




Research interests: Development of smart sensors and 3D flexible electronics. 3D digital documentation and evaluation of cultural heritage monuments using virtual and augmented reality methods. Packaging and agri-food safety. Nuclear security. Nondestructive evaluation and Structural Health Monitoring. Development of advanced characterization methods for quantification of damage and life prediction of technological materials and systems in aerospace, energy and civil infrastructure applications. Environmental degradation of aging structures. Development of novel materials and advanced damage characterization techniques in metal and ceramic matrix composites, nano-structured materials and coatings, multi-functional, hybrid and smart materials, bio-materials, cementitious materials.

Educational and Recent Positions

- Ph.D., Solids and Structures, Mechanical Engineering Dept, Université de Technologie de Compiègne (UTC), France (1991).
- D.E.A. in Applied Mechanics and Materials, Mechanical Engineering Department, UTC, Γαλλία (1987)
- D.E.A. in Philosophy, Université Paris I – Sorbonne, France (1984)
- B.Sc. in Physics, Aristotle University of Thessaloniki, Greece (1983)
- Professor of Mechanical Behavior Mechanical Behavior of Surfaces and Interfaces, Department of Materials Science Engineering (TMEY), University of Ioannina – Uoi (since 2009) and Director of the Mechanics, Smart Sensors and Nondestructive Evaluation (MSS-NDE) Laboratory  and Associate Professor, TMEY, UOI (2005-2008).
- Supervised: >100 diploma theses, >40 master's theses, 15 doctoral theses.

Publications and Bibliometric Data

- Publications: >80 US DoD classified research reports (1993-1999), >350 publications in peer-reviewed scientific journals and international conference proceedings, 8 book chapters, 6 patents, >300 presentations at international conferences (> 80 invited lectures).
- Citations: >5.650, h-index: 39, i10-index: 108 
- Included in the lists of "World's Top 2% Scientists" as published by Stanford University in 2020 and 2021, both for career-long and single-year impact.

Awards: Wohlleben/Hochwal Award and Certificate of Merit for Excellence in Research (1995 και 1999), US National Academy of Science & Engineering / National Research Council Award (1992), European Commission / CNRS-France Research Fellowship (1987).

Research Projects: Principal Investigator in several competitive research programs (with a total budget of >30M€) funded by: US National Science Foundation, US Defense Advanced Research Projects Agency – DARPA), European Commission, and Greek national funding bodies.

- Reviewer of European research programs (among others, vice-chairman for the evaluation of Horizon 2020 FET-OPEN projects, ERC Starting, Consolidator and Advanced Grants, etc.)

Professional / Administrative Experience

- Member of the Sectoral Scientific Council for Engineering Sciences of the National Research, Technology, and Innovation Council (ESETEK), which is the highest State advisory body in Greece, for matters of research and innovation (since 2020).
- Chairman of the Mechanical Engineering Department, University of Ioannina (2019 – 2022).
- Member of the Research Committee – Special Account for Research Funds of the University of Ioannina: 2005-2008, 2008-2011, 2014-2017, 2018-2021.
- Member of the Technical Committee of the University of Ioannina (2013-2016).
- Member of the Board of Directors of the Greek Atomic Energy Commission – GAEC (independent competent authority for the control, regulation and supervision of the fields of ionizing and non-ionizing radiation) (2008-2015).
- Director for Regulatory Policy and Special Scientist of GAEC (2000-2004).
- Chairman of the Drafting Committee of Civil Protection plans of the Ministry of Development and its supervised Agencies (Government Gazette 107/12-12-2006)
- Member of the Board of Directors of the European Supply Agency (Euratom), European Union (2002 – 2006).
- Advisor to the UN/IAEA DG, member of the AdSec group responsible, among others, to guide the Agency on policy and priorities in the field of nuclear security (since 2014).
- Senior expert of the Office of Internal Oversight Services (OIOS) of the UN/IAEA that provides objective, independent and systematic assessments to ensure accountability and sound governance of the Agency to Member States (since 2018).
- Independent International Senior Expert of the International Atomic Energy (IAEA/UN) (since 2003) with participation to >150 special international missions.
- National expert for FP6 Aeronautics and Space (2004 – 2006) and FP7 (Euratom) (2006-2010).
- Professor, Chemical and Materials Engineering Department, University of Dayton, Ohio, USA and Director of the Center for Materials Diagnostics, UDRI/DARPA US DoD (1997-1999).
- Research Engineer, US Air Force Research Laboratory, Wright-Patterson Air Force Base, Dayton, Ohio, responsible for the US Air Force research program in nondestructive evaluation of aerospace systems (1991-1997).
- Chairman and member of the organizing committees of International conferences and Academic Editor of scientific journals (Applied Physics, Metals, Materials, Acoustics, Nanotechnology, Sensors, etc.)