

## CURRICULUM VITAE

Professor Vassilis KOSTOPOULOS

**Born:** Athens, 1957

**Nationality:** Greek

**Marital Status:** Married, two children

**Present Position:** Professor Emeritus, Former Director of Applied Mechanics & Vibrations Lab. (2004-2024)

**Business Address:**

University of Patras, Department of Mechanical Engineering & Aeronautics (MEAD),  
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**Home Address:** 2 Amphitritis str., GR-265 04 Patras, Greece, tel. +30 6951002447.

**Education:**

1969-1975	Varvakios Model High School, Athens.
1975-1980	Undergraduate studies in Mechanical Engineering.
1980	Degree in Mechanical Engineering (Dip. Eng.), National Technical University of Athens (NTUA), Greece.
1982-1987	Postgraduate studies in Applied Mechanics (Mechanics of Composite Materials), Applied Mechanics Lab., Department of Mechanical Engineering, University of Patras, Greece.
1988	PhD in Applied Mechanics.

**Foreign languages:** English, French (working level).

**Computing Experience:**

DOS, WINDOWS, LINUX and UNIX Operating Systems.  
Fortran, C++ and Python programming languages.  
FEA General Purposes Codes: Nastran/Patran, ABAQUS, ANSYS.  
Transient Analysis FE Code DYNA 3D (implicit-explicit).  
Design software: CATIA, SolidWorks  
Fracture Mechanics Franc 2D and Franc 3D

**Teaching Experience:**

1987-2026:

**Undergraduate courses:**

(a) Vector Mechanics for Engineers (Static, Dynamics), (b) Applied Mathematics (Partial Differential Equations), (c) Introduction to Composite Materials, (d) Micro-Macro Mechanical Behavior of Composite Materials, (e) Experimental Characterization of Composite Materials, (f) Theory of Elasticity, (g) Mechanical Vibrations, (h) Non-Destructive Testing and Non-Destructive Inspection (i) Wave Propagation and Scattering in Layered Media (j) Introduction to Finite Element Analysis (k) Sensors and Signal Analysis, (l) Materials for Aeronautic Applications, (m) Damage Tolerance Design, (n) Thermo-mechanical behavior of Composite and Ceramic Materials, (o) Space Technologies.

1998-2026:

**Postgraduate courses:**

Advanced Dynamics  
Mechanics of Composites  
Fatigue Behavior of Composite materials and Structures  
Ceramic Matrix Composites  
Experimental Methods and Analytical Approach for certification of Materials and Structures  
Mathematical Theory of Anisotropic Elasticity  
Risk Analysis and Structural Health Monitoring

1990-2026: **Supervisor of more than 300 Diploma (MSc) Theses**

2000-2026: **Leading the following students' hands-on projects:**

- 2003-2007, Young Engineers' Satellite (YES 2). UPAT was responsible for the thermal and the Structural Analysis of the project. Applied Mechanics & Vibrations Laboratory was the Center of Expertise for mechanical design and was involved in all development phases. A Guinness World Record was granted 'The Young Engineers' Satellite 2 (YES2) was launched on board the Foton-M3 microgravity mission on 14 September 2007. On 25 September YES2 unwound an experimental package on a 0.5 mm-thick cable to test the principle of returning payloads to Earth without the use of retrorockets. Experimental data show that the cable successfully deployed to its full length of 31.7 km, the longest manmade structure ever deployed in space.'
- 2003-2004, Solar-Electric Car was Designed, Manufactured and successfully participated in the Athens Cultural Olympic Solar-Electric Car race of 2004, which covered a distance of 805 km (Athens-Olympia-Delphi-Athens). Rules applied by FIA (FIA Alternative Energies Cup).
- Air Cargo Challenge 2007, Lisbon, Portugal. Atlas I, Position 8/21.
- Air Cargo Challenge 2009, Covilha, Portugal. Atlas II, Position 6/26.
- Air Cargo Challenge 2011, Stuttgart, Germany. Atlas III, Position 14/32.
- 2011 Airbus 'Fly your ideas', participation in the final contest (75 Universities selected around the world).
- Air Cargo Challenge 2013, Covilha, Portugal. Atlas IIIB and ATLAS IV, Position 11/37.
- Air Cargo Challenge August 2015, Stuttgart, Germany. Atlas ATLAS IV-B and ATLAS V, Position 8/29
- Air Cargo Challenge August 2017, Zagreb, Croatia, ATLAS IV-b, Position 15/31
- 2012-2017, QB 50, a mission that deployed 50 double-unit CubeSats developed by teams from all around the globe, sponsored by EU within the frame of FP 7 SPACE.  
The University of Patras Satellite (UPSat) is the participation of Greece into the QB50 endeavour. (Coordinator of UPSat group, a cooperation of the Dept. of Mechanical Engineering & Aeronautics, the Dept. of Electrical Engineering and Computer Science and Libre Space Foundation), the UPSat was delivered and approved by ESA on July 2016. The UPSat was successfully launched on April 2017, from ISS).
- Fly your Thesis 2017, ESA Parabolic flights campaign, held end of November 2017. 'Behaviour of Photopolymer Fiber Composite Structures in Microgravity (deployment, polymerization and characterization)'
- Student Aerospace Challenge 2018/2019, ESA Educational Office, EXPRESS – EUROPEAN MULTI-PURPOSE REUSABLE SPACEPLANE, Paris, June 2019.
- 18th exercise of the competition Student Aerospace Challenge 2023/2024, ESA Educational Office, Design of a low carbon sustainable vehicle, Paris, June 2024.
- 18th exercise of the competition Student Aerospace Challenge 2023/2024, ESA Educational Office, UPogee, A suborbital space vehicle, Mission Profile and Concept, Paris, June 2024.
- Air Cargo Challenge 2024, Aachen, Germany.
- Air Cargo Challenge 2026 (will be held on July 2024), Stuttgart, Germany.

**PhD Theses completed (main supervisor)**

1.	1996	<b>V. Stamos</b> , <i>Fracture behaviour of bi-material interface</i>
2.	2000	<b>Y.Z. Pappas</b> , <i>Fatigue behaviour of Composite Laminates. A stochastic approach using NDT data</i>
3.	2001	<b>Y. P. Markopoulos</b> , <i>Impact behaviour of Composite laminates</i>
4.	2003	<b>C. Dassios</b> , <i>Fracture behaviour of CMCCs in the presence of small and large-scale bridging phenomena. Determination of Intrinsic characteristics of Fracture</i>
5.	2003	<b>I. Vougiouklakis</b> , <i>Investigation of the Thermomechanical Fatigue behaviour of top coated structural components of Gas Turbines using Acoustic Emission</i>

6.	2004	<b>C. Koimtzoglou</b> , <i>Investigation of the effect of Fatigue loading on the Interfacial properties of Fibre Reinforced Plastics and the stress transfer mechanisms using Laser Raman Spectroscopy</i>
7.	2006	<b>D. Vlachos</b> , <i>A generic methodology for Design, Analysis and Optimization of load bearing engineering components made of Continuous Fibre Reinforced Ceramic Composites under combined Thermo-Mechanical Fatigue loading conditions</i>
8.	2007	<b>A. Kokkinos</b> , <i>The use of SMA as a driving mechanism in an Intramedullary nail lengthening device for long bones</i>
9.	2007	<b>T. Loutas</b> , <i>Health monitoring methodologies for Ceramic Matrix Composites based on Acoustic Emission and Acousto-Ultrasonics, using wavelet analysis techniques</i>
10.	2008	<b>S. Tsantzalis</b> , <i>Design, Structural analysis and Optimization of an Intramedullary Leg Lengthening device based on SMA driving mechanism</i>
11.	2009	<b>P. Karapappas</b> , <i>Enhancement of the mechanical performance (Interlaminar Fracture Toughness, Fatigue, Impact and CAI properties) of CFRP laminates by introducing Carbon Nanotubes into the epoxy matrix material</i>
12.	2009	<b>A. Vavouliotis</b> , <i>A New Approach of Structural Health Monitoring of CFRP laminates based on the use of the electric conductivity measurements of Carbon Nanotubes doped Composites</i>
13.	2009	<b>G. Sotiriadis</b> , <i>Non-Destructive Evaluation of GFRP laminates subjected to cyclic loading by using inverse A-Scan techniques</i>
14.	2010	<b>J. Loukas-Lekatsas</b> , <i>Acoustic Wave Scattering by a Pair of Spherical Obstacles</i>
15.	2011	<b>A. Kotzakolios</b> , <i>Blast response of Aircraft Structures</i>
16.	2012	<b>C. Derdas</b> , <i>Analysis of aerospace composite bolted joints under elevated load rates</i>
17.	2012	<b>A. Panopoulou</b> , <i>Methodology for Innovative Health Monitoring of Aerospace Structures using Dynamic Response Measurements based on Dynamic FBGs and Advanced Signal Processing Techniques</i>
18.	2012	<b>D. Sikoutris</b> , <i>Fire response of composite aerostructures</i>
19.	2012	<b>D. Mazarakos</b> , <i>Design, structural analysis and optimization of a Double Inverted Funnel system for Recovery of Oil-Pollutant from Shipwrecks</i>
20.	2013	<b>N. Athanassopoulos</b> , <i>Calculation of the electrical conductivity and electrothermal analysis of multilayered carbon reinforced composites: application to damage detection</i>
21.	2013	<b>A. Baltopoulos</b> , <i>Multifunctional composite structures with damage sensing capabilities</i>
22.	2014	<b>D. Roulias</b> , <i>Methodologies for remaining useful life estimation with multiple sensors in rotating machinery</i>
23.	2015	<b>E. Fiamegou</b> , <i>Development of improved, multi-functional, nano-structured polymer-based adhesives with applications in the bonding of composite components and in the repair of engineering structures with composite patches</i>
24.	2017	<b>C. Kostagiannakopoulou</b> , <i>Development of new generation of multifunctional structural composites with multi-scale reinforcement for increased fracture toughness characteristics</i>
25.	2017	<b>A. Ampatzoglou</b> , <i>Design, Analysis, Optimization and Construction of a Micro-Satellite for the Study of Lower Thermosphere and Re-Entry conditions</i>
26.	2017	<b>A. Kotrotsos</b> , <i>Development of Self-Healing Techniques for Fiber Reinforced Composites</i>

27.	2017	<b>P. Kolverkloglou</b> , Modelling of the degradation of mechanical properties of glass fiber reinforced composites (GFRPs) due to environmental ageing
28.	2019	<b>E. Kollia</b> , Investigation of hydrothermal behavior and active degradation mechanisms of mechanical properties of polymer composite materials
29.	2019	<b>E. Giannaros</b> , On composite materials response subjected to impact loading: Numerical simulation and experimental validation
30.	2019	<b>P. Dimoka</b> , Out of Autoclave manufacturing of CFRPs having multiscale reinforcement for improved interlaminar fracture toughness and multifunctional characteristics
31.	2020	<b>N. Sarantinos</b> , Micro-Pins – the next step in Composite to Composite & Metal to Composite Joining
32.	2021	<b>X. Tsilimigra</b> , Self-Healing of CFRPs using micro-capsules or/and micro-vascules
33.	2021	<b>A. Masouras</b> , Pre-organized nanomaterial structures and application to multifunctional fiber composite materials
34.	2022	<b>Ch. Papakonstandinou</b> , Control moment gyroscope singularity avoidance for agile spacecraft
35.	2022	<b>S. Kilimtzidis</b> , Multi-Fidelity Multidisciplinary Structural Design & Optimization of Composite Materials Aircraft Wings
36.	2024	<b>N. Patrinooulou</b> , A study on methods to enhance autonomy for multi-UAV civilian applications
37.	2025	<b>I. Delasoudas</b> , Mechanical & Fracture Characterization of Polymer CNT Nanocomposites Using Atomistic Simulations
38.	2025	<b>T. Zaragkas</b> , Towards certification by Analysis of Thermoplastic Composites for Aircraft Structures: An Integrated Experimental and Computational Approach
39.	2026	<b>P. Gkertzos</b> , An Experimentally Validated Multiscale Numerical Framework for Simulating, Calibrating, and Optimizing the FDM Process and Part Performance: Advancing Towards a Digital Twin

<b>Other affiliations:</b>	1981 - 1982	Production Engineer, Hellenic Industry for Rubber and Plastics (N. & M. Petzetakis S.A.),
	1994-1996	Visiting Scientist, JRC, Institute for Advanced Materials, Petten, The Netherlands,
	2000	Auditor of Certified Products and Provisional Auditor on Quality Management Systems of ISO 9001:1994 & ISO 10011-1 (IRCA Registration number A 12396, Certificate no 1382), (Hellenic Organization for Standardization)
	2005-2024	Hellenic Open University (Coordinator of the thematic Area 'Applied Maths and Industrial Design' and Instructor for the MSc degree on Quality Control and Management)
	2013-2024	Hellenic Open University (Academic Advisor and Director of the MSc degree on Quality Control and Management)
	2020	Accepted as Visiting Professor, University of Delaware, Center for Composite Materials (was postponed due to the COVID pandemic)
	2024-today	Visiting Professor at the University of Medicine, Pharmacy, Science and Technology of TARGU MURES

**Applied Mechanics and Vibrations Laboratory under Prof. Kostopoulos supervision has been certified for:**

2005	<b>EN 17020:</b> responsible entity for the application of EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR)
2009	<b>EN 17025:</b> Mechanical testing of metals and composites (quasi-static and fatigue tests at ambient and high temperature)
2011	<b>EN 17020:</b> certified for the application of EN 62446 (Minimum requirements for the documentation, operation mode testing and inspection of Photovoltaic systems connected to the grid and its normative references HD 60364). The only certified Greek entity in the field.
2014	<b>EN 17020:</b> responsible entity for the application of the EU regulation for the testing of seat belts, bumpers and seats for school buses
2019	<b>GR/EK/UAS/04:</b> Certified and Register Entity by the Hellenic Civil Aviation Authority (HCAA) for the certification of Unmanned Aerial Vehicles and Systems

**Research Interests:**

Design, analysis and optimization of Composite Structures  
 Non-Destructive Inspection and Evaluation of Aeronautical Structures (UltraSonics, Acousto-Ultrasonics, Acoustic Emission, Thermography, Vibrations, Fiber Bragg Grating, Electrical Tomography, Surface Waves), Structural Health Monitoring, Data Fusion.  
 Composite Materials (Mechanical and Thermal Characterization, Fracture and Fatigue of Composites, Experimental Techniques).  
 Multifunctional Materials, Multi-scale reinforcement of Structural Composites.  
 Nano-augmentation, Nano-engineering, and Nano-design of Composites.  
 Manufacturing Technologies of Composite Structures.  
 Maintenance and Repair of Composites Structures.  
 Self-Healing Technologies of Composites.  
 Anisotropic Elasticity. Anisotropic Damage Theory.  
 Fluid-Structure Interaction. Blast behavior of Structures. Blast shielding & Hardening of Composites Aerostructures, High Strain rate behavior of Composites, Fracture Mechanics.  
 Quality Management and Technology.  
 Wave Propagation and Scattering in Continuous/layered Media, Inverse Problems and Inversion of Scattering Data.  
 Energy storage & Energy Conversion Applications (Graphene based supercapacitors and thermo-electric conversion systems based on nanotechnology)  
 Nanosatellites and Unmanned Aerial Systems. Constellations and swarming formation flights.  
 Reuse-Repurpose and Recycling of Composites/SSbD

**Administrative Experience**

- **2008-2010 Head of the Department of Mechanical Engineering & Aeronautics**
- **2008-2010 Member of the Senate of the University of Patras**
- **2020-2024 Head of the Department of Mechanical Engineering & Aeronautics**
- **2020-2024 Member of the Senate of the University of Patras**
- **2024-2024 Director of Applied Mechanics and Vibrations Lab., MEAD, UPATRAS**
- **2005-2008 and 2012-1015 Sector Head of Applied Mechanics, Advanced Materials and Biomechanics Sector of MEAD, UPAT**

**Evaluator of Research Proposals and Project Monitoring**

EU (FP7, H2000, Horizon Europe)  
 EU (ERC Consolidator Grants (Panel Member 2021, 2023, 2025), ERC Synergy Grants)  
 EU Project Monitoring (CL4 and CL5)  
 UK, Belgium, Czech Republic, Poland, The Netherlands, Switzerland, Romania, Greece and Cyprus  
 Romania: Evaluator of Romanian Research Centers INCAS (Aerospace Research "Elie Carafoli") and COMOTI

## Member:

- Member of the Technical Committee of Clean Aviation JU, (2021 – today).
- Member of the Explore & Mature Working Group, of Clean Aviation Preparation Group, (2019).
- Member of the Board of Hellenic Space Agency (March 2018 - September 2019).
- Member of the National Council of Research and Technology (January 2014-February 2016) (ESET).
- EU Clean Sky2, member of the States Representative Group (SRG), (2014-2021).
- Member of the Advisory Council for Aerospace Research and Innovation in Europe (2014-today).
- Member of ACARE MSG 'Working Team on Member States Issues'.
- Elected Member and Chairman of the Executive Board of the Council of the European Society for Composite Materials (ESCM).
- EU Clean Sky, member of the National States Representative Group (NSRG), (2007-2014).
- Member of EU FP7 Transport Program Committee (Including Aeronautics), 2007-2014.
- Member of EU FP6 Aerospace Program Committee, 2002-2007.
- Member of the Editorial Board of Journal of Composite Science and Technology'
- Member of the Editorial Board of the Journal 'Mechanics of Advanced Materials and Structures'
- Member of the Editorial Board of the Journal 'Polymers (Polymer Composites and Nanocomposites)
- Member of the Editorial Board of the Journal 'Science and Engineering of Composite Materials'
- Member of the Editorial Board of the MDPI 'Journal of Composite Science'
- Member of the Editorial Board of the Journal 'Research & Reviews in Polymers'
- Member of the Editorial Board of the Scientific World Journal as part of the journal's Mechanical Engineering subject area
- Member of the Editorial Board of the Open access Journal 'Journal of Composites'
- CEN (European Standardization Committee), TC 184, SC 1, Advanced Technical Ceramics and Ceramic Matrix Composites
- ISO, TC 206 Working Group 44, regarding "Test method for open hole tension of continuous fibre-reinforced ceramic matrix composites at room temperature."
- AIAA (American Institute for Aeronautics and Astronautics)
- ESIS (European Structural Integrity Society)
- Engineering Foundation of Greece
- ICTA (International Confederation for Thermal Analysis)
- HSCM (Hellenic Society of Composite Materials member of FEMS)
- HSNDT (Hellenic Society for Non-Destructive Testing)

## Conferences Organizer:

- **22nd European Conference on Composite Materials (ECCM 22)**, Member of the International Scientific Committee, June 2026 – Oslo, Norway.
- **ICSAAM 2025, 12th INTERNATIONAL CONFERENCE ON STRUCTURAL ANALYSIS OF ADVANCED MATERIALS**, Member of the International Scientific Committee, SEPTEMBER 15-18, 2025, BRASOV, ROMANIA.
- **CompTest 2025, 12th International Conference on Composite Testing and Model Identification** (will take place in Riga from 21 to 23 May 2025).
- **21st European Conference on Composite Materials (ECCM 21)**, Member of the International Scientific Committee, July 2024 Nantes, France.
- **ICSAAM 2024, 11th INTERNATIONAL CONFERENCE ON STRUCTURAL ANALYSIS OF ADVANCED MATERIALS**, Member of the International Scientific Committee, OCTOBER 06-10, 2024, PROTARAS (PARALIMNI), CYPRUS
- **20th European Conference on Composite Materials (ECCM 20)**, Member of the International Scientific Committee, June 2022 – Lausanne-Switzerland.

- **COMPTEST-2021, International Conference on Composite Testing and Model Identification**, Member of the International Scientific Committee, Lille, North of FRANCE, May 18-20, 2021.
- **ICSAAM-2023, 'Structural Analysis of Advanced Materials'**, Member of the International Scientific Committee, 4 - 8 September 2023, Leschi "Zakynthos" Union Association, Island of Zante, Greece.
- **19th European Conference on Composite Materials (ECCM 19)**, Member of the International Scientific Committee, June 2020 – Nantes/France.
- **ICCST/12, 12th International Conference on Composite Science and Technology "2020 - Scientific and Industrial Challenges"**, Member of the International Scientific Committee, May 8 – 10, 2019, Sorrento, Naples, Italy.
- **18th European Conference on Composite Materials (ECCM 18)**, Organizer and **Chairman of the organizing Committee**, June 2018, Athens/Greece.
- **ICSAAM-2017**, 7th International Conference on "Structural Analysis of Advanced Materials", Member of the International Scientific Committee, 19-21 September 2017, BUCHAREST, ROMANIA.
- **17th European Conference on Composite Materials (ECCM 17)**, Member of the International Scientific Committee, 26-30th June 2016 – Munich/Germany.
- **ICEM17, 17th International Conference on Experimental Mechanics**, Member of the International Scientific Committee, Rhodes, Greece, July 3-7, 2016.
- **ICSAAM-2015**, 6th International Conference on "Structural Analysis of Advanced Materials", Member of the International Scientific Committee, 08-11 September 2015, Porto, Portugal.
- International Conference '**On Safety & Reliability of Ship, Offshore & Subsea Structures**', Member of the International Technical Advisory Panel, 18-20 August 2014, Glasgow, UK.
- **ICSAAM-2013**, 5th International Conference on "Structural Analysis of Advanced Materials", Member of the International Scientific Committee, 23 - 26 September 2013, Kos, Greece.
- **10<sup>th</sup> International Conference on Durability of Composite systems** (Duracosys-2012), 17-19 September 2012, Brussels, Belgium.
- **6<sup>th</sup> ASRANet International Conference**, *Member of the International Technical Advisory Panel*, 14-16 June 2012 in Jurys Inn, Croydon, London, UK.
- **7th International Congress of the Croatian Society of Mechanics (7ICCSM2012)**, *Member of the International Scientific Committee*, May 22nd to 25th 2012 in Zadar, Croatia.
- **International Conference on Structural Analysis of Advanced Materials (ICSAAM-2011)**, *Member of the International Scientific Committee*, September 7-10, 2011 Bucharest Romania.
- **3rd International Conference on Smart Materials and Nanotechnology in Engineering (SMN2011)**, *Member of the International Scientific Committee*, 5-8 December 2011, Shenzhen, China.
- **Emerging Technologies in NDT - 2011**, 19 - 21 September 2011, Ioannina, Greece.
- **HT-CMC 7**, 7th International Conference on High Temperature Ceramic Matrix Composites, *Member of the International Scientific Committee*, September 20-22, 2010, Bayreuth, Bavaria, Germany
- **14th European Conference on Composite Materials**, Member of the International Scientific Committee, June 7 - 10, 2010 Budapest, Hungary
- **5<sup>th</sup> International ASRANet Conference**, Integrating Structural Analysis, Risk & Reliability, Member of the International Technical Advisory Panel, Edinburgh, UK, on 14-16 June 2010
- **MATERIAIS 2009**, the V International Materials Symposium, *RECENT ADVANCES IN CHARACTERIZATION, PROCESSING, DESIGN AND MODELLING OF STRUCTURAL AND*

*FUNCTIONAL MATERIALS, Member of the International Scientific Committee, April 5-8, 2009, Lisboa, Portugal.*

- **2<sup>nd</sup> International Conference on Smart Materials and Nanotechnology in Engineering**, Member of the International Scientific Committee, July 8-11, 2009, Weihai, China.
- **13<sup>th</sup> European Conference on Composite Materials**, Member of the International Scientific Committee, June 2 - 5, 2008 Stockholm, Sweden.
- **4<sup>th</sup> International ASRANet Colloquium**, Integrating Structural Analysis, Risk & Reliability, Member of the Technical Advisory Panel, Athens, Greece, June 25-27, 2008.
- **COMP '07**, Member of the organizing Committee and Member of the International Scientific Committee, Corfou, Greece, May 2007.
- **ECCM 12 European Conference on Composite Materials, Member of the International Scientific Committee Biarritz, France, September 2006.**
- **International Conference on DISMANTLING of OBSOLETE VESSELS**, member of the Technical Advisory Panel, September 2006, Glasgow, Scotland, UK.
- **16<sup>th</sup> European Conference of Fracture (ECF16)**, Member of the International Scientific Committee, June 2006.
- **ECCM 11**, Co-Chairman of the organizing Committee, Rodos, Greece, June 2004.
- **3<sup>rd</sup> International Conference on Emerging Technologies in Non-Destructive Inspection and Testing**, Member of the International Scientific Committee, Thessaloniki, Greece, May 2003.
- **COMP '03**, Member of the International Scientific Committee, Corfou, Greece, May 2003.
- **ECCM 10**, Member of the International Scientific Committee, Belgium, June 2002.
- **HELLAS-COMP 2001**, 2<sup>nd</sup> National Conference of Composites, Chairman of the organizing Committee, Patras, Greece, June 2001.
- **9<sup>th</sup> International Conference on Mechanics and Technology of Composite Materials**, Member of the International Scientific Committee, Sofia, Bulgaria, September 2000.
- **2<sup>nd</sup> International Conference on Non-Destructive Inspection and Testing**, Member of the International Scientific Committee, Athens, Greece, 1999.
- **8<sup>th</sup> International Conference on Mechanics and Technology of Composite Materials**, Member of the International Scientific Committee, Sofia, Bulgaria, September 1997.
- **1<sup>st</sup> National Conference of Composites**, Member of the organizing Committee, Xanthi, Greece, July 1997.
- **MCMC' 96** "Modelling of the Mechanical Behaviour of Continuous Fibre Reinforced Ceramic Matrix Composites", Member of the International Scientific Committee, Petten, The Netherlands, September 1996.
- **COMP'95** "High Technology Composites in Modern Applications", Member of the international scientific committee, Corfu, Greece, September 1995.
- **COMP'90** "Advanced Composites in Emerging Technologies", Member of the local organizing committee, Patras, Greece, August 1990.
- **COMP'88** "Phase Interaction in Composite Materials", Member of the local organizing committee, Patras, Greece, August 1988.

#### Participation in International R&D Programs:

Nr.	Title of the project
1.	Stimulation Action - SCIENCE Program, "Direct and Inverse Scattering Problems with Applications on Artificial Intelligence (Robot Vision) and the Study of Composite Materials ", 1987-1990.
2.	BRITE I Program, "Development of Continuous Carbon Fibre Reinforced Thermoplastics and their Processing for Manufacture of Composite Components", 1986-1990.
3.	BRITE II Program, "Lightweight Reflectors of Carbon-Fibre Reinforced Plastics", 1988-1992.
4.	BRITE/EURAM Program, "Development and Characterization of Ceramic Matrix and Carbon/Carbon Composites" (Project Manager of the Greek Contribution), 1990-1994.

5.	BRITE/EURAM Program, "Development of Improved Damage Tolerant Carbon Fibre Organic Composites" (Project Manager of the Greek Contribution), 1990-1994.
6.	BRITE/EURAM Program, "Processing Strategy for Filament Winding of Thermoset Components based on a Mathematical Process Description", 1992-1995.
7.	BRITE/EURAM "Design, Modelling and Control of a New Process for Glassfibre Preform Manufacture with Minimization of Scraps, Improvement of Working Conditions and without Environmental Impact", (Project Manager of the Greek Contribution), 1994-1998.
8.	BRITE/EURAM Program, "Low Temperature Sol-Gel Aerosol CVD", 1994-1998.
9.	STRIDE-HELLAS (EPET 1.5), "Installation of Infrastructure for the local Development, Installation and Maintenance of Wind Energy Production System in Combination with SeaWater Desalination System (WinD)", 1993-1995.
10.	EPET II, "Early Prognosis of Brain Edema Using Modal Analysis Techniques", 1995-1998.
11.	BRITE III, "Ceramic Components for Industrial Gas Turbines (CERCO)", 1998-2002.
12.	EPET II, "Design and Construction of a pilot Composite Bridge", 1998-2001.
13.	NSF Research Program, "Probabilistic Life Prediction for Composite Laminates Subjected to Fatigue Loading", 2001-2002.
14.	GROWTH: "Ceramic and Carbon Fibres: Validation of Test Methods", 2002-2004.
15.	GROWTH: "Virtual Lab. for Composite Materials" (ERIC), 2002-2005.
16.	EKVAV: "Seismic Assessment and Rehabilitation of Concrete Structures", 2003-2006.
17.	FP 6, EU-IP: "Advanced Sensor Development for Attention, Stress, Vigilance & Sleep/Wakefulness Monitoring", SENSATION, 2003-2007.
18.	FP 6, EU-STREP: "Aerospace Nanotube Hybrid Composite Structures with Sensing and Actuating Capabilities", NOESIS, 2004-2008.
19.	FP 6, EU-STREP: "Cost Effective and Environmentally Sound Dismantling of Obsolete Vessels", ShipDismantl, 2004-2008.
20.	FP 6, EU-STREP: 'Vulnerability Analysis for Near Future Composite/Hybrid Aerostructures: Hardening Via New Materials and Design Approaches against Fire and Blast Due to Accidents or Terrorist Attacks', VULCAN, 2006-2009.
21.	FP 6, EU-STREP: 'Advanced Modelling And Self-Learning Mechanisms To Enhance Rotating Engine Diagnosis And Prognosis Systems', ADHER, 2006-2008.
22.	ESA Call for Ideas 2006: 'Detailed characterisation of Nano-modified fiber reinforced polymers in terms of mechanical, electrical and thermal properties towards the development of new materials for space applications'.
23.	FP 6, EU-STREP: 'Double Inverted Funnel for the Intervention on Ship Wrecks' DIFIS, 2006-2009.
24.	FP 7, EU-L1: 'Multifunctional Layers For Safer Aircraft Composite Structures', LAYSA, 2008-2010.

25.	FP 7, EU-L1: 'Dismantling of Vessels with Enhanced Safety and Technology' DIVEST, 2008-2011.
26.	FP 7, EU-L1: 'Autonomous Surveillance in Public Transport Infrastructure Systems', ASPIS, 2008-2011.
27.	FP 7, EU-L1: 'Innovative Repair of Aerospace Structures with Curing Optimization & Life Cycle Monitoring Abilities', IAPETUS, 2009-2012.
28.	ESA, NPI projects: Methodology for Innovative Health Monitoring of Aerospace structures using Dynamic Response Measurements and advanced signal process (MINERVA), 2009-2013.
29.	FP 7, EU NMP: 'Innovative Smart Composite Moulds for Cost Effective Manufacturing of Plastic and Composite Components', COEUS TITAN, 2010-2013.
30.	FP 7, EU AAT L1: Composite fuselage section Wafer Design Approach for Safety Increasing in Worst Case Situations and Joints Minimizing, WASIS, 2010-2013.
31.	EU AAT L1: Novel Aeronautical Multifunctional Composite Structures with Bulk Electrical Conductivity and Self-Sensing Capabilities, ELECTRICAL, 2010-2013.
32.	ESA, GSTP program, Nanotube Reinforced Structural Materials for S/C Applications, NAREMA, 2010-2012.
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34.	EU Clean Sky JU, Eco-Design ITD, Study on the processing and the performance of cyanate ester composites towards the optimization for harsh service environments, SPECIMEN, 2011-2013.
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36.	ESA-GTF: "Design, Development, Manufacturing and Process Monitoring for structures of nano-modified multifunctional pre-preg materials targeting near term space applications". NANO2, 2011-2015.
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38.	EU AAT L0: Future Aircraft Design Following the Carrier-Pod Concept as an Enabler for Co-Modal Seamless Transport, Passenger Safety and Environmental Sustainability, FANTASSY, 2012-2014.
39.	EU AAT L1: Self-Healing Polymer for Concepts on self-Repaired Aeronautical composites, HIPOCRATES, 2013-2015.
40.	EU-JTI- Clean Sky: "Industrialization of Out-of-Autoclave Manufacturing for Integrated Aerostructures". IRIDA, 2011-2014.
41.	EU-JTI-Clean Sky: "Manufacturing optimization of a plenum with GFRP cyanate ester-based prepreg ". PLENOPTIMUM , 2014-2015.
42.	ESA-GSP:" Development Strategy for nano-enabled fibre reinforced plastics". NESTOR, 2013-2014.
43.	ESA-TRP: "Nano-enabled fibre reinforced plastics". NEFELI, 2013-2014.
44.	ESA MEC: "Large Deployable Structures for Future Science Missions", LAGARD, 2014-2016. (phase 1 PDR)
45.	EU FP 7-REG "Reinforcement of recycled PE by using natural fibers coming from wood wastes", REFIPLASR, 2013-2015.

46.	EU FP 7 AAT L2 “Smart Intelligent Aircraft Structures”, SARISTU, 2011-2015.
47.	EU H2020 Aviation: “EXTREME Dynamic Loading - Pushing the Boundaries of aerospace Composite Material Structures”, EXTREME, 2015-2019.
48.	EU H2020 NMP: “Open Access pilot plants for sustainable industrial scale nanocomposites manufacturing based on buckypapers, doped veils and prepregs”, PLATFORM, 2015-2018.
49.	EU H2020-FETOPEN-2014-2015-RIA: “An Advanced Methodology for the Inspection and Quantification of Damage on Aerospace Composites and Metals using an Innovative Approach”, Complnnova, 2015-2020.
50.	ESA TRP: “Graphene-based systems for enhanced energy storage”, GADGET, 2015-2017.
51.	ESA TRP: “Graphene-based advanced polymers with high thermal and electrical conductivity”, GOETHE, 2015-2017.
52.	ESA NPI: “Micro-Pins – the next step in Composite to Composite & Metal to Composite Joining”, MICROPIN, 2016-2019.
53.	H2020-EASME, Challenges of nearly zero energy buildings (nZEB) design in Southern Europe, SoughtZEB, 2015-2018.
54.	ESA MEC: “Large Deployable Structures for Future Science Missions”, LAGARD, 2014-2016. (phase 2: CDR & manufacturing of the scale prototype)), 2016-2019.
55.	H2020-JTI-CS2-2016-CFP03-LPA-01-13, Titanium COmposite Adhesive Joints, TICOAJO, 20016-2019.
56.	H2020-JTI-CS2-2016-CFP03-REG-01-02, GREen Turboprop Experimental Laminar Flow WTT, GRETEL, 2017-2020.
57.	H2020- JTI-CS2-2015-CPW02-AIR-01-03, Development of innovative and ECO-friendly Airframe TECHnologies from design to manufacturing to improve aircraft life cycle environmental footprint, ecoTECH, 2016-2023.
58.	H2020-Transport, Adaptive ADAS to support incapacitated drivers Mitigate Effectively risks through tailor made HMI under automation, ADAS&ME, 2016-2019.
59.	H2020-Transport, Safe and green Sensor Technologies for self-explaining and forgiving Road Interactive aPplications, SAFE STRIP, 2017-2020.
60.	H2020-Transport, MOBILITY AS A SERVICE IN A MULTIMODAL EUROPEAN CROSS-BORDER CORRIDOR, MYCORRIDOR, 2017-2020.
61.	H2020-ERANET MANUNET, Traceability, quality, processes control and production follow-up in pilot plants for nanocomposites manufacturing based on buckypapers and prepregs, TQMNANO, 2017-2020.
62.	EU-EDA, Unmanned Heterogeneous Swarm of Sensor Platforms, EUROSARM, 2016-2018.
63.	H2020-JTI-CS2, Novel Processes and Equipment in Composite Repair Technology, NEWCORT, 2016-2019.
64.	ESA-MEC, Response of Composite Deployable Booms Subjected to HVI, CODOMAIN, 2016-2017.
65.	H2020-Transport, Real-time Condition-based Maintenance for Adaptive Aircraft Maintenance Planning, REMAP, 2018-2022.
66.	H2020, JU-SESAR, A European UTM Testbed for U-Space, EuroDrone, 2018-2020.

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68.	ESA-MEC, High Thermal and Electrically Conductive Bonding Materials for Space, HITEC, 2019-2020.
69.	USAF AFMC AFOSR/IOE, Real-time Decision Making for Autonomous Systems using AI Methods, GRANT12830363, 2019-2021.
70.	H2020, JU-SESAR, METROPOLIS2, Metropolis 2: A unified approach to airspace design and separation management for U-space, 2020-2022.
71.	H2020, LOTUS, Low Observable Tactical Unmanned Air System, 2020-2024.
72.	H2020, MORPHO, Embedded Life-Cycle Management for Smart Multimaterials Structures: Application to Engine Components, 2021-2025.
73.	H2020, DECODE, Drug-coated balloon simulation and optimization system for the improved treatment of peripheral artery disease, 2020-2025.
74.	HORIZON (EDF), dTHOR, Digital Ship Structural Health Monitoring, 2022-2025.
75.	HORIZON, REPOXYBLE, Depolymerizable bio-based multifunctional closed loop recyclable epoxy systems for energy efficient structures, 2022-2026.
76.	HORIZON (EDF), ACTUS, Advanced capabilities & Certification for Tactical UAV Systems, 2024-2028.
77.	HORIZON, Bio3DGREEN, 'Bio-inspired, and Bio-based graphene foam (GF) manufacturing platform for high-performance, sustainable components', 2025-2029.

## PUBLICATIONS

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1. *Development of Improved Damage Tolerant Carbon Fibre Organic Composites.*
2. *Development and Characterization of Ceramic Matrix and Carbon/Carbon Composites.*
3. *Design, modelling and control of a new process for glass-fibre perform manufacture with minimisation of scraps, improvement of working conditions and without environmental impact.*
4. *Continuous Atmosphere in-line aerosol CVD at low temperatures.*

5. *Damage Characterization of Ceramic Matrix Composites using Experimental, Numerical and Non-Destructive techniques.*
6. *Early Diagnosis of an oncoming Brain Swelling or Oedema*
7. *Fatigue life prediction of glass Fiber Reinforced Plastics.*
8. *Design, Analysis, Optimization and Construction of a motorway Composite Bridge*
9. *Repair of Concrete Structural Elements using Unidirectional CFRP Laminates*
10. *Ceramic Components for Industrial Gas Turbine*
11. *Ceramic and Carbon Fibres: Validation of Test Methods*
12. *Virtual Lab. for Composite Materials ([www.composites-IQ](http://www.composites-IQ))*
13. *Seismic Assessment and Rehabilitation of Concrete Structures*
14. *Advanced Modeling and Self-Learning Mechanisms to Enhance Rotating Engine Diagnosis and Prognosis Systems*
15. *Aerospace Nanotube Hybrid Composite Structures with Sensing and Actuating Capabilities*
16. *Double Inverted Funnel for the Intervention on Ship Wrecks*
17. *Vulnerability Analysis for Near Future Composite/Hybrid Aerostructures: Hardening Via New Materials and Design Approaches against Fire and Blast Due to Accidents or Terrorist Attacks*
18. *Detailed characterisation of Nano-modified fiber reinforced polymers in terms of mechanical, electrical and thermal properties towards the development of new materials for space applications*
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## CITATIONS (source: scholar.google.com, March 2026)

Citation Indices		
	Total	Since 2021
Citations	9740	4624

<b>h-Index</b>	<b>50</b>	<b>35</b>
<b>i10-index</b>	<b>192</b>	<b>126</b>

## AWARDS

1. **Special Award in the Student Aerospace Challenge of ESA, UPOGEE team (Suborbital Day Special Prize) of University of Patras. Paris, June 2024, (the team supervised by Prof. V. Kostopoulos).**
2. **2nd prize in iGEM MIT International Competition with the team of University of Patras., Boston, December 2020, (the team co-supervised by Prof. V. Kostopoulos).**
3. **1<sup>st</sup> Senior Scientist Award, in TRA-VISIONS 2020 (AIR) Senior Researcher Competition, Transport Research Arena, Helsinki, 2020.**
4. **Communication Award, Aerospace Challenge 2018/2019, ESA Educational Office, EXPRESS – EUROPEAN MULTI-PURPOSE REUSABLE SPACEPLANE, Paris, June 2019, (the team supervised by Prof. V. Kostopoulos).**
5. **1st Innovation Award, UK innovation competition organized by Accelerate ME 2018/19 programme, December 2018.**
6. **2nd prize of the International CubeSat and Mission Contest, Northwestern Polytechnical University, Xi'an, November 2018.**
7. **1<sup>st</sup> position in the ESA Competition 'FLY your THESIS' 2016, with the Space Group of AML/UPAT, October 2017.**
8. **2<sup>nd</sup> Innovation award European Final of the KICKoff 2016 competition, 'Drywall Integrated Supercapacitors', October 2016.**
9. **1<sup>st</sup> Innovation award, Greek Regional Final of the KICKoff 2016 competition, 'Drywall Integrated Supercapacitors', June 2016.**
10. **1<sup>st</sup> Innovation award, 2<sup>nd</sup> National Innovation Contest of Innovation and Applied Research organized by the Assembly of Greek Industries and Eurobank, Athens, September 2013.**
11. **1<sup>st</sup> Design award, SunLIFE Solar Car Design Contest, June 2008, INTEREG III.**
12. **Best paper award, ECCM 13, Stockholm, Sweden, June 2008.**
13. **1<sup>st</sup> research project award by the Hellenic College of Orthoaidics: Optimization of Meniscus failure treatment by using SMA materials, Athens 2007.**
14. **1<sup>st</sup> research paper award, AERODAYS 2006, Vienna, Austria.**

**15. 2nd Design award (HERMES I Research Group), Solar Electric Cars Design Contest PHAETHON 2004, Athens Cultural Olympics.**