

CV



PERSONAL DETAILS

SURNAME: KOTROTSOS
NAME: ATHANASIOS
DATE OF BIRTH: 09/02/1985
BIRTH PLACE: AGRINION GREECE

MARITAL STATUS: SINGE
PRESENT STATUS: POST DOCTORAL
RESEARCH ASSOCIATE,
APPLIED MECHANICS
LABORATORY,
UNIVERSITY OF PATRAS
NATIONALITY: HELLENIC (GREEK)

CONTACT INFORMATION

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OTHER INFORMATION

DRIVE LICENSE: PRIVATE B CATEGORY

MILITARY SERVICE: COMPLETED

EDUCATIONAL TRAINING

1. **Dipl.-ing** (Dpt of Mechanical and Aeronautical Engineering, university of Patras Greece, November 2008).

2. **M.Sc** (Dpt of Physics, Dpt of Chemistry, Dpt of Materials Science, Dpt of Chemical Engineering, Interdepartmental degree qualified at Science and Technology of Polymers, university of Patras Greece, November 2011).

3. **Ph.D-ing** (Dpt of Mechanical and Aeronautical Engineering, university of Patras Greece, June 2017) in applied mechanics (**Development of Self-Healing techniques for Fiber Reinforced Composite Materials**), (Supervisor: Prof. **Vassilis Kostopoulos**).

4. Member of **TEE** (Technical Chamber of Greece) from 5-3-2009.

WORK EXPERIENCE

4/2006-12/2006 and 12/2009-12/2010

- **OTE VOICE MAIL** (Telecommunications Agency of Greece) Telephone directory inquiry of Greece.

11/2011-6/2012

- **Mechano-composer** of Aircrafts at Stefanovikion Magnisias during military service.

LANGUAGES

GREEK

- Native Language

ENGLISH

- Certificate of **Lower** University of Cambridge – 2003
 - Certificate of **Proficiency** according to **CEFR** (Common European Framework of Reference for Languages) - 2016
-

PARTICIPATION IN RESEARCH PROGRAMS

1. **FP7- COLLABORATIVE (246256): COEUS-TITAN** "*Innovative Smart Composite Moulds for Cost-Effective manufacturing of plastic and composite components*", 01/02/2011-31/05/2011 & 01/10/2013-28/02/2014.
2. **ERASMUS MOBILITY** ΠΡ. "ΔΙΑ ΒΙΟΥ ΜΑΘΗΣΗΣ", 30/09/2015-30/12/2016.
3. **FP7-COLLABORATIVE (605412): HIPOCRATES** "*Self-Healing polymers for Concepts on Self-Repaired aeronautical composites*", 01/04/2015-30/09/2015, 01/12/2015-31/12/2015 & 01/03/2016-31/10/2016.
4. **ΕΣΠΑ 2007-2013 ΘΑΛΗΣ (THALES)**. Project acronym: "Development of Composite Materials and Related Techniques for Aircraft Applications. Monitoring of their Structural Integrity and Assessment of their Self-healing capability" 2012-2015.

PARTICIPATION IN CONFERENCES

1. **A. Xerapadaki, G.C. Papanicolaou, A. Kotrotsos, D.E. Mouzakis**, "*Experimental investigation on Copper-Epoxy Particulate Composites Subjected to static and Dynamic Loading*", **ICSAAM 2007** (International Conference on Structural Analysis of Advanced Materials) September 2007 Patras (Psathopyrgos).
2. **A. Kotrotsos, A. Baltopoulos, X. Tsilimigkra, P. Tsokanas, V. Kostopoulos**, "*Experimental investigation on Self-healing efficiency of doped Fiber Reinforced Plastics with Thermoplastic micro-Particles*", **10th HPSC** (10th HELLENIC POLYMER SOCIETY CONFERENCE with International Participation), University of Patras, Rio Campus, Patras, 4-6 December 2014.
3. **X. Tsilimigkra, A. Baltopoulos, A. Kotrotsos, N. Siakavellas, V. Kostopoulos**, "*Strategies and feasibility study on developing vascular networks in structural polymer composites*", **10th HPSC** (10th HELLENIC POLYMER SOCIETY CONFERENCE with International Participation), University of Patras, Rio Campus, Patras, 4-6 December 2014.
4. **A. Kotrotsos, A. Baltopoulos, S. Tsantzalis, X. Tsilimigkra, P. Tsokanas, V. Kostopoulos**, "*Experimental investigation on Self-healing efficiency of doped Fiber Reinforced Plastics with Thermoplastic micro-Particles*", **ICSAAM 2015**, (The 6th International Conference on Structural Analysis of Advanced Materials) September 2015, Porto, Portugal.
5. **X. Tsilimigkra, A. Baltopoulos, S. Tsantzalis, A. Kotrotsos, N. Siakavellas, V. Kostopoulos**, "*Strategies on implementing a potential self healing functionality in a composite structure*", **ICSAAM 2015**, (The 6th International Conference on Structural Analysis of Advanced Materials) September 2015, Porto, Portugal.
6. **A. Kotrotsos, A. Baltopoulos, S. Tsantzalis, X. Tsilimigkra, P. Tsokanas, D.H. Turkenburg, H.R. Fischer, V. Kostopoulos**, "*Experimental investigation on Self-healing efficiency of doped Carbon*

- Fiber Reinforced Plastics with Bis-maleimide based polymers*", **E-MRS 2015 FALL**, (Fall Meeting of the European Materials Research Society) September 2015, Warsaw, Poland.
7. **X. Tsilimigkra, A. Baltopoulos, S. Tsantzalidis, A. Kotrotsos, N. Siakavellas, V. Kostopoulos**, "*Introducing a modified compact tension specimen for potential use in self healing applications*", **E-MRS 2015 FALL**, (Fall Meeting of the European Materials Research Society) September 2015, Warsaw, Poland.
 8. **A. Kotrotsos, A. Repanas, A. Baltopoulos, S. Tsantzalidis, X. Tsilimigkra, B. Glasmacher, V. Kostopoulos**, "*Self-healing Concepts for Aerospace Applications*", **5th International Science Slam 2015**, October 2015, Hannover, Germany.
 9. **A. Kotrotsos, S. Tsantzalidis, A. Christopoulos, T. Loutas, V. Kostopoulos**, "*Impact and CAI tests on doped Carbon Fiber Reinforced Plastics with Bis-Maleimide based polymers. Thermal characterization and Healing Efficiency value*", **ECCM17** (European Conference on Composite Materials) 26-30 JUNE 2016, Munich, Germany. **A. Xepapadaki, G.C. Papanicolaou, A. Kotrotsos, D.E. Mouzakis**, "*Experimental investigation on Copper-Epoxy Particulate Composites Subjected to static and Dynamic Loading*", **ICSAAM 2007** (International Conference on Structural Analysis of Advanced Materials) September 2007 Patras (Psathopyrgos).
 10. **A. Kotrotsos, A. Vavouliotis, S. Tsantzalidis, V. Kostopoulos**, "*The effect of CNTs modified matrix of epoxy CRPs on the hydrothermal behavior of the material: Evaluation of the water uptaking using electrical resistance measurements*", **ICSAAM 2013** (International conference on structural analysis of advanced materials) September 2013 Kos (Dodekhanisos).
 11. **A. Kotrotsos, E. Kollia, L. Kontaxis, V. Kostopoulos, G.C. Papanicolaou**, "*Thermogravimetric Analysis and Thermal Conductivity Study of Polymer Matrix Micro- and Nano-TiO₂ Particulate Composites*", **Therma 2014** (6th Hellenic conference on Thermal Analysis & Thermidometry), Technical Institute of Thessaly, Larissa 26-28 September 2014.
 12. **E. Kollia, A. Kotrotsos, L. Kontaxis, V. Kostopoulos, G.C. Papanicolaou**, "*Dynamic Mechanical Analysis of polymer matrix micro and nano TiO₂ particulate Composites*", **Therma 2014** (6th Hellenic conference on Thermal Analysis & Thermidometry), Technical Institute of Thessaly, Larissa 26-28 September 2014.
 13. **L. Kontaxis, E. Kollia, A. Kotrotsos, V. Kostopoulos, G.C. Papanicolaou**, "*Mechanical and DSC of Epoxy Matrix/TiO₂ Micro- and Nano-Particulate Composites*", **Therma 2014** (6th Hellenic conference on Thermal Analysis & Thermidometry), Technical Institute of Thessaly, Larissa 26-28 September 2014.
 14. **P. Dimoka, D.E. Vlachos, N. Athanasopoulos, A. Kotrotsos, K. Antoniadis, V. Kostopoulos**, "*Self-Heating Composite molds for the*

“green” manufacturing of composite components”, **10th HPSC** (10th HELLENIC POLYMER SOCIETY CONFERENCE with International Participation), University of Patras, Rio Campus, Patras, 4-6 December 2014.

15. **G.C. Papanicolaou, E.J. Pappa, D.V. Portan, A. Kotrotsos**, *“Modeling and Experimental Verification of the Stacking Sequence and Surface Treatment Effect on the Thermal Conductivity of Multilayered Hybrid Nano-Composites”*, **Therma 2016** (7th Hellenic conference on Thermal Analysis & Thermidometry), University of Ioannina, Ioannina 27-29 of May 2016.
16. **A. Kotrotsos, P. Tsokanas, S. Tsantzalīs, V. Kostopoulos**, *“Toughening and healing of composites by multiwall CNT doped nylon micro-particles”*, **ICSAAM 2017** (The 7th International Conference on Structural Analysis of Advanced Materials), 19-22 September 2017, Bucharest, Romania.
17. **X. Tsilimigkra, A. Kotrotsos, S. Tsantzalīs, G. Sotiriadis, V. Kostopoulos, S. Florez, T. Bosman**, *“Mechanical performance and ultrasonic inspection of an impacted skin-stiffened composite implemented with a self-healing functionality”*, **Euromat 2017** (European congress and exhibition on advanced materials and processes), 17-22 September 2017 Thessaloniki, Greece.
18. **A. Kotrotsos, S. Tsantzalīs, P. Tsokanas, V. Kostopoulos**, *“Development of Self-healing techniques for Fiber Reinforced Composites: Recent advances on Intrinsic Self-healing mechanism”*, **ICCM17** (International Conference on Composite Materials), 20-25 August 2017 Xi’an, China.

JOURNAL PUBLICATIONS

1. **G.C. Papanicolaou, A.G. Xepapadaki, A. Kotrotsos, D.E. Mouzakis**, *“Interphase Modelling of Copper-Epoxy Particulate Composites subjected to static and Dynamic Loading”*, **Applied Polymer Science**, 109, 1150-1160, (2008).
2. **A. Kotrotsos, A. Vavouliotis, S. Tsantzalīs, V. Kostopoulos**, *“The Effect of CNT modified matrix of epoxy CFRPs on hydrothermal behaviour of material. Evaluation of water uptake using electrical resistance measurements”*, **Plastics, Rubber and Composites**, 43, 122-129, (2014).
3. **A. Kotrotsos, A. Vavouliotis, T. Loutas, V. Kostopoulos**, *“The Effect of CNT modified matrix of cyanate ester CFRPs on the hydrothermal behavior of the material. Evaluation of the water uptake using electrical resistance measurements”*, **Polymer Composites**, 37, 1072-1077, (2014).
4. **A. Kotrotsos, A. Baltopoulos, S. Tsantzalīs, X. Tsilimigkra, P. Tsokanas, V. Kostopoulos**, *“Experimental investigation on self-healing efficiency of doped fiber reinforced plastics with PET micro-particles”*, **UPB**

- SCIENTIFIC BULLETIN, SERIES D: MECHANICAL ENGINEERING, 78, 67-76, (2016).
5. **V. Kostopoulos, A. Kotrotsos, S. Tsantzalís, P. Tsokanas, T. Loutas, A.W. Bosman**, "*Toughening and healing of continuous fibre reinforced composites by supramolecular polymers*", **Composites Science and Technology**, 128, 84-93, (2016).
 6. **V. Kostopoulos, A. Kotrotsos, S. Tsantzalís, P. Tsokanas, A.C. Christopoulos, T. Loutas**, "*Toughening and healing of continuous fibre reinforced composites with bis-maleimide based pre-pregs*", **Smart Materials and Structures**, 25, 84011 (12 pp.), (2016).
 7. **A. Repanas, A. Kotrotsos, V. Kostopoulos, B. Glasmacher**, "*MWCNT-doped Nylon electrospun fibers as materials for increasing damage tolerance of CFRPs in structural applications*", **IJSET – International Journal of Innovative Science, Engineering & Technology**, 3, 272-277, (2016).
 8. **X. Tsilimigkra, A. Baltopoulos, S. Tsantzalís, A. Kotrotsos, N. Siakavellas, V. Kostopoulos, S. Flórez**, "*Strategies on implementing a potential self-healing functionality in a composite structure*", **Ciência & Tecnologia dos Materiais**, 28, 147-154, (2016).
 9. **V. Kostopoulos, A. Kotrotsos, A. Baltopoulos, S. Tsantzalís, P. Tsokanas, T. Loutas, A.W. Bosman**, "*Mode II fracture toughening and healing of composites using supramolecular polymer interlayers*", **eXPRESS Polymer Letters**, 10, 914-926, (2016).
 10. **G. C. Papanicolaou, V. Kostopoulos, L. Kontaxis, E. Kollia, A. Kotrotsos**, "*A Comparative Study Between Epoxy/Titania Micro- and Nano-Particulate Composites Thermal and Mechanical Behavior by Means of Particle-Matrix Interphase Considerations*", **Polymer Engineering and Science**, (2017).
 11. **X. Tsilimigkra, A. Kotrotsos, S. Tsantzalís, G. Sotiriadis, V. Kostopoulos, S. Florez, A. W. Bosman**, "*Skin-stringer component with self-healing functionalities*", **JEC Composites Magazine** No 112, April-May 2017, 41-42.
 12. **G.C. Papanicolaou, E.J. Pappa, D.V. Portan, A. Kotrotsos, E. Kollia**, "*Effect of Stacking Sequence and Surface Treatment on the Thermal Conductivity of Multilayered Hybrid Nano-Composites*", **Journal of Applied Physics**, (2017).

1. **V. Kostopoulos** and **A. Kotrotsos**, Self-healing of structural composites containing dendrimers as healing agent, in book "Dendrimers", INTECH open science, (accepted for Publication, 2017).

FEATURED SKILLS & RESEARCH ACTIVITIES

Polymers, Polymer composites, Nanotechnology, Manufacturing, Smart materials, Self-healing materials, Advanced materials, Electrospinning, Non destructive inspection techniques, Mechanical characterization of materials, Thermal characterization of materials, Electrical characterization of materials, Acoustic emission, Fracture mechanics, Structural engineering, Fatigue behavior, Hydrothermal, SEM, Optical microscopy, Failure analysis.

INTERESTS

- Sports-Gym
- Traditional and folk Greek dances
- President in Traditional dances group of University of Patras
- Trips