

CURRICULUM VITAE

FIRST NAME	SOTIRIOS
SURNAME	MARRAS
MAJOR	CHEMICAL ENGINEER
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ACADEMIC EDUCATION

- 2008 ***PhD in Chemical Engineering Department***
Aristotle University of Thessaloniki, Greece
PhD Topic "Development of Novel Microcellular Polymer Clay Nanocomposites"
Advisor: C. Panayiotou
- 2001 ***MSc in Mechanical Engineering***
Michigan Technological University, USA
MSc Thesis: "On Some Experimental and Modeling Aspects of High-Cycle Fatigue"
Thesis Advisors: Prof. E. C. Aifantis and Prof. W.W. Milligan
- 1998 ***Diploma (Master's equivalent) in Chemical Engineering***
Aristotle University of Thessaloniki, Greece
Diploma Thesis: "Effect of Humidity and a Variety of Other Solutes on the Mechanical Properties of Ceramic Bricks"
Thesis Advisor: Prof. E. C. Aifantis

PEDAGOGICAL EDUCATION

- 2003 ***Annual Program of Pedagogical Education***
School of Pedagogical and Technological Education (ASPETE), Volos, Greece

TEACHING EXPERIENCE

- 11/17-Σήμερα ***Laboratory Teaching Staff, Department of Biochemistry and Biotechnology, UTH, Larisa***
- Biochemical Engineering
 - Application of Nanotechnology on Food Packaging
- Laboratory Courses:*
- General Chemistry for Biosciences
 - Structure and Analysis of Biomolecules
 - Metabolism
 - Clinical Biochemistry
 - Enzymology
- 01/16-6/16 ***Laboratory Assistant, School of Pedagogical and Technological Education (ASPETE), Volos, Greece***
- Teaching Practice

- 10/14-6/15 **Laboratory Assistant, School of Pedagogical and Technological Education (ASPETE), Volos, Greece**
- Teaching Practice
- 11/12-6/13 **Scientific Assistant, School of Pedagogical and Technological Education (ASPETE), Volos, Greece**
- Educational Research Methodology
 - Teaching Practice
- 2008-09 **Laboratory Assistant in Interdepartmental Postgraduate Program, of AUTH in**
 2010-11 **"Conservation and Restoration of Artworks ", AUTH, Thessaloniki, Greece**
 2012-13 Thermomechanical Analysis, Calorimetric Techniques, Thermal Aging
- 10/04-7/10 **Laboratorial & Scientific Assistant in TEI of Western Macedonia, Greece**
- Methods of Industrial Products Production
 - Materials and Design
 - Non Metallic Technical Materials
 - Nanotechnology

RESEARCH EXPERIENCE

- 06/21-12/24 **Research Program, University of Thessaly**
Program Title: "Biofunctional - Water" 6623.
- Analysis of plant-based ingredients and creation of new products.
- 06/07-05/08 **Research Program, TEI of Western Macedonia, Greece**
Program Title: "Simple and economic fabrication of environmentally friendly nanocomposites derived from renewable resources for high (biomedical) and low (packaging) added value products".
- Assembled of layout and performed of experiments for the production of nanocomposite materials. Three systems of polymer/filler were selected.
 - Thermomechanical characterization of the prepared polymer nanocomposites.
- 1/04-12/07 **Research Program, TEI of Western Macedonia, Greece**
Program Title: "Developing of Advanced Polymer Nanocomposites Applying Shear"
- Prepared Polymer Clay Nanocomposites by Extrusion.
 - Carried out XRD Analysis for the Characterization of the Composites.
 - Performed Thermal Analysis using Differential Scanning Calorimetry (DSC) and Thermogravimetric Analysis (TGA).
 - Studied the Mechanical Properties of the Composites in Tensile Loading Conditions.
- 10/05-12/06 **Research Program, Aristotle University of Thessaloniki**
Program Title: "Developing of ecological composite materials".
- Studied the mechanical strength of the composites in tensile loading conditions.
 - Investigated fracture surface of the prepared material by scanning electron microscopy (SEM)
 - Performed thermal analysis on the composites.
- 09/03-12/03 **Research Program, Aristotle University of Thessaloniki**
Program Title: "Development of new Fermentations for the recycling and utilization of oil industries remains, for the production of biopolymers and chemical substances <BIOLIVE>".

- Prepared biodegradable and biocompatible polymer nanocomposites with layered silicates by the solvent casting method.
- Carried out XRD Analysis for the Characterization of the Composites.
- Investigated of Thermal Behavior of the prepared Composites

1/99-6/01

Research Program, Michigan Technological University (MTU)

Program Title: "High Cycle Fatigue"

- Performed various laboratory procedures (four-point bending fatigue tests, compression and tension tests, polishing, coating).
- Used Scanning Electron Microscope with the aid of a digital image analysis processor, which enabled a 3-D reconstruction of the fractured surface.
- Investigated the effect of microstructure, loading variables and environmental parameters on the fracture surface roughness.
- Applied fractal analysis.

01/99-12/99

Research Program, Aristotle University of Thessaloniki

Program Title: "REVISA: Reactor Integrity in Severe Accidents".

- Performed Mechanical Tests in Ceramic Materials
- Studied the Diffusion Effect on the Crack Propagation

4/97-3/98

Research Program, Aristotle University of Thessaloniki

Program Title: "Erection of the Bathhouse of the Pazar Hamam Market in Tehssaloniki"

- Measured the mechanical properties of ceramic bricks.
- Studied the effect of humidity's diffusion on ceramic materials.
- Applied non-destructive Interventions (impact tests) to measure the hardness of construction materials in historical monuments.

WORK EXPERIENCE

10/01-06/03

2nd Lieutenant-Chemist, Quality Control Department of Hellenic Air Force

Petroleum Distribution Command (01/02- 06/03)

- Supervised the physiochemical analysis of fuels (distillation, estimation of flash point, fuel density, Pour and Cloud point, thermal oxidation stability, Reid vapor pressure, determination of chemical additives like icing inhibitor, static dissipator, analysis of fuel mixtures using IR spectroscopy)
- Was in charge for the maintenance of the laboratory.

General Chemical Laboratory of Hellenic Air Force at Elefsina's Airbase (10/01-12/01)

- Performed fuel quality control tests (distillation, flash point, Reid vapor pressure, determination of chemical additives, static dissipator etc.).
- Performed textile quality control tests (mechanical strength, density, discoloration, thickness of texture etc.).

PUBLICATIONS SUMMARY

1.	Papers Published in Referred Journals (www.scopus.com 11/2024)	19
	First author	8
2.	Papers Published in Conference proceedings	71
	International Conferences	42
	Greek Conferences	29
3.	Citations	776
4.	h-index (www.scopus.com 11/2024)	13
5.	Participation on Research Projects	8

REFERRED JOURNAL PUBLICATIONS

- P.1.C. Spartali, A.-M.G. Psarra, **S.I. Marras**, C. Tsiptsias, A. Georgantopoulos, F.D. Kalousi, A. Tsakalof, I. Tsvintzelis, Silybin-Functionalized PCL Electrospun Fibrous Membranes for Potential Pharmaceutical and Biomedical Applications, *Polymers* **16**(16), 2346, 2024.
- P.2.C. Tsiptsias, C. Spartali, **S.I. Marras**, X. Ntampou, I. Tsvintzelis, C. Panayiotou Thermochemical Transition in Low Molecular Weight Substances: The Example of the Silybin Flavonoid, *Molecules* **27**(19), 6345, 2022.
- P.3.A. Tsimliaraki, I. Tsvintzelis, **S.I. Marras**, I. Zuburtikudis, C. Panayiotou, "Foaming of PCL/clay nanocomposites with supercritical CO₂ mixtures: The effect of nanocomposite fabrication route on the clay dispersion and the final porous structure", *The Journal of Supercritical Fluids*, **81**, 86–93 2013.
- P.4.E. Agnantopoulou, V. Tserki, **S. Marras**, J. Philippou, C. Panayiotou, "Development of biodegradable composites based on wood waste flour and thermoplastic starch" *Journal of Applied Polymer Science* **126**(1), E272-E280, 2012.
- P.5.**S.I. Marras**, I. Zuburtikudis, "Structure and Thermal Behavior of Poly(L-lactic acid) Clay Nanocomposites: Effect of Preparation Method as a Function of the Nanofiller Modification Level" *Journal of Applied Polymer Science*, **124**(4), 2999–3006, 2012.
- P.6.A. Tsimliaraki, I. Tsvintzelis, **S.I. Marras**, I. Zuburtikudis, C. Panayiotou, "The effect of surface chemistry and nanoclay loading on the microcellular structure of porous poly(D,L lactic acid) nanocomposites", *The Journal of Supercritical Fluids*, **57**(3), 278–287 2011.
- P.7.A. Tsimliaraki, I. Zuburtikudis, **S.I. Marras**, C. Panayiotou, "Optimizing the nanofibrous morphology of electrospun PBSA/clay nanocomposites and revealing the role of the fibre nano-dimension on the attained material properties", *Polymer International*, **60**(5), 859–871, 2011.
- P.8.**S.I. Marras**, I. Zuburtikudis, C. Panayiotou "Solution casting vs. melt compounding: Effect of fabrication route on the structure and thermal behavior of poly(L-lactic acid) clay nanocomposites" *Journal of Materials Science*, **45**, 6474–6480, 2010.
- P.9.A. Tsimliaraki, S. Svinterikos, C. Panayiotou, **S.I. Marras**, I. Zuburtikudis, and L. Papadopoulou, "PBSA/layered silicate nanocomposites and the role of nanoclay on their electrospun fibrous structure" *International Journal of Nanomanufacturing*, **6**(1/2/3/4), 291-299, 2010.
- P.10. A. Tsimliaraki, S. Svinterikos, I. Zuburtikudis, **S.I. Marras** and C. Panayiotou, "Nanofibrous structure of non-woven mats of electrospun biodegradable polymer nanocomposites – A Design of Experiments (DoE) study" *Industrial & Engineering Chemistry Research*, **48**(9), 4365-4374, 2009.
- P.11. **S.I. Marras**, A. Tsimliaraki, I. Zuburtikudis, C. Panayiotou, "Morphological, thermal and mechanical characteristics of polymer/layered silicate nanocomposites: The role of filler modification level", *Polymer Engineering and Science*, **49**(6), 1206-1217, 2009.
- P.12. **S.I. Marras**, K. P. Kladi, I. Tsvintzelis, I. Zuburtikudis, C. Panayiotou "Biodegradable Polymer Nanocomposites: The Role of Nanoclays on the Thermomechanical Characteristics and the Electrospun Fibrous Structure", *Acta Biomaterialia*, **4**, 756-765, 2008.
- P.13. I. Tsvintzelis, **S.I. Marras**, I. Zuburtikudis, C. Panayiotou "Porous Poly(L-Lactic Acid) Nanocomposite Scaffolds Prepared by Phase Inversion Using Supercritical CO₂ as Antisolvent", *Polymer*, **48**(21), 6311-6318, 2007.
- P.14. **S.I. Marras**, A. Tsimliaraki, I. Zuburtikudis, C. Panayiotou "Thermal and Colloidal Behavior of Amine-Treated Clays: The role of Amphiphilic Organic Cations Concentration", *Journal of Colloid and Interface Science*, **315**(2), 520-527, 2007.
- P.15. **S.I. Marras**, I. Zuburtikudis, C. Panayiotou "Nanostructure vs Microstructure: Morphological and Thermomechanical Characterization of Poly(L-lactic acid)/Layered Silicate Hybrids" *European Polymer Journal* **43**(6), 2191-2206, 2007.
- P.16. **S.I. Marras**, A. Tsimliaraki, I. Zuburtikudis, C. Panayiotou "Surfactant-Induced Morphology and Thermal Behavior of Polymer Layered Silicate Nanocomposites", *Journal of Physics: Conference Series*, **61**(1), 1366-1370, 2007.

- P.17. A. Shyam, S.A. Padula II, **S.I. Marras** and W.W. Milligan, "Fatigue Crack Propagation Thresholds in Nickel-Base Superalloys at High Frequencies and Temperatures", *Metallurgical and Materials Transactions A* 33A, 1949-1962, 2002.
- P.18. M. Zaiser, **S. Marras**, E. Nadgorny, E.C. Aifantis, "Fractal Dislocation Patterning in Plastically Deformed NaCl Polycrystals", *Physica Status Solidi (A)* 185(2), R4-R5, 2001.
- P.19. **S.I. Marras**, I.A. Ihtiaris, N.K. Hatzitrifon, K. Sicalidis and E.C.Aifantis, "A Preliminary Study of Stress-Assisted Fluid Penetration in Ceramic Bricks", *Journal of the European Ceramic Society* 20, 489-495, 2000

CONFERENCE PROCEEDINGS

- C.1. C Spartali, I. Tsvintzelis, **S.I. Marras**, C. Tsiptsias, A. Georgantopoulos, F. Kalousi, A.-M.G. Psarra, Electrospinning approach for encapsulation of silybin in PCL fibrous membranes, 11th International Conference of the the Hellenic Crystallographic Association, Larissa, Greece, 2023, p. 70.
- C.2. C. Spartali, C. Tsiptsias, F. Kalousi, A. Georgantopoulos, A.M. Psarra, **S. Marras**, I. Tsvintzelis, Encapsulating silybin in PCL-based electrospun nanofibers, *Planta Med* 88(15) (2022) P-399.
- C.3. E. Panayotidou, A. Kroustalli, A. Baklavaridis, **S.I Marras**, I. Zuburtikudis, D.S. Achilias and D. Deligianinni, "Nanocomposites of Poly(3- hydroxybutyrate) with Layered Silicates: Characterization and Biocompatibility" Proceedings of the 8th Panhellenic Chemical Engineering Conference, Thessaloniki, 26-28/5/2011, cd rom.
- C.4. A. Baklavaridis, I. Zuburtikudis, E. Panayotidou, **S.I Marras** and C. Panayiotou, "Porous Nanocomposite Materials Prepared by Polymer Mixtures and Montmorillonite for Tissue Engineering Applications" Proceedings of the 8th Panhellenic Chemical Engineering Conference, Thessaloniki, 26-28/5/2011, cd rom.
- C.5. A. Tsimliaraki, I. Tsvintzelis, **S.I Marras**, I. Zuburtikudis, C. Panayiotou, "Tailoring the porous structure of polymer/ clay nanocomposites by proper modification of the nanoclay's surface chemistry" in Book of Abstracts of COST Action 868: Understanding polymer (bio)functionalization at the nanoscale, Crete, Greece, 2-3/9/2010.
- C.6. E. Panayotidou, D.S. Achilias, **S.I. Marras**, I. Zuburtikudis "The role of the organo-modified nano-reinforcement on the thermal properties of Poly(3-hydroxybutyrate)-based hybrid materials", in Book of Abstracts of COST Action 868: Understanding polymer (bio)functionalization at the nanoscale, Crete, Greece, 2-3/9/2010.
- C.7. A. Tsimliaraki, I. Tsvintzelis, **S.I Marras**, I. Zuburtikudis, C. Panayiotou, "Foaming of PLA/clay nanocomposites in supercritical CO₂: The effect of clay surface chemistry on the final porous structure", accepted in the 19th International Conference on Durability of Composite Systems, Patra, 12-15/9/2010.
- C.8. A. Tsimliaraki, I. Tsvintzelis, **S.I Marras**, I. Zuburtikudis, C. Panayiotou, "Foaming of PCL/clay nanocomposites in supercritical CO₂: The effect of nanocomposite fabrication route on the final porous structure", accepted in the 19th International Conference on Durability of Composite Systems, Patra, 12-15/9/2010.
- C.9. A. Tsimliaraki, I. Tsvintzelis, **S.I Marras**, I. Zuburtikudis, C. Panayiotou, "Preparation of Microcellular Scaffolds of Poly (lactic acid) Nanocomposites with Controlled Porous Structure" in Proceeding of the 4th Panellenic Panhellenic Conference of the Hellenic Society of Biomechanics, EAEMBIO, Ioannina, 4-6/6/2010, p. 155.
- C.10. E. Panayotidou, A. Kroustalli, **S.I Marras**, I. Zuburtikudis, D.S. Achilias, D. Deligianinni and D. Maurilas, "Nanocomposite materials of Biopolymer Poly(3-hydroxybutyrate): Preparation, Characterization and Biocompatibility" in Proceeding of the 4th Panellenic Panhellenic Conference of the Hellenic Society of Biomechanics, EAEMBIO, Ioannina, 4-6/6/2010, p. 155.
- C.11. A. Tsimliaraki, **S.I Marras**, P. Manoudis, I. Zuburtikudis, C. Panayiotou, "Pre- and post-spinning characterization of polymer/clay nanocomposites", in Abstract Book of the 4th International Technical Textiles Congress, Istanbul, 16-18 May 2010.

- C.12. A. Tsimpliaraki, P. Manoudis, **S.I. Marras**, I. Zuburtikudis, "Surface topography of nanocomposite fibrous electrospun mats using AFM", in Abstract Book of the 4th International Technical Textiles Congress, Istanbul, 16-18 May 2010.
- C.13. A. Tsimpliaraki, I. Tsvintzelis, **S.I. Marras**, I. Zuburtikudis, C. Panayiotou, "Preparation and Foaming of Nanocomposites in Supercritical CO₂", in Abstract Book of the 12th European Meeting SCF, Graz, 9-12 May 2010A.
- C.14. Tsimpliaraki, I. Zuburtikudis, **S.I. Marras**, C. Panayiotou, "Optimizing the nanofibrous structure of non-woven mats of electrospun bio-degradable polymer nanocomposites, in Proceedings of 6th international Conference on Textile and Polymer Biotechnology, Het Pand, Ghent, Belgium, 23-25/9/2009.
- C.15. A. Tsimpliaraki, I. Tsvintzelis, **S.I. Marras**, I. Zuburtikudis, C. Panayiotou, "Organomodification of nanoclays and its role on the porous structure of polymer nanocomposites produced by supercritical CO₂", in Abstract Book of the XXV Panhellenic Conference on Solid State Physics and Materials Science, Thessaloniki, 20-23/9/2009, pp 312.
- C.16. Tsimpliaraki, I. Tsvintzelis, I. Zuburtikudis, **S.I. Marras**, L. Papadopoulou, C. Panayiotou, "Porous microcellular nanocomposites of poly(DL-lactic acid)/organically modified montmorillonite – The role of alkyammonium type and its cation concentration during the filler's modification", in Abstract Book of the 6th International Conference on Nanosciences & Nanotechnologies, Thessaloniki (NN09), 13-15/7/2009.
- C.17. I. Zuburtikudis, **S.I. Marras**, E. Panayotidou and K. Tornikidou, "Fabrication of Poly(3-hydroxybutyrate)/Layered Silicate Nanocomposites Through Melt Intercalation", Proceedings of the 7th Panhellenic Chemical Engineering Conference, Patras, Greece, 3-5/6/2009, cd rom.
- C.18. **S.I. Marras**, I. Zuburtikudis, E. Panayotidou, C. Panayiotou, "Morphology and Thermo-mechanical Properties of Poly(ϵ -caprolactone)/Clay Nanocomposites: Effect of clay modification level" Proceedings of the 7th Panhellenic Chemical Engineering Conference, Patras, Greece, 3-5/6/2009, cd rom.
- C.19. A. Tsimpliaraki, I. Zuburtikudis, **S.I. Marras**, C. Panayiotou, "Production of biodegradable polymer nanocomposite membranes and optimization of their nanofibrous morphology", Proceedings of the 7th Panhellenic Chemical Engineering Conference, Patras, Greece, 3-5/6/2009, cd rom.
- C.20. I. Zuburtikudis, **S.I. Marras**, E. Panayotidou and K. Tornikidou, "Biodegradable Poly(3-hydroxybutyrate)/Layered Silicate Nanocomposites through melt intercalation", in Book of Abstracts of COST Action 868: Biotechnology and Biopolymers in Textile Packaging, Cosmetics and Medical Applications, Istanbul, Turkiye, 19-20/2/2009.
- C.21. I. Zuburtikudis, K. Tornikidou, **S.I. Marras**, E. Panayotidou, G. Christofidou, "Environmentally-benign Polymer/Silicate Nanocomposites for Biomedical and Packaging Applications" AIChE Annual Meeting, Philadelphia, 16-21/11/2008.
- C.22. I. Zuburtikudis, **S.I. Marras**, K. Tornikidou, E. Panayotidou and G. Christofidou, "Enhanced Thermal Stability of Biodegradable Poly(3-hydroxybutyrate)/Layered Silicate Nanocomposites", AIChE Annual Meeting, Philadelphia, 16-21/11/2008.
- C.23. **S.I. Marras**, I. Zuburtikudis, A. Tsimpliaraki, K. Tornikidou, E. Panayotidou, G. Christofidou, "The Extent of Filler's Organo-modification and the Resulting Morphology and Thermo-mechanical Properties of Poly(ϵ -caprolactone)/Clay Nanocomposites", AIChE Annual Meeting, Philadelphia, 16-21/11/2008.
- C.24. **S.I. Marras**, I. Zuburtikudis, K. Tornikidou, A. Tsimpliaraki, E. Panayotidou, G. Christofidou "Structural and Thermo-mechanical Characteristics of high-amylose Starch/Bionolle Nanocomposite Blends", AIChE Annual Meeting, Philadelphia, 16-21/11/2008.
- C.25. A. Tsimpliaraki, S. Svinterikos, **S.I. Marras**, I. Zuburtikudis and C. Panayiotou, "Optimization of the nanofibrous structure of non-woven mats of electrospun biodegradable nanocomposites using Response Surface Methodology", AIChE Annual Meeting, Philadelphia, 16-21/11/2008.
- C.26. A. Tsimpliaraki, S. Svinterikos, **S.I. Marras**, I. Zuburtikudis, L. Papadopoulou, C. Panayiotou, "PBSA/Layered Silicate Nanocomposites and the Role of Nanoclay on Their Electrospun Fibrous Structure, 6th International Symposium On Nanomanufacturing, Athens, 12-14/11/2008, pp15.

- C.27. A. Tsimpliaraki, S. Svinterikos, **S.I Marras**, I. Zuburtikudis, C. Panayiotou, "Nanofibrous structure of electrospun mats based on biopolymer nanocomposites", in Book of Abstracts of COST Action 868: Biotechnical Functionalization of Renewable Polymeric Materials. Joint Working Group and MC Meeting, Varna, Bulgaria, 18-19/11/2008.
- C.28. E. Panayiotidou, **S.I. Marras**, I. Zuburtikudis and D.S. Achilias "Nanofiller Effect on the Thermal Response of Poly(3-hydroxybutyrate) Nanocomposite and Isoconversional Kinetic Analysis of the Thermal Degradation", in Book of Abstracts of the 7th Hellenic Polymer Conference, Ioannina, 28/9/-1/10/2008, p.p. 174-175.
- C.29. I. Tsvintzelis, **S.I. Marras**, I. Zuburtikudis and C. Panayiotou, "Microcellular Nanocomposite Polymers Prepared with Supercritical CO₂: The Role of Nanoclays on Porous Structure", in Book of Abstracts of the 7th Hellenic Polymer Conference, Ioannina, 28/9/-1/10/2008, p.p. 274-275.
- C.30. A. Tsimpliaraki, S. Svinterikos, **S.I. Marras**, I. Zuburtikudis, L. Papadopoulou, C. Panayiotou, "Preparation and Characterization of Biodegradable Polymer Nanocomposites and Their Nanofibrous Nonwoven Mats", in Book of Abstracts of the 5th International Conference on Nanosciences & Nanotechnologies, Thessaloniki, 14-16/7/2008, p.p. 246.
- C.31. **S.I. Marras**, I. Zuburtikudis, K. Tornikidou, E. Panayotidou, G. Christofidou, "Morphology and Thermomechanical Behavior of Poly(ϵ -caprolactone) Clay Nanocomposites: The Role of Filler Modification Level", in Book of Abstracts of the 5th International Conference on Nanosciences & Nanotechnologies, Thessaloniki, 14-16/7/2008, p.p. 231.
- C.32. **S.I. Marras**, I. Zuburtikudis, K. Tornikidou, E. Panayotidou, G. Christofidou, "Thermal Behavior of Biodegradable Poly(3-hydroxybutyrate)/Layered Silicate Nanocomposites", in Book of Abstracts of the 5th International Conference on Nanosciences & Nanotechnologies, Thessaloniki, 14-16/7/2008, p.p. 232.
- C.33. A. Tsimpliaraki, S. Svinterikos, **S.I. Marras**, I. Zuburtikudis, L. Papadopoulou, C. Panayiotou, "Nanofibrous Structure of Non-Woven Mats of Electrospun Polymer Nanocomposites" in Book of Abstracts of 1st International Conference from nanoparticles & Nanomaterials to Nanodevices and Nanosystems (1st IC4N – 2008), Halkidiki, Greece, 16-18/6/2008, p. 376.
- C.34. **S.I. Marras**, I. Zuburtikudis, K. Tornikidou, E. Panayotidou, G. Christofidou, "Effect of Surfactant Concentration on Poly(ϵ -caprolactone)/Clay Nanocomposite Properties" in Book of Abstracts of 1st International Conference from nanoparticles & Nanomaterials to Nanodevices and Nanosystems (1st IC4N – 2008), Halkidiki, Greece, 16-18/6/2008, p. 375.
- C.35. I. Zuburtikudis, **S.I. Marras**, K. Tornikidou, E. Panayotidou, G. Christofidou, "Effect of Nanoclays on the Thermal Response of Poly(3-hydroxybutyrate) Nanocomposites" in Book of Abstracts of 1st International Conference from nanoparticles & Nanomaterials to Nanodevices and Nanosystems (1st IC4N – 2008), Halkidiki, Greece, 16-18/6/2008, p. 386.
- C.36. **S.I. Marras**, I. Zuburtikudis, K. Tornikidou, E. Panayotidou, G. Christofidou, "Effect of Filler Modification Level on the Structural and Thermomechanical Characteristics of Poly(ϵ -caprolactone) Clay Nanocomposites", in Nano – 2008 – 9th International Conference on Nanostructured Materials, Rio de Janeiro, Brazil, 1-6/6/2008.
- C.37. I. Zuburtikudis, K. Tornikidou, **S.I. Marras**, E. Panayotidou, G. Christofidou, "Green Polymer/Layered Silicate Nanocomposites for Biomedical and Packaging Applications", in Nano – 2008 – 9th International Conference on Nanostructured Materials, Rio de Janeiro, Brazil, 1-6/6/2008.
- C.38. A. Spanoudaki, P. Pisis, I. Zuburtikudis, **S.I. Marras** and C. Panayiotou, "Effect of Montmorillonite Nano inclusions on the molecular Dynamic and Thermal Properties of Polylactic acid", in Proceedings of the 1st Panhellenic Conference in Packaging, Athens, 17-18/03/2008, cd rom.
- C.39. C. Panayiotou, **S. Marras**, I. Tsvintzelis, K. Kladi, and I. Zuburtikoudis, "Electrospinning of Poly(ϵ -caprolactone) Clay Nanocomposites", in 2007 AIChE Annual Meeting, Salt Lake City, USA 4-9/11/2007.
- C.40. I. Zuburtikudis, **S.I. Marras**, A. Tsimpliaraki, "Nanocomposite Materials with Matrix of Biodegradable Copolymer of Boutanodiole 1,4 and Succinic & Adipic Acid", Proceedings of the 6th Panhellenic Chemical Engineering Conference, Athens, Greece, 31/5-2/6-2007, pp. 461-464.
- C.41. **S.I. Marras**, I. Zuburtikudis, A. Tsimpliaraki, C. Panayiotou, "The role of Surfactant on the Structure and the Thermal Properties of Nanocomposite Materials of Poly(L-lactic acid)

- Clay Nanocomposites", Proceedings of the 6th Panhellenic Chemical Engineering Conference, Athens, Greece, 31/5-2/6-2007, pp. 237-240.
- C.42. I. Tsvintzelis, K. Tsiopsias, **S.I. Marras**, C. Panayiotou I. Filippou, "Preparation of cellulose Fibrous Structure by Electrospinning Process", Proceedings of the 6th Panhellenic Chemical Engineering Conference, Athens, Greece, 31/5-2/6-2007, pp. 381-384.
- C.43. A. Tsimliaraki, **S.I. Marras**, I. Zuburtikudis, "Fabrication of Polymer clay nanocomposites using solvent and applying shear: A Comparative Study", Proceedings of the 6th Panhellenic Chemical Engineering Conference, Athens, Greece, 31/5-2/6-2007, pp. 465-468.
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2013-σήμερα Supervision of 1 undergraduate thesis, *DBB, UTH*, and 5 undergraduate theses, *School of Pedagogical and Technological Education (ASPETE), Volos, Greece*.
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- IR Spectroscopy
- Polymer Thermal Analysis by TGA and DSC