. Brady, G. Petekidis,
"*Structural and mechanical manipulation of colloidal gels by shear",*
Society of Rheology 84th Annual Meeting, 10-14 February 2013, Pasadena, USA
45. G. Petekidis, **Invited talk**
"Relating the structure and dynamics with the rheology of Hard sphere glasses in oscillatory and steady shear"
7th International Discussion Meeting on Relaxations in Complex Systems 21-26, July, 2013 Barcelona, Spain
46. N. Koumakis, J. F. Brady and G. Petekidis, **Invited talk**
"Stresses and particle dynamics in hard sphere crystals under oscillatory shear"
SES 50th Annual Technical Meeting and ASME-AMD Annual Summer Meeting, 28–31 July, 2013, Brown University, USA
47. G. Petekidis
"Links of the microscopic structure and dynamics with the rheology in concentrated colloidal suspensions under shear."
International Soft Matter Conference 2013, September 15-19, 2013, Rome, Italy
48. N. Koumakis, J. F. Brady and G. Petekidis,
"Shear induced diffusion in colloidal glasses"
Society of Rheology 85th Annual Meeting, 13-17 October 2013, Montreal, Canada
49. N. Koumakis, J. F. Brady and G. Petekidis,
"Concentrated hard sphere crystals under oscillatory shear: Stresses and dynamics" Society of Rheology 85th Annual Meeting, 13-17 October 2013, Montreal, Canada
50. N. Koumakis, A. Jacob and G. Petekidis
"Rheology, structure and dynamics of hard sphere glasses during start-up and shear cessation", Annual European Society of Rheology Meeting, 8-11 April 2014, Karlsruhe, Germany
51. E. Moghimi, N. Koumakis and G. Petekidis
"Manipulation of the mechanical properties of colloidal gels by steady and oscillatory shear" Annual European Society of Rheology Meeting, 8-11 April 2014, Karlsruhe, Germany
52. Alan R. Jacob, Andreas Poulos, Sunhyung Kim, Jan Vermant and George Petekidis,
"Orthogonal superposition rheometry of colloidal glasses" Society of Rheology 86th Annual Meeting, 5-9 October 2014**,** Philadelphia, Pennsylvania, USA
53. E. Moghimi**,** N. Koumakis and G. Petekidis
"Manipulation of the mechanical properties of colloidal gels by steady and oscillatory shear"
Society of Rheology 86th Annual Meeting, 5-9 October 2014**,** Philadelphia, Pennsylvania, USA
54. G. Petekidis
"Flow of colloidal glasses and gels: From microscopic structure and dynamics to rheology"
10th Hellenic Polymer Society Conference, 4-6 December 2014, Patras, Greece, **Invited talk**
55. E. Moghimi and G. Petekidis
"Residual Stresses in colloidal gels"
Annual European Society of Rheology Meeting, 14-17 April 2015, Nantes, France
56. G. Petekidis
"Hard-sphere suspensions under shear: From Brownian to non-Brownian response."
"Experimental flowing matter" WG1 COST meeting, Ankara, Turkey, 23-24 April 2015, **Invited talk**
57. G. Petekidis
"Structure and Dynamics in Sheared Colloidal Glasses"
SoftComp Topical Workshop *"Dense Suspensions Flow"*, Edinburgh, 1-3 June 2015, **Invited talk**
58. G. Petekidis
"Flow of colloidal glasses: Correlating structure, dynamics and rheology"

Special Symposium in Honor of Prof. Roger Tanner, Samos, 29 June – 2 July 2015, **Invited talk**

59. Alan R. Jacob, Andreas S. Poulos, George Petekidis, Sunhyung Kim, Jan Vermant
"Convective Cage Release in Model Colloidal Glasses"
Society of Rheology 87th Annual Meeting, 11-15 October 2015**,** Baltimore, Maryland, USA

60. E. Moghimi and G. Petekidis
"Residual Stresses in colloidal gels"
Society of Rheology 87th Annual Meeting, 11-15 October 2015**,** Baltimore, Maryland, USA

61. G. Petekidis
"Microscopic Mechanisms in Yielding of Attractive Colloidal Glasses during Start-up Shear", XVIIth International Congress on Rheology (ICR2016) August 8 - 13, 2016, Kyoto, Japan

62. Panagiota Bogri, Andreas Pamvouxoglou and George Petekidis
"Dynamics of concentrated suspensions of soft semi-permeable colloids"
Conference of the European Colloid and Interface Society, ECIS 2016, 4-9 September 2016, Rome, Italy

63. G. Petekidis
"Flow of non-equilibrium states of attractive colloids: Insights from experiments and computer simulations"
88th Annual Meeting of the Society of Rheology, February 12-16, 2017 Tampa, Florida, USA

64. G. Petekidis,
"Dynamics and rheology of concentrated suspensions and glasses of soft colloids", Bridging the Scales in Glasses III, 16-17 February 2017, Mainz, Germany

65. G. Petekidis,
"Role of attractions in the rheology and internal relaxations of colloidal glasses at rest and under shear"
CECAM workshop on Rheology of Gel Networks, Lyon, France, 21-23 June, 2017, **Invited talk**

66. Mohandas and George Petekidis
"Flow of colloidal gels and log rolling structures of rod-like colloids", Society of Rheology 89th Annual Meeting, October 8-12, 2017, Denver, Colorado, USA

67. G. Petekidis
"Complex yielding in frustrated states of attractive colloids"
XLVII Winter Meeting on Statistical Physics, Puebla, Mexico, 7-10 January 2018, **Invited talk**

68. G. Petekidis
"Non-linear mechanics of colloidal gels and attractive glasses"
KITP conference: Non-linear mechanics and rheology of dense suspensions: nanoscale structure to macroscopic behaviour, Santa Barbara, USA, 22-26 January 2018, **Invited talk**

69. E. Moghimi and G. Petekidis
"Yielding mechanisms and internal relaxations in sheared attractive glasses"
Annual European Society of Rheology Meeting, 17-20 April 2018, Sorento, Italy

70. E. Moghimi and G. Petekidis
"Microscopic origin of flow in attractive colloidal glasses under shear"
Conference of the European Colloid and Interface Society, ECIS 2018, 2-7 September 2016, Ljubljana, Slovenia

71. George Petekidis, Tatjana Sentjabrskaja Alan R Jacob, Stefan U Egelhaaf, Marco Laurati and Thomas Voigtmann
"Binary Colloidal Glasses: Linear Viscoelasticity and its Link to Local Structure and Dynamics"
Society of Rheology 90th Annual Meeting, October 14-18, 2018, Houston, Texas, 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
19. G. Petekidis, *"Flow of colloidal glasses and gels"*, Kyoto University, Institute for Chemical Research, Japan, November 2012
20. G. Petekidis, *"Using Colloids to study the Physics of the Mesoscopic world", Department of Physics, University of Crete,* February 2013
21. G. Petekidis, *"Rheology and dynamics of colloidal systems by combined LS-echo and rheometry under oscillatory shear"* Malvern, web-seminar (under NDA) March 2013.
22. G. Petekidis. *"Rheology and Dynamics of colloidal glasses and gels"* MPIP, Mainz, Germany, October 2013
23. G. Petekidis, *"How do colloidal glasses and gels flow"* Chemical & Biomolecular Engineering, Cornell University, USA, October 2014
24. G. Petekidis, *"Flow of concentrated colloids and glasses: Links between microscopic structure, dynamics and rheology"*
Department of Physics, Georgetown University, USA, October, 2014
25. G. Petekidis, *"Rheology and internal relaxations of sheared colloidal glasses and gels*", Department of Chemical and Biomolecular Engineering, North Carolina State University, USA, October 2017.
26. G. Petekidis, *"Flow of concentrated colloids and glasses: Links between microscopic structure, dynamics and rheology"*
Department of Chemical Engineering, University of Delaware, USA, October, 2017
27. G. Petekidis, *"Complex yielding in frustrated states of attractive colloids*", Forschungszentrum Julich, Germany, November 2017
28. G. Petekidis, *"Rheology of colloidal gels and attractive glasses"* Chemical Engineering Department, Katholic University of Leuven, Belgium, December, 2017
29. G. Petekidis, *"Colloidal systems: Varying interactions, shapes and linking structure, dynamics and flow properties"*
División de Ciencias e Ingenierías, Universidad de Guanajuato, Leon, Mexico, January, 2018
30. G. Petekidis, *"Complex yielding of non-ergodic states of attractive colloids"* Department of Chemical Engineering, Caltech, USA, February, 2018
31. G. Petekidis, *"Complex yielding and shear induced tuning of frustrated states of attractive colloids"* Department of Chemical Engineering, Stanford University, USA, February, 2018