

MICHAIL CHALARIS,

Associate Professor of Chemistry, Democritus University of Thrace (DUTH), Fire Service Lieutenant General (ret.)

Division of Physical Chemistry and Chemical Technology

Dr. Michail Chalaris is an Associate Professor in the Department of Chemistry at the Democritus University of Thrace (DUTH), specializing in Occupational Safety - Management and Transport of Hazardous Materials and Dangerous Goods in the Chemical Industry. He is also a retired Lieutenant General of the Hellenic Fire Service, having served in both strategic and operational leadership positions.

He currently serves as Director of the MSc in quality, safety, security, health, and environmental management and as Research Director on Risk, Hazards, Crises and Safety at the advanced Laboratory "Hephaestus".

He has extensive teaching, research, and consulting activity, with numerous published works. He is lead instructor for the course "Technological Disasters and Environmental Hazards" in the Interinstitutional MSc program "Analysis and Management of Anthropogenic and Natural Disasters." He also teaches the "Hazard Identification & Risk Management" unit in the "Business Environment" course of the MSc in Oil and Gas Technology, and the unit "Toxicology and Health and Safety in the Cosmetic Industry" in the "Applied Biochemistry and Toxicology of Cosmetics" course in the MSc in Cosmetic Chemistry. Additionally, he teaches in the following modules of the MSc in Chemical Industry: CHE4 (Occupational Safety – Process Safety – Asymmetric Threat Safety and Protection of Critical Infrastructure), CHE5 (Occupational and Environmental Risk Assessment and Management), and CHE8 (Occupational Health and Hygiene – Harmful Factors, Fundamentals of Toxicology and Chemical Exposure).

He has served as a professor at the Fire Academy, the Hellenic Military Nursing Academy, and as a guest lecturer in undergraduate and postgraduate programs at other higher education institutions. He has also been an instructor in training programs of the National Centre for Public Administration and Local Government (EKDDA) and in certified vocational training centers, teaching subjects such as local-level civil protection planning and implementation, emergency management, risk and crisis management for health and safety in educational institutions, and occupational safety in the public sector.

He is a certified adult educator, registered in the official registries of EOPPEP and EKDDA. He holds a certificate in e-learning instruction from EKDDA/INEP, is certified by KEMEA for training of Private Security Personnel Instructors (IEPYA) and is NATO-certified as a trainer of trainers for Chemical-Biological-Radiological-Nuclear (CBRN) events.

He is currently supervising six (6) PhD candidates in the Department of Chemistry at DUTH and serves as a member of advisory committees for five (5) additional PhD dissertations (DUTH and University of the Peloponnese). He has served on three (3) PhD examination committees. He has successfully supervised one completed doctoral dissertation (DUTH, 2025) and two postdoctoral research projects (International Hellenic University, 2023; DUTH, 2025).

He successfully supervised 35 MSc theses in the Interinstitutional MSc program "Analysis and Management of Anthropogenic and Natural Disasters," eight (8) in the MSc program "Chemical Industry: Quality, Environment, Health and Safety Management," and four (4) in the MSc in Oil and Gas Technology. He has served as a member of over 25 thesis examination committees across the four MSc programs in which he teaches.

Furthermore, he has supervised 25 undergraduate theses in the BSc programs of Petroleum and Natural Gas Engineering and Mechanical Engineering (Technological Education), as well as eight (8) undergraduate theses in the BSc program of the Department of Chemistry at DUTH. He has published 184 original research papers in peer-reviewed scientific journals and conference proceedings (national and international), 56 peer-reviewed collective scientific volumes, one scientific monograph (in addition to his PhD thesis), 18 books or book chapters with peer review, and 160 conference presentations or co-presentations (as of 20/10/2025). Additionally, he has authored dozens of popular science articles in Greek print and online media on topics such as chemistry, water quality management, occupational health and safety, consumer protection, environmental issues, civil protection, and fire safety.

He has served as Guest Editor for four (4) Special Issues in scientific journals and as a peer reviewer for 12 journals (Elsevier, Springer, Wiley, MDPI). His work has received 754 citations, including 725 independent citations (Scopus), with an h-index of 15 (Scopus, 20/10/2025). More details: https://www.researchgate.net/profile/Michail_Chalaris

He has participated as a speaker and delegate in numerous international and national conferences, symposia, workshops, professional meetings, and research project presentations. He has been a member of organizing and scientific committees for various academic events.

He has participated in more than 14 international and national research projects as Principal Investigator or Scientific Coordinator under programs such as Erasmus+, Horizon 2020, UCPM, Interreg, and I3. He has secured seven competitive European-funded projects (I3, Erasmus+, RFF) with a total budget exceeding €11 million, in which he serves as Coordinator and Scientific Lead. Additionally, he acts as Scientific Lead on behalf of DUTH in two large-scale projects (Erasmus+, Horizon 2020) with budgets over €4 million and participates in five other national and European research projects as a project team member. He has also served as an evaluator on international projects and was awarded an international research prize in 2024 for his scientific contributions.

From 2009 to 2012, he headed the Labour Inspectorate of Greece, having been appointed through the opengov process as Executive Secretary of the Ministry of Labour and Social Security.

Between 2006 and 2008, he was a member of the Physical and Biophysical Chemistry Committee of IUPAC. He is also a member of the Coordination Committee of the Hellenic Network for Green Chemistry and has served on various interministerial, legislative, and technical committees of the Greek State.

He has participated in interviews and public discussions on television and radio on topics related to his expertise.

He served as President of the Association of Greek Chemists (AGC/EEX) and was an active member from 1994 to 2018, elected to all governing bodies by his peers.

Dr. Chalaris holds a BSc and PhD in Chemistry from the National and Kapodistrian University of Athens (NKUA). He is a graduate of the Fire Service Officers School and holds an MA in "Applied Strategy and International Security" from the University of Plymouth. He received further training in environmental disaster management at the Rescue Services College Rosersberg in Sweden and in national defense strategy at the Hellenic National Defence School. He is a certified technical expert of the European Commission (DG ECHO/Civil Protection Mechanism) in civil protection matters and a graduate of the Fire Academy's Training and Advanced Studies School.

His main research interests include:

- Risk, hazard, crisis and safety science; disaster management; environmental emergencies; technological accidents; hazardous materials transport; humanitarian engineering
- International security, terrorism, WMDs, CBRN(E) threats, hazardous materials risk governance
- Physical, theoretical and computational chemistry, with emphasis on molecular modeling, statistical thermodynamics, and the simulation of hazardous substances and loads
- Labour law and occupational safety policy, with expertise in undeclared work and posted worker legislation
- Vocational and adult education in safety, chemical management, and crisis response