

Curriculum Vitae

Dr. Panagiotis A. Klonos

Applications Physicist NTUA, MSc, PhD

Personal information

Nationality: Greek

Date of birth: 9th JULY 1982

Address: Heroon Polytechneiou 9, Zografou Campus, 15780, Athens, Greece

Telephone No: +30 210 7722974 Fax: +30 210 772 2932

e-mail address: pklonos@central.ntua.gr, pklonos@gmail.com (personal)

web: <http://dielectricsgroup.physics.ntua.gr/>

ResearcherID: M-2687-2016

Orcid-ID:  <http://orcid.org/0000-0001-7222-612X>

Academic studies

2016-2017 Postdoctoral research ‘*Various parameters affecting interfacial polymer properties in polymer nanocomposites*’, Dielectrics Research Group, Physics Department, NTUA.

2009–2015 Ph.D. *Interfacial interactions and molecular dynamics in organic-inorganic nanocomposite polymeric materials* in the Dielectrics Research Group, Department of Physics, National Technical University of Athens (NTUA), Greece.

2007-2009 M.Sc. Microsystems & Nanodevices, NTUA, Greece.

2000-2007 B.Sc. School of Applied Mathematical and Physical Sciences, NTUA, Greece.

Military services

Done in the 22nd Tank Squadron of the Hellenic Army in the period from 21/05/2013 to 21/02/2014.

Languages

Greek (mother tongue), English (Cambridge FCE)

Experimental Interests – Techniques

- Nanocomposite polymeric materials, molecular dynamics, polymer-filler interfacial interactions, hydration properties, glass transition, polymer crystallization, structure-properties relationships
- Broadband Dielectric Spectroscopy (BDS)
- Differential Scanning Calorimetry (DSC)
- Thermally Stimulated Depolarization Currents (TSDC)
- Equilibrium and Dynamic water Sorption Isotherms (ESI, DSI)

Published work consists of publications in international refereed scientific journals (**27** in total) and in refereed conference proceedings (**4** in total) and **1** book chapter. The published work has been cited **413** times (**123** non self-citations) giving h-index ***h*=14** (according to Google Scholar).

Participation in research projects

- i. IKYDA, 2008 – 2009, New organic/inorganic silica/polymer hybrids: synthesis and relaxation behavior, Programme for the promotion of the exchange and scientific cooperation between Greece and Germany, (cooperation NTUA - Leibniz Institut für Polymerforschung Dresden e.V. (IPF))
- ii. COMPOSITUM, 2009 – 2013, Hybrid nanocomposites and their applications, E.E., SP3-People, PIRSES-GA-2008-230790, (coordinator J. Skubiszewska-Zieba, University of Lublin, Poland).
- iii. NAPOLYNET, 2008 – 2011, Setting up research-intensive clusters across the EU on characterization of polymer nanostructures, E.E., FP7, CSA, project number 218331 (coordinator Cl. Silvestre, ICTP, CNR, Italy).
- iv. NANOBIOIMAT, 2014 – 2017, Nanostructured Biocompatible/Bioactive Materials, FP7 – PIRSES-GA-2013-612484., E.E., SP3-People (Coordinator A. Derylo-Marczewska, University of Lublin, Poland).
- v. HERACLEITUS II, Operational Program “Education and Lifelong Learning” of the National Strategic Reference Framework (NSRF).

Scientific Visits

1. 2009, November – Leibniz Institut für Polymerforschung (IPF), Dresden, Germany (IKYDA Project).
2. 2010, July-August – Institute of Surface Chemistry (NAS), Kiev, Ukraine (COMPOSITUM program).
3. 2010, November-December – Polymer Physics Group, University of Rostock, Rostock, Germany (NaPolyNet project).
4. 2011, May-July – Institute of Surface Chemistry (NAS), Kiev, Ukraine (COMPOSITUM program).
5. 2014, July-September – Institute of Surface Chemistry (NAS), Kiev, Ukraine (NANOBIOIMAT Program).
6. 2015, April-June – IOFFE Physical-Technical Institute of the Russian Academy of Sciences, St. Petersburg, Russian Federation (NANOBIOIMAT Program)

Theses

1. P. Klonos, *Hydration and molecular mobility studies in nanocomposite hydrogels*, Diploma Thesis supervised by Prof. C. Christodoulides, National Technical University of Athens (Greece 2007).
2. P. Klonos, *Molecular dynamics and phase transitions in polymers adsorbed onto nanooxide particles*, MSc Thesis supervised by Prof. P. Pissis, National Technical University of Athens (Greece 2009).
3. P. Klonos, *Interfacial interactions and molecular dynamics in organic-inorganic nanocomposite polymeric materials*, PhD Thesis (in English) supervised by Prof. P. Pissis, National Technical University of Athens (Greece 2015).

Educational and other activities

- o Co-supervision of 6 MSc and 5 BSc theses of students of School of Applied Mathematical and Physical Sciences and of 2 MSc Programs (Physics and Technological Applications, Microsystems and Nanodevices) at the NTUA.

- Assistant teaching of experimental exercises to undergraduate (physics) and graduate students (advanced characterization methods of materials) of the National Technical University of Athens.
- Member of the organization committee: Demonstration Course – Characterization Methodology and Tools for New Polymer Nanostructured Materials, 13-15 May 2009, Athens, Greece. Under the auspices of NaPolyNet.

Scholarship - Prizes

- The research of PhD thesis was co-financed by the National Strategic Reference Framework (NSRF) - Research Funding Program: Heracleitus II.
- Seven (7) prizes for original work publications given by the Thomaides Foundation.

Seminars – Short courses

- *Innovation and Entrepreneurship*, In the frames of ‘Science and Technology Festival’, 21 November and 5 December, 2008, N.C.S.R. Democritos, Athens, Greece.
- *Recent Advances in Polymer Nanomaterials for Food*, Training School, COST Action: FA0904, 3 – 5 November 2011, St’s Cyril and Methodius University, Skopje, F.Y.R.O.M.
- *New materials for biomedical applications*, Workshop, in the frames of NARGEL Program, 6 April 2015, National Technical University of Athens, Athens, Greece.
- *Polymer Nanocomposites: Synthesis, Properties, Modeling, Applications*, Workshop in the frames of ARISTEIA Project, 16 – 17 June 2015, National Technical University of Athens, Athens, Greece.
- *Structural investigation and molecular dynamics of nanostructured polymeric materials*, GREEK-GERMAN workshop 2015, in the frame of the project "Hochschulpartnerschaften mit Griechenland" by Deutscher Akademischer Austausch Dienst, DAAD, 28 September – 01 October 2015, National Technical University of Athens, Athens, Greece.

Reviewer for international scientific journals

Macromolecules (ACS)	European Polymer Journal (Elsevier)
Journal of Physical Chemistry (ACS)	Applied Surface Science (Elsevier)
Industrial and Engineering Chemistry Research (ACS)	Microelectronic Engineering (Elsevier)
Journal of Applied Polymer Science (Wiley)	Journal of Polymer Engineering (De Gruyter)
Advances in Polymer Technology (Wiley)	Nanoscale Research Letters (Springer)
Express Polymer Letters	Adsorption Science and Technology

Book Chapter

P. Klonos, A. Kyritsis, P. Pissis, *Interfacial effects in polymer nanocomposites studied by thermal and dielectric techniques*, Chapter 6 in *Interface/interphase in polymer nanocomposites*, A.N. Netravali, K.L. Mittal (Eds.), Series: *Adhesion and Adhesives: Fundamental and Applied Aspects*, WILEY - Scrivener Publishing LLC, 2016, pp 191-248. (ISBN: 9781119184911, doi: 10.1002/9781119185093.ch6)

Publications in refereed scientific journals

1. A. Stathopoulos, P. Klonos, A. Kyritsis, P. Pissis, C. Christodoulides, J.C.R. Hernandez, M.M. Pradas, J.L.G. Ribelles. Water sorption and polymer dynamics in hybrid Poly(2-hydroxyethyl-co-ethyl acrylate)/silica hydrogels. **European Polymer Journal** 46 (2010) 101-111. <http://dx.doi.org/10.1016/j.eurpolymj.2009.10.014>.
2. P. Klonos, P. Pissis, V.M. Gun'ko, A. Kyritsis, N.V. Guzenko, E.M. Pakhlov, V.I. Zarko, W. Janusz, J. Skubiszewska-Zieba, R. Lebeda. Interaction of poly(ethylene glycol) with fumed silica and alumina/silica/titania. **Colloids and Surfaces A** 360 (2010) 220-231. <http://dx.doi.org/10.1016/j.colsurfa.2010.03.00>.
3. P. Klonos, A. Panagopoulou, L. Bokobza, A. Kyritsis, V. Peoglos, P. Pissis. Comparative studies on effects of silica and titania nanoparticles on crystallization and complex segmental dynamics in poly(dimethylsiloxane). **Polymer** 51 (2010) 5490-5499. <http://dx.doi.org/10.1016/j.polymer.2010.09.054>.
4. P. Klonos, A. Panagopoulou, A. Kyritsis, L. Bokobza, P. Pissis. Dielectric studies of segmental dynamics in poly(dimethylsiloxane)/titania nanocomposites. **Journal of Non-Crystalline Solids** 357 (2011) 610-614. <http://dx.doi.org/10.1016/j.jnoncrysol.2010.06.058>.
5. Yu. Bolbukh, V. Tertykh, P. Klonos, P. Pissis. DSC study of polyhydroxyethylmethacrylate filled with modified silicas. **Journal of Thermal Analysis and Calorimetry** 108 (2012) 1111-1119. <http://dx.doi.org/10.1007/s10973-011-2030-7>.
6. P. Klonos, C. Pandis, S. Kriptou, A. Kyritsis, P. Pissis. Interfacial interactions in polymer nanocomposites studied by dielectric and thermal techniques. **IEEE Transactions on Dielectrics and Electrical Insulation** 19 (2012) 1283-1290. <http://dx.doi.org/10.1109/TDEI.2012.6260002>.
7. P. Klonos, S. Kaprinis, V.I. Zarko, V. Peoglos, E.M. Pakhlov, P. Pissis, V.M. Gun'ko. Thermal and dielectric studies of PEG/C/AST nanocomposites. **Journal of Applied Polymer Science** 128 (2013) 1601-1615. <http://dx.doi.org/10.1002/app.3795>.
8. C. Stamatopoulou, P. Klonos, S. Koutsoumpis, V. Gun'ko, P. Pissis, L. Karabanova. Hydrophilic nanocomposites based on polyurethane/poly(2-hydroxyethyl methacrylate) semi-IPNs and modified/unmodified nanosilica for biomedical application. **Journal of Polymer Science B** 52 (2014) 397-408. <http://dx.doi.org/10.1002/polb.2342>.
9. M.V. Galaburda, P. Klonos, V.M. Gun'ko, V.M. Bogatyrov, M.V. Borysenko, P. Pissis. Dielectric properties and thermal destruction of poly(dimethylsiloxane)/Fe₂O₃/SiO₂ nanocomposites. **Applied Surface Science** 305 (2014) 67-76. <http://dx.doi.org/10.1016/j.apsusc.2014.02.162>.
10. I. Sulym, P. Klonos, M. Borysenko, P. Pissis, V.M. Gun'ko. Dielectric and Thermal studies of Segmental Dynamics in Silica/PDMS and Silica/Titania/PDMS nanocomposites. **Journal of Applied Polymer Science** 131 (2014) 41154. <http://dx.doi.org/10.1002/app.41154>.
11. G.Z. Papageorgiou, Z. Terzopoulou, D. Bikiaris, K.S. Triantafyllidis, E. Diamanti, D. Gournis, P. Klonos, E. Giannoulidis, P. Pissis. Evaluation of the formed interface in biodegradable poly(L-lactic acid)/graphene oxide nanocomposites and the effect of nanofillers on mechanical and thermal properties. **Thermochimica Acta** 597 (2014) 48-57. <http://dx.doi.org/10.1016/j.tca.2014.10.007>.
12. P. Klonos, I.Ya. Sulym, M.V. Borysenko, V.M. Gun'ko, S. Kriptou, A. Kyritsis, P. Pissis. Interfacial interactions and complex segmental dynamics in systems based on silica-polydimethylsiloxane core-shell nanoparticles: Dielectric and Thermal study. **Polymer** 58 (2015) 9-21. <http://dx.doi.org/10.1016/j.polymer.2014.12.03>.
13. P. Klonos, I.Ya. Sulym, K. Kyriakos, I. Vangelidis, S. Zidropoulos, D. Sternik, M.V. Borysenko, A. Kyritsis, A. Derylo-Marczewska, V.M. Gun'ko, P. Pissis. Interfacial phenomena in core-shell nanocomposites of PDMS adsorbed onto low specific surface area fumed silica nanooxides: Effects of surface modification. **Polymer** 68 (2015) 158-67. <http://dx.doi.org/10.1016/j.polymer.2015.05.01>.

14. P. Klonos, A. Kyritsis, P. Pissis. Effects of surface modification and thermal annealing on the interfacial dynamics in core-shell nanocomposites based on silica and adsorbed PDMS. **European Polymer Journal** 70 (2015) 342-59. <http://dx.doi.org/10.1016/j.eurpolymj.2015.07.038>.
15. P. Klonos, S. Kripotou, A. Kyritsis, G.Z. Papageorgiou, D. Bikiaris, D. Gournis, P. Pissis. Glass transition and segmental dynamics in poly(L-lactic acid) / graphene oxide nanocomposites. **Thermochimica Acta** 617 (2015) 44-53. <http://dx.doi.org/10.1016/j.tca.2015.08.020>.
16. P. Klonos, A. Kyritsis, P. Pissis. Interfacial dynamics of polydimethylsiloxane adsorbed on fumed metal oxide particles of a wide range of specific surface area. **Polymer** 77 (2015) 10-13. <http://dx.doi.org/10.1016/j.polymer.2015.09.021>.
17. P. Klonos, V. Chatzidogiannaki, K. Roumpos, E. Spyratou, P. Georgiopoulos, E. Kontou, P. Pissis, Y. Gomza, S. Nesin, O. Bondaruk, L. Karabanova. Structure-properties investigations in hydrophilic nanocomposites based on polyurethane/poly(2-hydroxyethyl methacrylate) semi-interpenetrating polymer networks and nanofiller densil for biomedical application. **Journal of Applied Polymer Science** 133 (2016) 43122. <http://dx.doi.org/10.1002/app.43122>.
18. P. Klonos, G. Dapei, I.Ya. Sulym, S. Zidropoulos, D. Sternik, A. Derylo-Marczewska, M.V. Borysenko, V.M. Gun'ko, A. Kyritsis, P. Pissis. Morphology and molecular dynamics investigation of PDMS adsorbed on titania nanoparticles: effects of polymer molecular weight. **European Polymer Journal** 74 (2016) 64-80. <http://dx.doi.org/10.1016/j.eurpolymj.2015.11.010>.
19. P. Klonos, A. Kyritsis, P. Pissis. Interfacial and confined dynamics of PDMS adsorbed at the interfaces and in the pores of silica-gel: effects of surface modification and thermal annealing. **Polymer** 84 (2016) 38-51. <http://dx.doi.org/10.1016/j.polymer.2015.12.045>.
20. Y. Bolbukh, P. Klonos, K. Roumpos, V. Chatzidogiannaki, V. Tertykh, P. Pissis. Glass transition and hydration properties of polyhydroxyethylmethacrylate filled with modified silica nanoparticles. **Journal of Thermal Analysis and Calorimetry** 125 (2016) 1387-1398. <http://dx.doi.org/10.1007/s10973-016-5677-2>.
21. P. Klonos, Z. Terzopoulou, S. Koutsoumpis, S. Zidropoulos, S. Kripotou, G.Z. Papageorgiou, D. Bikiaris, A. Kyritsis, P. Pissis. Rigid amorphous fraction and segmental dynamics in nanocomposites based on poly(L-lactic acid) and nano-inclusions of 1-3D geometry studied by thermal and dielectric techniques. **European Polymer Journal** 82 (2016) 16-34. <http://dx.doi.org/10.1016/j.eurpolymj.2016.07.002>.
22. P. Klonos, K. Kulyk, M.V. Borysenko, V.M. Gun'ko, A. Kyritsis, P. Pissis. Effects of molecular weight below the entanglement threshold on interfacial nanoparticles/polymer dynamics. **Macromolecules** 49 (2016) 9457-9473. <http://dx.doi.org/10.1021/acs.macromol.6b01931>.
23. P. Klonos, A. Kyritsis, L. Bokobza, V.M. Gun'ko, P. Pissis. Interfacial effects in PDMS/titania nanocomposites studied by thermal and dielectric techniques. **Colloids and Surfaces A** 519 (2017) 212-222. <http://dx.doi.org/10.1016/j.colsurfa.2016.04.020>.
24. P. Klonos, P. Pissis. Effects of interfacial interactions and of crystallization on rigid amorphous fraction and molecular dynamics in polylactide/silica nanocomposites: a methodological approach. **Polymer** 112 (2017) 228-243. <http://dx.doi.org/10.1016/j.polymer.2017.02.003>.
25. M. Souli, P. Klonos, A.F. Fragopoulou, I.V. Mavragani, I.S. Pateras, N. Kostomitsopoulos, L.H. Margaritis, P. Zoumpoulis, L. Kaklamanis, D. Kletsas, V.G. Gorgoulis, A. Kyritsis, P. Pissis, A.G. Georgakilas. Applying broadband dielectric spectroscopy (BDS) for the biophysical characterization of mammalian tissues under a variety of cellular stresses. **International Journal of Molecular Sciences** 18 (2017) 838. <http://dx.doi.org/10.3390/ijms18040838>.

26. V. Bershtein, P. Pissis, T. Sukhanova, L. Karabanova, P. Yakushev, O. Bondaruk, P. Klonos, E. Spyratou, M. Vylegzhanina, E. Voronin. Biocompatible nanocomposites based on semi-interpenetrating polymer networks and nanosilica modified by bioactive amino acid tryptophan: morphology, dynamics and properties. **European Polymer Journal** 92 (2017) 150-164. <http://dx.doi.org/10.1016/j.eurpolymj.2017.04.038>.
27. P. Klonos, P. Pissis, A. Kyritsis. Effects of hydration/dehydration on interfacial polymer fraction and dynamics in nanocomposites based on metal-oxides and physically adsorbed polymer. **Journal of Physical Chemistry C** 121 (2017) 19428-19441. <http://dx.doi.org/10.1021/acs.jpcc.7b05267>.

Referred Conference Proceedings Publications

1. P. Pissis, P. Klonos, A. Kyritsis, *Interfacial effects in polymer nanocomposites studied by dielectric and thermal techniques*, Proceedings - International Symposium on Electrets (2011), art. no. 6084985, pp. 67-68.
2. P. Pissis, P. Klonos, S. Kriptomou, A. Kyritsis, *Thermal transitions and segmental dynamics in polymer nanocomposites*, Proceedings - Modern polymeric materials for environmental applications, 5th International Seminar, Krakow (Poland), May 2013, K. Pielichowski (ed), Crakow University of Technology, Vol. 5, Iss. 2, pp. 135-142.
3. P. Klonos, G. Z. Papageorgiou, Z. Terzopoulou, S. K. Triantafyllidis, D. Gournis, D. N. Bikiaris, A. Kyritsis, P. Pissis. *Effects of graphene oxide on molecular dynamics, thermal and mechanical properties of poly(L-lactic acid)*, Proceedings - ECCM16 – 16th European Conference on Composite Materials, Seville, Spain, 22-26 June 2014.
4. P. Pissis, P. Klonos, A. Kyritsis, V.M. Gun'ko. *Interfacial effects in core-shell polymer nanocomposites*. 20th International Conference on Composite Material, ICCM, Copenhagen, Denmark, 19-24 July, 2015.

Participation in scientific conferences

1. Stathopoulos, P. Klonos, P. Pissis, M.M. Pradas, J.L. Gomez Ribelles, *Study of hydration and dielectric properties of hydrated poly(hydroxyethylacrylate-co-ethyl acrylate) nanocomposites*, 46th Microsymposium, Nanostructured Polymers and Polymer Nanocomposites, 8 – 12 July, **2007**, Prague, Czech Republic.
2. Ch. Pandis, A. Stathopoulos, P. Klonos, C. Christodoulides, A. Spanoudaki, A. Kyritsis, P. Pissis, M.M. Pradas, J.C. Rodriguez Hernandez, J.L. Gomez Ribelles, *Hydration properties of nanostructured hydrogels based on poly(2-hydroxyethyl acrylate) and poly(2-hydroxyethyl acrylate-co-ethyl acrylate)*, 7th HELLENIC POLYMER CONFERENCE, September 28th – October 1st, **2008**, Ioannina, Greece.
3. Polycarpos Pissis, Anna Panagopoulou, Panagiotis Klonos, Daniel Fragiadakis and Liliane Bokobza, *Glass transition and polymer dynamics in rubber/silica and rubber/titania nanocomposites*, 6th International Discussion Meeting on Relaxations in Complex Systems (IDMRCS), 30 August – 5 September **2009**, Rome, Italy.
4. P. Pissis, A. Panagopoulou, P. Klonos, D. Fragiadakis, L. Bokobza, *Structure and polymer dynamics in rubber/silica and rubber/titania nanocomposites*, International Symposium 'Modern Problems of Surface Chemistry and Physics', 18 – 21 May, **2010**, Kiev, Ukraine.
5. P. Klonos, P. Pissis, A. Kyritsis, N.V. Guzenko, V.M. Gun'ko, *Studies of the interfacial and relaxation phenomena in poly(ethylene glycol)-nanooxide composite systems*, International Symposium 'Modern Problems of Surface Chemistry and Physics', 18 – 21 May, **2010**, Kiev, Ukraine.
6. P. Klonos, A. Kyritsis, P. Pissis, N.V. Guzenko, V.M. Gun'ko, *Dielectric and thermal studies of the interfacial and relaxation phenomena in polymer-oxide nanocomposites*, XII Polish – Ukrainian Symposium 'Theoretical and Experimental Studies of Interfacial Phenomena and their Technological Applications' simultaneously with 2nd COMPOSITUM Conference 'Hybrid Nanocomposites and their Applications', 24 – 28 August, **2010**, Kielce - Ameliowka, Poland. (2nd Poster Prize)
7. P. Klonos, P. Pissis, A. Panagopoulou, A. Kyritsis, L. Bokobza, *Comparative studies on effects of silica and titania nanoparticles in the molecular mobility of poly(dimethylsiloxane)*, THERMA - 4th National Thermal Analysis Conference, 23 – 24 October, **2010**, Patra, Greece.

8. Klonos P., Kyritsis A., Pissis P, *Interfacial and complex relaxation phenomena in poly(dimethyl siloxane)-oxide nanocomposite systems*, Ukrainian Conference with International Participation ‘Modern Problems of Surface Chemistry and Physics’, 11 – 13 May, **2011**, Kiev, Ukraine.
9. Kyriakos K., Sulym I., Klonos P., Vangelidis I., Kyritsis A., Borysenko M.V., Gun’ko V.M., Pissis P, *Dielectric studies of the interfacial and confined segmental dynamics in PDMS/ZrO₂/SiO₂ nanocomposites*, Ukrainian Conference with International Participation ‘Modern Problems of Surface Chemistry and Physics’, 11 – 13 May, **2011**, Kiev, Ukraine.
10. Telegeev I.G., Voronin E.F., Guzenko N.V., Gun’ko V.M., Pahlov E.M., Klonos P., Pissis P, *Equilibrium water sorption on a methacrylate silanes-treated nanosilica surface*, Ukrainian Conference with International Participation ‘Modern Problems of Surface Chemistry and Physics’, 11 – 13 May, **2011**, Kiev, Ukraine.
11. Polycarpus Pissis, Panagiotis Klonos, *Dielectric studies of interfacial effects in polymer nanocomposites*, Nanocomposite 2011 – From Nanoscale to Macro Composites, Conference and Training School, 7 – 10 June, **2011**, Paris-Est, Creteil University, France.
12. Tertykh V., Bolbukh Y., Klonos P., Pissis P, *DSC investigation of polyHEMA filled with modified silica*, 33rd International Conference on Vacuum Microbalance and Thermoanalytical Techniques (ICVMTT33), 3rd COMPOSITUM Conference Hybrid Nanocomposites and their Applications, 26 – 30 June, **2011**, Zamosc, Poland.
13. P. Klonos, A. Kyritsis, L. Bokobza, P. Pissis. *Interfacial polymer/filler interactions affecting crystallization and complex segmental dynamics in poly(dimethyl siloxane) nanocomposites*, International 9th Eurofillers International Conference ‘EUROFILLERS 2011’, 21 – 25 August, **2011**, Dresden, Germany.
14. P. Pissis, P. Klonos, A. Kyritsis, *Interfacial effects in polymer nanocomposites studied by dielectric and thermal techniques*”, 14th International Symposium on Electrets ‘ISE 14’, 27 – 31 August, **2011**, Montpellier, France.
15. P. Klonos, N.V. Guzenko, V.I. Zarko, V.M. Gun’ko, A. Kyritsis, P. Pissis, *Interfacial interactions and molecular dynamics in semicrystalline polymer nanocomposites: thermal and dielectric studies*, 5th Hellenic Conference of Thermal Analysis and Calorimetry ‘THERMA 2012’, 25-27 May, **2012**, Thessaloniki, Greece.
16. Stamatopoulou, P. Klonos, A. Kyritsis, P. Pissis, L. Karabanova, *Water effects on the thermal and dielectric behaviour of semi-interpenetrating polymer networks based on polyurethanes*, 5th Hellenic Conference of Thermal Analysis and Calorimetry ‘THERMA 2012’, 25-27 May, **2012**, Thessaloniki, Greece.
17. Panagiotis Klonos, Konstantinos Kyriakos, Ioannis Vangelidis, Iryna Sulim, Vladimir M. Gun’ko, Apostolos Kyritsis, Polycarpus Pissis, *Modified polymer dynamics in PDMS nanocomposites: dielectric and thermal studies*, 7th Conference of International Dielectric Society and 13th Conference on Dielectric and Related Phenomena ‘BDS 2012’, 3 – 7 September, **2012**, Leipzig, Germany.
18. P. Klonos, K. Kyriakos, I. Vangelidis, I. Sulim, M.V. Borysenko, A. Kyritsis, B.B. Palyanytsya, V.M. Gun’ko, P. Pissis, *Polymer dynamics and interfacial effects in polymer nanocomposites based on core-shell nanoparticles*, XIII Ukrainian–Polish Symposium ‘Theoretical and Experimental Studies of Interfacial Phenomena and their Technological Applications’ simultaneously with 4nd COMPOSITUM Conference ‘Hybrid Nanocomposites and their Applications’, 11-14 September, **2012**, Kiev, Ukraine.
19. P. Klonos, A. Kyritsis, V.M. Gun’ko, P. Pissis, *Dielectric Studies of Polymer Nanocomposites Based on Silica/PDMS Core-shell Nanoparticles*, 9th Hellenic Polymer Society Conference ‘New Polymeric Materials & Applications: A Development Initiative for New Business opportunities in Greece’, 29 November – 1 December, **2012**, Thessaloniki, Greece.
20. G.Z. Papageorgiou, P. Klonos, E. Giannoulidis, Z. Terzopoulou, D. Gournis, D. N. Bikiaris, P. Pissis, *Study of Properties of Poly(L-lactic acid)/Graphene Oxide Nanocomposites*, 9th Hellenic Polymer Society Conference ‘New Polymeric Materials & Applications: A Development Initiative for New Business opportunities in Greece’, 29 November – 1 December, **2012**, Thessaloniki, Greece.
21. P. Pissis, P. Klonos, S. Kriptou, A. Kyritsis. *Thermal Transitions and Segmental Dynamics in Polymer Nanocomposites*, 5th International Seminar on ‘Modern Polymeric Materials for Environmental Applications’, 15-17 May, **2013**, Krakow, Poland.
22. V. Chatzidogiannaki, P. Klonos, A. Kyritsis, E. Spyratou, O. Bondaruk, L. Karabanova, P. Pissis. *Thermal and Hydration Study on Hydrophilic Nanocomposites based on Polymer/Silica for biomedical Applications*. Medicta 2013, 11th Mediterranean Conference on ‘Calorimetry and Thermal Analysis’, 12-15 June, **2013**, Athens, Greece.

23. P. Klonos, G.Z. Papageorgiou, Z. Terzopoulou, D.N. Bikiaris, A. Kyritsis, P. Pissis. *Crystallization and Molecular Dynamics in Poly(L-Lactic Acid) filled with Graphene Oxide Nanosheets and Silica Nanoparticles*. Medicta 2013, 11th Mediterranean Conference on 'Calorimetry and Thermal Analysis', 12-15 June, **2013**, Athens, Greece.
24. P. Pissis, P. Klonos, St. Koutsoumpis, A. Kyritsis, I. Sulym, M. Borysenko, V. Gunko. *Thermal transitions, molecular dynamics and interfacial effects in polymer nanocomposites*, 11th Mediterranean Conference on Calorimetry and Thermal Analysis (MEDICTA 2013), 12-15 June **2013**, Athens, Greece.
25. P. Klonos, S. Koutsoumpis, A. Kyritsis, P. Pissis. *Thermal transitions, polymer dynamics and interfacial effects in polymer nanocomposites based on core-shell nanoparticles*. European Polymer Congress 'EPF 2013', 16-21 June, **2013**, Pisa, Italy.
26. A. Kyritsis, P. Klonos, P. Pissis. *Interfacial effects in polymer Nanocomposites: from a polymer matrix with in-situ generated inorganic nanoparticles to polymer/particle core-shell nanocomposites*. 7th International Discussion Meeting on Relaxations in Complex Systems '7th IDMRSC', 21-26 July, **2013**, Barcelona, Spain.
27. V. Chatzidogiannaki, P. Klonos, A. Kyritsis, E. Spyratou, O. Bondaruk, L. Karabanova, P. Pissis. *Hydration and dielectric studies in nanocomposites based on polymer networks filled with fumed silica for biomedical applications*. 12th Eurofillers International Conference 'Eurofillers 2013', 25-29 August, **2013**, Bratislava, Slovakia.
28. M.V. Galaburda, I.Y. Sulim, P. Klonos, P. Pissis, V.M. Gun'ko, *Hydration properties of TiO₂/SiO₂ and Fe₂O₃/SiO₂ nanocomposites with adsorbed poly(dimethylsiloxane)*. 15th International Conference-School of Advanced Materials and Technologies, 27-31 August, **2013**, Palagna, Lithuania.
29. D. Bikiaris, P. Klonos, E. Giannoulidis, G. Papageorgiou, Z. Terzopoulou, E. Diamanti, D. Gournis, P. Pissis. *Poly(L-lactic acid)/GO nanocomposites: Preparation, thermal and dielectric study*. European Congress and Exhibition on Advanced Materials and Processes 'EUROMAT2013', 8-13 September, **2013**, Sevilla, Spain.
30. A. Kyritsis, P. Klonos, S. Kriptou, P. Pissis. *Thermal Transitions and Segmental Dynamics in Polymer Nanocomposite*. XXIX Panhellenic Conference on Solid State Physics and Material Science, 22-25 September, **2013**, Athens, Greece.
31. P. Pissis, P. Klonos, G. Papageorgiou, Z. Terzopoulou, K. Triantafyllidis, D. Gournis, D. Bikiaris, A. Kyritsis. *Structure-property relationships in poly(L-lactic acid) nanocomposites*. International Conference on Structural Nano Composites 'NANOSTRUC 2014', 20-21 May, **2014**, Madrid, Spain.
32. L.V. Nosach, E.F. Voronin, E.M. Pakhlov, V.M. Gun'ko, J. Skudiszewska-Zieba, P. Pissis, P. Klonos, R. Lebeda. *Comparison of liquid-phase and gas-phase adsorption modification of nanosilica with chitosan*. 34th International Conference on Vacuum Microbalance and Thermoanalytical Techniques 'ICVMTT34' and International Conference 'Modern Problems of Surface Chemistry', 20-21 May, **2014**, Kiev, Ukraine.
33. P. Klonos, G.Z. Papageorgiou, Z. Terzopoulou, S.K. Triantafyllidis, D. Gournis, D.N. Bikiaris, A. Kyritsis, P. Pissis. *Effects of grapheme oxide on molecular dynamics, thermal and mechanical properties of poly(L-Lactic Acid)*. 16th European Conference on Composite Materials 'ECCM16', 22-26 June, **2014**, Seville, Spain.
34. P. Klonos, A. Kyritsis, V.M. Gun'ko, P. Pissis. *Thermal transitions and molecular dynamics of poly(dimethylsiloxane) (PDMS) sorbed on silica*. XIV Polish-Ukrainian Symposium 'Theoretical and Experimental Studies of Interfacial Phenomena and their Technological Applications' simultaneously with 1st NANOBIO-MAT Conference 'Nanostructured Biocompatible/Bioactive Materials', 9-13 September, **2014**, Zakopane, Poland.
35. A. Kyritsis, P. Klonos, P. Pissis. *Interfacial effects in polydimethylsiloxane (PDMS) based nanocomposites: dielectric and calorimetric studies*. 8th International Conference of Broadband Dielectric Spectroscopy and its Applications 'BDS 2014', 14-19 September, **2014**, Wisla, Poland.
36. P. Klonos, A. Kyritsis, P. Pissis. *Dielectric and thermal study of the interfacial dynamics and crystallization in polymer nanocomposites*. 8th International Conference of Broadband Dielectric Spectroscopy and its Applications 'BDS 2014', 14-19 September, **2014**, Wisla, Poland.
37. P. Pissis, P. Klonos, A. Kyritsis. *Interfacial effects in polymer nanocomposites*. 10th Hellenic Polymer Society Conference, 4-6 December, **2014**, Patra, Greece.
38. A. Kyritsis, P. Klonos, P. Pissis. *Morphology and molecular dynamics in polymer/inorganic nanocomposites: from an elastomeric matrix with dispersed nanoparticles to nanocomposites rich in inorganic phase*. 'Polymer Nanocomposites: Synthesis, Properties, Modeling, Applications' Workshop, 16 – 17 June, **2015**, Athens, Greece.

39. P. Pissis, P. Klonos, S. Kripotou, A. Kyritsis. *Interfaces and interphases in polymer nanocomposites*. European Polymer Federation Congress 2015, EPF2015, 21-26 June, **2015**, Dresden, Germany.
40. P. Pissis, P. Klonos, A. Kyritsis, V.M. Gun'ko. *Interfacial effects in core-shell polymer nanocomposites*. 20th International Conference on Composite Material, ICCM, 19-24 July, **2015**, Copenhagen, Denmark.
41. M. Souli, P. Klonos, A. Kyritsis, P.S. Zoumpoulis, I. Theotokas, P. Filis, S. Tyritzis, L. Kaklamanis, A. Georgakilas. *Applying broadband dielectric relaxation spectroscopy for the detection of prostate cancer biophysical characteristics*. EUROSON 2015, 27th Congress of the European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB), 11th Congress of the Hellenic Society for Ultrasound (HSUMB), November 6-8, **2015**, Athens, Greece.
42. M.P. Souli, P. Klonos, A.F. Fragopoulou, I.S. Pateras, L.H. Margaritis, P. Zoumpoulis, D. Kletsas, V.G. Gorgoulis, A. Kyritsis, P. Pissis, A.G. Georgakilas. *Applying broadband dielectric relaxation spectroscopy (DRS) for the biophysical analysis of mammalian tissues under a variety of environmental stresses*. GERMAN-GREEK Workshop 'Nano-structured soft materials: from polymer self-assembly to stimuli responsive materials', September 26-30, **2016**, Athens, Greece.
43. Panagiotis Klonos, Polycarpus Pissis. *Rigid amorphous fraction and molecular dynamics in polylactide/silica nanocomposites*. International Conference on Biobased Materials and Composites, ICBMC 2017, March 29-31, **2017**, Nantes, France.
44. P. Klonos, K. Kulyk, M.V. Borysenko, V.M. Gun'ko, A. Kyritsis, P. Pissis. *Effects of molecular weight on interfacial polymer dynamics in polymer nanocomposites*. Eurofiller Polymer Blends, EUROFILLERS 2017, April 23-27, **2017**, Hersonissos, Herakion, Crete, Greece.
45. V.A. Bershtein, P. Pissis, T.E. Sukhanova, L.V. Karabanova, P.N. Yakushev, O. Bondaruk, P. Klonos, E. Spyratou, M. Vylegzhanina, E. Voronin. *Morphology, dynamics and properties of biocompatible nanocomposites based on PU-PHEMA semi-IPNs and nanosilica modified by amino acid tryptophan*. 9th International Symposium on Molecular Mobility and Order in Polymer Systems, MMOPS IX, June 19-23, **2017**, St. Petersburg, Russian Federation.
46. A. Kyritsis, P. Klonos, P. Pissis. *Interfacial interactions and complex segmental dynamics in polymer nanocomposites: dielectric and thermal studies*. 8th International Discussion Meeting on Relaxations in Complex Systems, 8 IDMRCS, July 23-38, **2017**, Wisla, Poland.
47. A. Kyritsis, P. Klonos, Yu. Bolbukh, V.A. Tertykh, V.M. Gun'ko, P. Pissis. *Molecular mobility studies on the amorphous part of poly(vinylidene fluoride) (PVDF)/silica nanocomposites*. 16th International Symposium on Electrets, ISE16, September 4-8, **2017**, Leuven, Belgium.