

Vasiliki Kontomitrou

Environmental Engineer || Research Engineer

Sustainable Electronics & Semiconductor Processes

Quality Management System (ISO 9001)

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Professional Summary

Environmental Engineer and Research Engineer with expertise in semiconductor research environments and sustainable laboratory practices. Experience includes semiconductor fabrication process simulation, thin-film optical characterization and participation in national and European research funding proposals. Completed ISO 9001:2015 Lead Auditor training (CQI/IRCA) and experience in coordinating quality management systems in research laboratories. Research interests include sustainable electronics, eco-friendly semiconductor technologies and environmental impact reduction in microelectronics.

Research Focus

- ⊕ Sustainable electronics and environmentally responsible semiconductor manufacturing
- ⊕ Environmental impact reduction in semiconductor fabrication processes
- ⊕ Eco-friendly laboratory and cleanroom practices
- ⊕ Thin-film optical characterization techniques (spectroscopic ellipsometry)
- ⊕ Quality management and standardization practices in research laboratories (ISO 9001)

Research Interests

- ⊕ Environmental catalysis for pollution abatement and clean energy technologies
- ⊕ Sustainable materials and environmental technologies

Professional Experience

 **Jan 2013 - Present**

Research Engineer - Semiconductor Devices & Sustainable Electronics

Microelectronics Research Group (MRG), Foundation for Research and Technology - Hellas (FORTH-IESL), Heraklion, Greece

- Participation in sustainability research focusing on pollution reduction and clean energy technologies
- Promotion of environmentally sustainable practices in laboratory and cleanroom environments
- Coordination and maintenance of the laboratory Quality Management System (ISO 9001:2015)
- Internal auditing and quality management activities in compliance with ISO 9001 standards
- Design and simulation of semiconductor fabrication processes and device structures
- Thin-film optical characterization and analysis using spectroscopic ellipsometry
- Participation in the preparation of national and European research funding proposals

 **Oct 2021 - Jun2023**

Teacher of Environmental Science

(Definite duration contracted employment), Apprenticeship Vocational Schools (EPAS), Greek Public Employment Service (DYPA)

Courses:  [Materials Science and Technology](#)  [Renewable and Sustainable Energy](#)

📅 **Nov 2014 - Jan 2015**

Teacher of Environmental Science

(Definite duration contracted employment), Department of Education and Lifelong Learning, Municipality of Heraklion, Division of Culture and Youth Education (I.N.E.D.I.V.I.M)

Courses: ✦ *Environmental Solutions for Sustainable Homes*

📅 **Mar 2009 - Nov 2012**

Design Engineer - Freelance

- CAD design and development of technical drawings for engineering projects.

📅 **Dec 2008**

Research Assistant - Environmental Geotechnology

FORTH-IMS - Laboratory of Geophysical, Satellite Remote Sensing and Archaeo-environment

- Magnetic, resistivity and electromagnetic survey at Ancient Nicopolis, Epirus

📅 **Mar 2008 - Aug 2008**

Internship - Department of Environment

O.A.N.A.K (Eastern Crete Development Organization), Heraklion - Crete, Department of Environment

- Preparation of Environmental Impact Assessments for public sector projects

Education

- ⊕ MSc in **Environmental Catalysis for Pollution Abatement and Clean Energy Production** - Hellenic Open University (2021-2025)
- ⊕ Certificate of **Pedagogical & Technological Teaching Competence** - School of Pedagogical and Technological Education (ASPETE), Pedagogical Training Program (EPPAIK) (2017-2018)
- ⊕ BSc in **Environmental and Natural Resources Engineering** - Hellenic Mediterranean University (2003-2009)

Technical Skills

Sustainability & Environmental Engineering

- Sustainable laboratory practices
- Life Cycle Assessment (LCA) - training based on ISO 14040/14044
- Greenhouse Gas Accounting - training based on ISO 14064-1
- Environmental impact reduction strategies

Semiconductor & Materials Research

- Semiconductor process simulation
- Thin-film optical characterization (spectroscopic ellipsometry)

Quality & Standards

- ISO 9001:2015 Quality Management Systems
- Internal auditing and quality coordination
- Environmental and sustainability standards

Professional Certifications & Training

- SUSTAIN-E Summer School on Sustainable Electronics - Université Grenoble Alpes (UGA)
- ISO 9001:2015 Lead Auditor Training (CQI/IRCA) - TÜV Austria Academy
- Life Cycle Assessment (LCA) - training based on ISO 14040 / 14044 - National and Kapodistrian University of Athens
- Greenhouse Gas Accounting - training based on ISO 14064-1 - TÜV Austria Academy
- Emissions Reduction Plans - PAS 2060, ISO 14068-1:2023, SBTi - TÜV Austria Academy
- AI Governance - training based on ISO 42001 - PRIORITY Training Academy
- PMI Project Management Ready - TÜV Austria Academy