
CURRICULUM VITAE

Name: Petroula Tarantili
Date of Birth: October 18th, 1968
Marital status: Married
Address: National Technical University of Athens, School of Chemical Engineering, Polymer Technology lab.
Heroon Polytechniou 9, Zografos, GR15780, Athens GREECE
Tel./ Fax: +30 2107723289 / +30 2107723163
E-mail: taran@chemeng.ntua.gr

Working Experience:

1996-1999 : ARGO S.A., Plastics Packaging Materials, Company

2000-2002 Hellenic Petroleum S.A.

Academic Positions

Graduate student	1992-1996
PostDoc student	1999-2000
Lecturer	2003-2007
Assist. Professor	2007 -

Teaching:

1992-1996 Laboratory practice in the courses “Polymer Science” and “Polymer Technology”, 7th and 8th semester respectively, School of Chemical Engineering,
1999-2000, Technology”, 7th and 8th semester respectively, School of Chemical Engineering,
2003-2006

2007 - : Laboratory practice in the courses “Polymer Science & Technology I” & “Polymer Science & Technology II” 8th and 9th semester respectively, School of Chemical Engineering

2003 - 2006 “Polymer Science” (6th semester School, of Chemical Engineering)
“Polymer Technology” (8th semester School, of Chemical Engineering)

2006 - : Polymer Engineering (6th semester School, of Chemical Engineering)

2007 - : Polymer Science & Technology II (9th semester School, of Chemical Engineering)

2005 - : “Polymers Technology”, Msc in Process Control, School of Mechanical Engineering NTUA

International collaborations

- March - June 1994: PhD visiting researcher (Greek British Council grant) at Queen Mary and Westfield College, University of London, London, UK.
 - February - June 1993: Erasmus student at Université des Sciences et Techniques de Lille-France.
-

Research:

- Polymeric composite and nanocomposite materials
 - Biomedical Polymers
 - Plastic Packaging materials
 - Plastic wastes management and recycling
-

I. List of publications in international referred journals

1. Andreopoulos A.G. and Tarantili P.A. Treated aramid fibres as reinforcement for epoxies. *Advanced Composites Letters* 1994; 3(3): 93-97
2. Andreopoulos A.G., Tarantili P. Preparation and study of aramid/epoxy prepregs. *Journal of Materials Science* 1995; 30(8): 2159-2162
3. Tarantili P.A., Koullas D.P., Christakopoulos P., Kekos D., Koukios E.G. and Macris B.J. Cross-synergism in enzymatic hydrolysis of lignocellulosics: Mathematical correlations according to a hyperbolic model. *Biomass and Bioenergy* 1996; 10(4): 213-219
4. Tarantili P.A., Andreopoulos A.G. Mechanical properties of epoxies reinforced with chloride-treated aramid fibers. *Journal of Applied Polymer Science* 1997; 65(2): 267-276
5. Andreopoulos A.G. and Tarantili P.A. Effect of hygrothermal treatment on the flexural properties of UHMPE fibre/epoxy resin composites. *Advanced Composites Letters* 1997; 6(3): 103-108
6. Tarantili P.A., Andreopoulos A.G., and Galiotis C. Real-time micro-Raman measurements on stressed polyethylene fibers. 1. Strain rate effects and molecular stress redistribution. *Macromolecules* 1998; 31(20): 6964-6976
7. Andreopoulos A.G., Tarantili P.A. Water sorption characteristics of epoxy resin-UHMPE fibers composites. *Journal of Applied Polymer Science* 1998; 70(4): 747-755
8. Andreopoulos A.G. and Tarantili P.A. A review on various treatments of UHMPE fibers. *Journal of Elastomers and Plastics* 1998; 30(2): 118-132
9. Andreopoulos A.G., Tarantili P.A. and Anastassakis P. Properties of Low Density Polyethylene/Polypropylene blends. *Journal of Macromolecular Science-Pure and*

Applied Chemistry 1998; A35(5): 751-761

10. Andreopoulos A.G., Evangelatou M. and Tarantili P.A. Properties of maxillofacial silicone elastomers reinforced with silica powder. *Journal of Biomaterials Applications* 1998; 13(1): 66-73

11. Arjyal B.P., Tarantili P.A., Andreopoulos A.G., Galiotis C. Surface and bulk stress/strain measurements in composite laminates with a fibre-optic Raman probe. *Composites Part A: Applied Science and Manufacturing* 1999; 30(10): 1187-1195

12. Andreopoulos A.G., Tarantili P.A. Study of the off-axis properties of composites reinforced with ultra-high modulus polyethylene fibres. *European Polymer Journal* 1999; 35(6): 1123-1131

13 Andreopoulos A.G., Tarantili P.A., and Anastassakis P. Compatibilizers for Low Density Polyethylene/Polypropylene blends. *Journal of Macromolecular Science-Pure and Applied Chemistry* 1999; A36(9): 1113-1122

14 Polyzois G.L, Tarantili P.A., Frangou M.J., Andreopoulos A.G. Physical properties of a silicone prosthetic elastomer stored in simulated skin secretions. *The Journal of Prosthetic Dentistry* 2000; 83(5): 572-577

15 Rallis G., Tarantili P.A., Andreopoulos A.G. Epoxy resin composites with surface modified aramid fibres. *Advanced Composites Letters* 2000; 9(2): 127-133

16 Vlachou M., Hani N., Efentakis M., Tarantili P.A. and Andreopoulos A.G. Polymers for use in controlled release systems: The effect of surfactants on their swelling properties. *Journal of Biomaterials Applications* 2000; 15(1): 65-77

17 Andreopoulos A.G. and Tarantili P.A. Waste leather particles as a filler for poly(vinyl chloride) plastisols. *Journal of Macromolecular Science - Pure and Applied Chemistry* 2000; A37(11): 1353-1362

18 Babanas K., Tarantili P.A. and Andreopoulos A.G. Plasticized poly(vinyl chloride) filled with waste leather particles. *Journal of Elastomers and Plastics* 2001; 33(1): 72-85

19 Vlachou M., Naseef H., Efentakis M., Tarantili P.A. and Andreopoulos A.G. Swelling properties of various polymers used in controlled release systems. *Journal of Biomaterials Applications* 2001; 15(4): 293-306

20 Andreopoulos A.G. and Tarantili P.A. Xanthan gum as a carrier for controlled release of drugs. *Journal of Biomaterials Applications* 2001; 16(1): 34-46

21 Polyzois G.L., Tarantili P.A., Frangou M.J., Andreopoulos A.G. Fracture force, deflection at fracture, and toughness of repaired denture resin subjected to microwave polymerization or reinforced with wire or glass fiber. *Journal of prosthetic dentistry* 2001; 86(6): 613-619

22 Mamouzelos N.J., Proikakis C.S., Tarantili P.A., Andreopoulos A.G. Release of Propranolol and Diclofenac from low MW DL-poly(lactic acid). *Journal of Biomaterials Applications* 2001; 16(3): 177-190

23. Bousoulas J., Tarantili P.A., Andreopoulos A.G. Resole resin as sizing agent for aramid fibres. *Advanced Composites Letters* 2001; 10(5): 239-245

24. Proikakis C.S., Tarantili P.A., Andreopoulos A.G. Synthesis and characterization of

low molecular weight polylactic acid. *Journal of Elastomers & Plastics* 2002; 34(1): 49-63

25. Andreopoulos A.G. and Tarantili P.A. Study of biopolymers as carriers for controlled release. *Journal Macromolecular Science-Physics* 2002; B41(3): 559-578

26. Proikakis C.S., Mamouzelos N.J., Tarantili P.A., Andreopoulos A.G. Stability of DL-poly(lactic acid) in aqueous solutions. *Journal of Applied Polymer Science* 2003; 87(5): 795-804

27. Frangou Mary J., Polyzois Gregory L., Tarantili Petroula A., Andreopoulos Andreas G. Bonding of silicone extra-oral elastomers to acrylic resin: The effect of primer composition. *European journal of prosthodontics and restorative dentistry* 2003; 11(3): 115-118

28. Georgopoulos S.Th., Tarantili P.A., Avgerinos E., Andreopoulos A.G., Koukios E.G. Thermoplastic polymers reinforced with fibrous agricultural residues. *Polymer Degradation and Stability* 2005; 90(2): 303-312

29. Baroulaki I., Karakasi O., Pappa G., Tarantili P.A., Economides D., Magoulas K. Preparation and study of plastic compounds containing polyolefins and post used newspaper fibers. *Composites Part A: Applied Science and Manufacturing* Volume 2006; 37(10): 1613-1625

30. Proikakis C.S., Mamouzelos N.J., Tarantili P.A., Andreopoulos A.G. Swelling and hydrolytic degradation of poly(D,L-lactic acid) in aqueous solutions. *Polymer Degradation and Stability* 2006; 91(3): 614-619

31. Proikakis C.S., Tarantili P.A., Andreopoulos A.G. The role of polymer/drug interactions on the sustained release from poly(DL-lactic acid) tablets. *European Polymer Journal* 2006; 42(12): 3269-3276

32. Baroulaki I., Mergos J.A., Pappa G., Tarantili P.A., Economides D., Magoulas K., Dervos C.T. Performance of polyolefin composites containing recycled paper fibers. *Polymers for Advanced Technologies* 2006; 17(11-12): 954-966

33. Vassiliadi E., Tarantili P.A. Characterization of metallized biaxially oriented polypropylene film. *Journal of Applied Polymer Science* 2007; 105(4): 1713-1722

34. Katsoulotos G., Tarantili P.A. The Effect of Matrix Composition on the properties of cellulosic fibers-polyethylene composites. *Journal of Applied Polymer Science* 2008; 107(4): 2385-2393

35. Katsoulotos G., Pappa G., Tarantili P.A., Magoulas K. Preparation and characterization of functionalized low density polyethylene matrix biocomposites. *Polymer Engineering and Science* 2008; 48 (5): 902-911

36. Tarantili P. and Koumoulos H. Sustained release of guaifenesin and ipriflavone from biodegradable coatings. *European Polymer Journal* 2008; 44(2): 444-452

37. Tarantili P.A. and Kiose V. The effect of accelerated ageing on the structure and properties of mono- and multilayer packaging films. *Journal of Applied Polymer Science* 2008;109(1):674-682

38. Pandazakos G., Tarantili P.A., Beazi-Katsioti M. A 4-month accelerated aging study of geomembranes exposed to landfill leachate. Accepted in *Journal of Elastomers and Plastics* 2009, 41(1): 23-39
39. Karahaliou E.-K., Tarantili P.A. Preparation of ABS/ montmorillonite nanocomposites and degradation studies during extrusion reprocessing. *Journal of Applied Polymer Science* 2009, 113(4), 2271-2281
40. Dervos C.T., Tarantili P.A., and Athanassopoulou M.D. Low- κ' Dielectric Properties of UV-treated BOPP Films. *Journal of Physics D: Applied Physics* 2009, 42(13), art. No: 135409
41. Karahaliou E.-K., Tarantili P.A. Stability of ABS compounds subjected to repeated cycles of extrusion processing, *Polymer Engineering and Science* 2009, 49(11):2269-2275
42. Tarantili P.A., Mitsakaki A.N and Petoussi M.A. "Processing and properties of engineering plastics recycled from waste electrical and electronic equipment (WEEE)" *Polymer Degradation and Stability*, 95:405-410, 2010.
43. Stathi K., Tarantili P.A., Polyzois G. The effect of accelerated ageing on performance properties of addition type silicone biomaterials, *Journal of Materials Science: Materials in Medicine*,21(5): 1403-1411, 2010
44. Voulomenou A., Tarantili P.A. Preparation, characterization and property testing of condensation-type silicone/montmorillonite nanocomposites. *Journal of Applied Polymer Science* 118(5): 2521-2529, 2010
45. Vasilakos S., Tarantili P.A., The effect of photo-ageing on the physical properties of silicone/montmorillonite prosthetic nanocomposites. *Journal of Applied Polymer Science* 118(5): 2659-2667, 2010

II. Publications in Technical Journals

1. Andreopoulos A.G., Tarantili P.A. Surface Treated High-Modulus Reinforcements. *Textile Technology for China* 1997; 41-44
2. Andreopoulos A.G., Tarantili P.A. Modification of PE fibres for use in Composites. *Technical Textiles International* Dec. 1996/Jan. 1997; 5(10): 26-28
3. Andreopoulos A.G. and Tarantili P.A. Advanced fibres treated with corona and plasma. *Textile Technology International* 1998; 37-40

III. Oral presentation in International Conferences

1. Andreopoulos A.G., Tarantili P.A. & Milioti E.C. "Effect of treatment of UHMPE Fibres on their performance as reinforcement". 6th European Polymer Federation Symposium on Polymeric Materials, Crete, 7-11 October 1996
2. Polyzois G.L., Tarantili P.A., Frangou M.J., Andreopoulos A.G. "Physical properties of a silicone prosthetic elastomer stored in simulated skin secretions". 15th Annual

Conference, American Anaplastology Association, May 3-6 2000, Washington D.C. USA

- 3.** Bousoulas J.D., Tarantili P.A., Andreopoulos A.G. “A comparative study of various surface treatments on aramid fibres”. Polymer Processing Society: Europe/Africa Regional Meeting, Athens, September 14-17 2003
- 4.** Frangou Mary J., Polyzois Gregory L., Tarantili Petroula A., Andreopoulos Andreas G. “Bonding of silicone extra-oral elastomers to acrylic resin: The effect of primer composition”. 27th Annual Conference of European Prosthodontic Association, 4-6 September 2003, Geneva Switzerland
- 5.** Georgopoulos S., Tarantili P.A., Avgerinos E., Andreopoulos A.G., Koukios A.G. “Lignocellulosic agricultural residues as fillers of thermoplastic polymers”. 4th International Symposium: Materials from Renewable Resources, 11-12 September 2003, Erfurt Germany
- 6.** Proikakis C., Mamouzelos N., Tarantili P.A., Andreopoulos A.G. “Swelling and hydrolytic degradation of poly(D,L-lactic acid) in aqueous solutions”. MoDeSt 3, 29/8-2/9/2004, Lyon France
- 7.** Gavela S., Karakosta C., Nydriotis C., Kaselouri-Rigopoulou V., Koliass S., Tarantili P.A., Magoulas C., Tassios D., Andreopoulos A. “A study of concretes containing thermoplastic wastes as aggregates”. International RILEM Conference on the Use of Recycled Materials in Buildings and Structures, 2004, Volume 2, 911-918
- 8.** Tarantili P.A., Andreopoulos A.G. “Design of biodegradable polymer systems for drug release applications”. 8th International Symposium: Polymers for Advanced Technologies, 13-16 September 2005, Budapest Hungary
- 9.** Tarantili P.A., Andreopoulos A.G. “Biodegradable polymeric carriers for controlled release systems”. 1st South East European Congress of Chemical Engineering (SEECChE 1), 25-28 September 2005, Belgrade Serbia and Montenegro
- 10.** Katsoulotos G., Pappa G., Tarantili P.A., Magoulas K., Andreopoulos A.G. “Modified polyethylene as a matrix for paper fiber reinforced composites”. 1st South East European Congress of Chemical Engineering (SEECChE 1), 25-28 September 2005, Belgrade Serbia and Montenegro
- 11.** Tarantili P.A., Mitsakaki A.N and Petoussi M.A. “Processing and properties of engineering plastics recycled from waste electrical and electronic equipment (WEEE)”. MoDeSt 2008, 07/9-11/9/2008, Liège Belgium
- 12.** Tarantili P.A., Andreopoulos A. G. Recycling of engineering plastics deriving from waste electrical and electronic equipment (EEE) 2nd International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2009) & SECOTOX Conference, Myconos, June 21-26, 2009
- 13.** Tarantili P., Vasilakos S. Preparation of Silicone elastomer/montmorillonite Nanocomposites and their performance as carriers for drug release, 22nd European Conference on Biomaterials, Lausanne, 7-11/9/2009
- 14.** Tarantili P.A., Andreopoulos A.G. Management of High Value-Added Waste Plastics. 3^o Διεθνές Συνέδριο ΕΕΔΣΑ, 30-31/10/2009, Αθήνα

15. Vasilakos S.P., Tarantili P.A. Preparation and property testing of organoclay/polysiloxane nanocomposites for biomedical applications, SPE, Belfast, 7-9/9/2010
16. Tarantili P., Vasilakos S. Accelerated ageing of pigmented silicone elastomer nanocomposites, suitable for biomedical applications 23rd European Conference on Biomaterials, Tampere Finland, 11-15/9/2010

IV. Poster presentation in International Conferences

1. Tarantili P.A., Andreopoulos A.G. and Galiotis C. "Study of stress relaxation of Ultra-High-Modulus Polyethylene fibres using micro-Raman spectroscopy". Fourth MED-School and Symposium on Science and Technology of Advanced Polymer Based Materials, 5-9 June 1995, Fodele-Crete
2. Georgopoulos S.Th., Tarantili P.A., Avgerinos E., Andreopoulos A.G., Koukios E.G. "Thermoplastic polymers reinforced with fibrous agricultural residues" MoDeSt 3, 29/8-2/9/2004, Lyon France
3. Baroulaki I., Pappa G., Tarantili P.A., Economides D., Magoulas K. "Performance of polyolefin composites containing recycled paper fibers". 8th International Symposium: Polymers for Advanced Technologies, 13-16 September 2005, Budapest Hungary
4. Stathi K., Tarantili P.A., Polyzois G. "The Effect of accelerated ageing on the color stability of pigmented maxillofacial silicone elastomers". 27th Annual Conference of European Prosthodontic Association, 11-13 October 2007, Athens Greece
5. Tarantili P.A., Stathi K.J. "The effect of accelerated ageing on the physicochemical properties of reinforced polysiloxane elastomers". MoDeSt 2008, 07/9-11/9/2008, Liège Belgium
6. Tarantili P.A. and Kiose V.E. "Structure-property interrelations of single and multilayer plastic films exposed to accelerated ageing conditions". MoDeSt 2008, 07/9-11/9/2008, Liège Belgium
7. Vassiliadi E., Tarantili P.A., Andreopoulos A.G. "Study of properties of metallized, biaxially oriented polypropylene film for packaging applications". 6th Hellenic Conference on Polymers, Patras, 3-5 November 2006
8. Voulomenou A., Tarantili P.A. Study of silicone rubber composites containing organophilic nanoparticles. 7th Hellenic Conference on Polymers, Ioannina, 28/9-1/10 2008
9. Koumoulos H., Tarantili P.A. "Drug release from thin, biodegradable PLA coatings" 22nd European Conference on Biomaterials, Lausanne, 7-11/9/2009
10. Vasilakos S.P., Tarantili P.A., "Preparation, structure and performance of layered silicate nanocomposites with polysiloxane matrix", 14th European conference on composite materials, Budapest, 7-10/6/2010
11. Moraitis G., Tarantili P.A., "Preparation and study of organoclay nanocomposites based on matrices of compatibilized polyolefin blends", 14th European conference on composite materials, Budapest, 7-10/6/2010

12. Vasilakos S.P., Triantou M., Tarantili P. The effect of organoclay reinforcement on the vulcanization reaction and network structure of polysiloxane nanocomposites hybrids. MoDeSt 2010, 05/9-9/9/2010, Athens GREECE
13. Alexandrakis E., Tarantili P.A., Andreopoulos A.G. Compatibilized polyolefin blends: Effect of composition and processing parameters on the blend morphology and thermomechanical properties. MoDeSt 2010, 05/9-9/9/2010, Athens GREECE
14. Stathokostopoulou C., Tarantili P.A., Effect of organic modified montmorillonite on the structure and properties of poly(D,L-lactic acid) nanocomposites MoDeSt 2010, 05/9-9/9/2010, Athens GREECE
15. Tarantili P.A., Stathokostopoulou C. Preparation, characterization and hydrolytic degradation studies of organoclay/Poly(lactic acid) nanocomposites for biomedical applications, 23rd European Biomaterials Conference, Tampere Finland, 11/05/9/2010
16. Vasilakos S., Triantou M., Tarantili P.A. The effect of clay reinforcement on the morphology and thermomechanical properties of medium molecular weight polysiloxane nanocomposites. 8th Hellenic Polymer Society Symposium, 24-29 October 2010, Hersonissos Crete, Greece
17. Moraitis G. Tarantili P.A. The effect of composition and processing parameters on the morphology and properties of organoclay/polyolefin nanocomposites. 8th Hellenic Polymer Society Symposium, 24-29 October 2010, Hersonissos Crete, Greece
18. Stathokostopoulou C., Tarantili P.A., Layered silicate/Poly(lactic acid) nanocomposite films as carriers in drug release systems. 8th Hellenic Polymer Society Symposium, 24-29 October 2010, Hersonissos Crete, Greece

Reviewer in Scientific Journals

1. Composites Part A
2. Composites Science and Technology
3. Macromolecular Bioscience
4. Biomacromolecules
5. Acta Biomaterialia
6. Journal of Applied Polymer Science
7. Polymer Science and Engineering
8. Industrial Crops and Products
9. Journal of Membrane Science.
10. Industrial & Engineering Chemistry Research
11. Journal of Engineering Science and Technology Review
12. Polymers for advanced technologies
13. Polymer Bulletin
14. Journal of Chemical Technology & Biotechnology