



This project receives funding in the European Commission's Horizon Europe Research Programme under Grant Agreement Number 101160387



DEMOSAXIA EVENT AGENDA

Foundation for Research and Technology - Hellas (FORTH), 100 Nikolaou Plastira str.,
Vassilika Vouton, Heraklion, Crete GR 700 13, Greece
Room: Vasileios Dougalis Amphitheater
23–25 September 2026

DemosAxia workshop on research valorisation, IPR, technology transfer and industry collaboration.

Local time GR (CET+ 1hr)

DAY 1 — Wednesday 23 September: From Research Results to Value

09:15 – 09:30: Welcome & Introduction

Content: DemosAxia project overview, Objectives of the workshop

Speakers: FORTH team

09:30 – 10:30: From Results to Value – Research Valorisation

Abstract: *This session will examine the processes and mechanisms through which research results can be translated into economic, societal and environmental value. It will address the progression from research outputs and publications to intellectual property, prototype development, partnerships and practical applications. Particular attention will be given to the roles of researchers, technology transfer offices and entrepreneurs, as well as to the strategic considerations that support the effective valorisation and uptake of research results.*

Speaker: Manolis Vergetakis, Technology Transfer Consultant & Commercialisation Officer, PRAXI Network

10:30 – 10:45: Coffee Break

10:45 – 11:30: IPR & Exploitation Strategies

Abstract: *Research results can take many forms, from inventions and software to data, know-how, designs and other valuable intangible assets, each requiring a tailored IP strategy. The presentation will offer a practical perspective on protecting and exploiting intellectual property generated within collaborative research and innovation projects. Starting from the distinction between background and foreground IP, it will address how to balance the protection of results with the need to share them among partners, clarifying ownership and access rights, as well as covering key tools such as confidentiality agreements, licensing strategies and spin-off creation, with practical examples drawn from real-world collaborations.*

Speaker: Astrid Wiedersich Avena, SEA IP SME Helpdesk

11:30 – 12:15: Building an Entrepreneurial Culture at Universities: Moving from Papers to Impact

Abstract: *Universities generate endless innovation, yet valuable research frequently stays locked in academic journals instead of delivering practical impact. Bridging this gap requires moving beyond paper metrics to cultivate a proactive commercialization culture driven by proactive Technology Transfer Offices (TTOs). By unburdening researchers from patent complexities, fostering interdisciplinary teams, and prioritizing non-dilutive pre-seed funding, institutions can transform labs into startup incubators. Drawing from personal experience during my time at the University of Cambridge, navigating the patenting process firsthand and spinning out my own research project, this presentation highlights practical strategies to bypass common commercialization pitfalls. Attendees will discover actionable steps to empower academic founders, protect early-stage IP, and turn scientific discoveries into scalable real-world solutions.*



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Speaker: Dr George Kakavelakis, Assistant Professor of Printed Nanoelectronics, Department of Electronic Engineering, Hellenic Mediterranean University (HMU), Greece; Co-Founder and Former CTO, GraphEnergyTech Ltd., UK

12:15 – 13:30: Lunch

13:30 – 14:15: **Innovation & Impact Pathways I**

Abstract: Recent narratives appear to set patenting as a must-do, a unique avenue to research exploitation. However, patenting is just a set of options available to researchers and research organisations. A variety of factors affect the validity and feasibility of different choices. The nature and state of the technology itself, the subjective circumstances of the research team and the dynamics of the market must be taken into account, along with significant barriers and drivers. Based on current state-of-the-art and more than 20 years of experience, Prof. Stamboulis will present the elements and structuring of IP strategy and the framework for decision making on the alternative routes to impact.

Speaker: Prof. Yeoryios Stamboulis, Department of Economics, University of Thessaly

14:15 – 15:45: **Open Knowledge towards Real Impact: Strategic Openness in Research and Innovation**

Abstract: Research and innovation generate valuable knowledge beyond publications, including data, software, protocols, models, workflows, and technical know-how. However, making these outputs openly available does not automatically make them reusable or impactful. This interactive session explores how strategic openness can support research valorisation, collaboration, reproducibility, and innovation, considering when knowledge should be openly shared and when access may need to be delayed, controlled, or restricted. Through practical examples and group exercises, participants will explore barriers to effective reuse and consider how factors such as intellectual property, confidentiality, commercial interests, data quality, interoperability, and timing influence sharing decisions, with the aim of turning research knowledge into a responsibly managed and genuinely reusable asset.

Speakers: Dr. Mariam González Debs, Head of Communication, Conferences & Marketing, INL

15:45 – 16:00: **Wrap-up**, Open discussion

DAY 2 — Thursday 24 September: From Innovation to Industry and Impact

09:30 – 10:15: **Innovation & Impact Pathways II**

Abstract: Researcher's perspectives and time horizons differ significantly from those of industry. Still, they are expected to integrate or even legitimize their roles in the context of industry's criteria. In order to navigate this interaction, with the aim to find a future fit with industrial needs and entrepreneurial opportunities, they need to employ tools and frameworks that capture the dynamics of industrial and technological evolution. Is the sector in a phase of disruption? What is the role of our research in the broader technological system and industrial ecosystem? How does it fit in the future prospects of the sector and its actors? These are key questions that need to be addressed before, during and at the end of research projects.

Speaker: Prof. Yeoryios Stamboulis, Department of Economics, University of Thessaly

10:15 – 11:00: **From Ideas to Demonstrators: CEA's Recipe for Innovation**

Abstract: Transforming scientific ideas into real-world impact requires far more than technological excellence. As a Lighthouse of Innovation within the European DemosAxia project, CEA has developed a proven innovation model that bridges research, technology maturation and industrial deployment, turning promising ideas into demonstrators, industrial partnerships and market-ready solutions. This presentation will explore the key ingredients behind CEA's innovation approach, from interdisciplinary research and co-innovation with industry to prototyping, demonstration, technology transfer and ecosystem building. It will illustrate how these complementary elements work together to accelerate the journey from laboratory research to industrial and societal impact. As part of the DemosAxia Recipes of Innovation initiative, the session will present the CEA case study as a contribution to a broader European effort to identify and share best practices from the project's Lighthouses of Innovation. By showcasing concrete methodologies, <https://demosaxia-project.eu/>



collaboration models and lessons learned, the presentation contributes to the development of the Recipes of Innovation guidebook—a practical resource designed to help researchers, innovation managers and policymakers strengthen innovation ecosystems across Europe. Participants will gain practical insights into creating the conditions that enable breakthrough ideas to evolve into impactful innovations, while fostering collaboration, technology transfer and long-term competitiveness.

Speaker: Philippe Caillol, Innovation Director, CEA

11:00 – 11:30: Coffee Break

11:30 – 12:30: From Lab to Market: Standards and regulations as collaboration drivers

Abstract: *Successful technology transfer is only possible when a set of different factors come together. Excellent science is the major prerequisite, a clearly defined industrial problem or a market failure is the other, and last but not least is the standards and regulations followed by the Research and Technology Organizations (RTOs) so they can act as trusted partners. Through real examples of contract R&D, collaborative research projects, and IP licensing, participants will discover how standards and compliance are a part of the innovation process through risk reduction, building industry confidence, and accelerating the path from laboratory breakthroughs to market adoption.*

Speakers: Brigita Jurisic, Business and Strategic Relations Officer, INL & Margaret Costa, Head of the Quality Management Unit, INL

12:30 – 13:00: Innovation Business Observatory (IBO): Supporting the Evolution of Crete's Regional Innovation Ecosystem

Abstract: *The Innovation Business Observatory (IBO) of the Region of Crete serves as a strategic mechanism for monitoring, understanding and supporting the evolution of the regional innovation ecosystem. By collecting and analysing data on entrepreneurship, innovation, research, investment and emerging business trends, the IBO provides evidence-based insights that can inform policy design and strengthen collaboration among businesses, research institutions, public authorities and other ecosystem stakeholders. Its role is to identify opportunities, anticipate emerging challenges and contribute to a more dynamic, resilient and competitive innovation environment in Crete, supporting the transition towards a knowledge-driven and sustainable regional economy.*

Speaker: Eirini Patsiali, Innovation Business Observatory (IBO), Region of Crete

13:00 – 14:00: Lunch

14:00 – 14:30: From Pilot Lines to Production: Micro/Nanoelectronics & Photonics for Industrial Quality Control

Content: Pitches of FORTH-ALPES & INL pilots

Speakers: FORTH, ALPES Lasers, INL

Title: Microfabrication on flexible substrates: Synergizing Microfabrication and Integration for Industrial Innovation

Abstract: *INL presents its capabilities in microtechnology integration and packaging, with focus on flexible substrates, namely the FlexStack platform – a flexible and detachable multilayer microfabrication process for on-chip and on-package functionality. Examples include microfabricated functional microstructures, integrated flexible interconnects and integrated passive components.*

Speaker: Dr. Rosana Dias, Researcher, INL

Title: Quality Inspection of Quantum Cascade Lasers Wafers Using Multiphoton Microscopy

Abstract: *As semiconductor devices become increasingly complex, rapid and non-invasive inspection methods are becoming essential for assessing wafer quality, improving manufacturing yield and ensuring device reliability. In advanced semiconductor structures, however, critical interfaces, buried layers, and defects remain inaccessible to conventional surface-based inspection techniques. In this talk, we present multiphoton microscopy as a non-invasive optical approach for the inspection of quantum cascade laser (QCL) wafers. Multiphoton excitation generates nonlinear optical signals selectively within the focal volume, providing intrinsic optical sectioning and enabling three-dimensional visualization of structures beneath the wafer surface. By scanning the QCL wafer at different depths, the technique provides optical access to the*

<https://demosaxia-project.eu/>



buried active quantum-well region, with a spatial resolution on the order of 500 nm. The nonlinear optical response provides sensitive contrast for evaluating structural uniformity and identifying localized variations due to defects. Importantly, the approach extends beyond imaging: post image analysis converts nonlinear optical signatures into measurable quality metrics, enabling the detection of defects through changes in the nonlinear optical response. Our results demonstrate the potential of multiphoton microscopy to provide quantitative quality evaluation of the subsurface active region of the QCL quantum-well, toward faster and cheaper QCL manufacturing.

Speaker: Dr. Sotiris Psilodimitrakopoulos, Researcher, FORTH

14:30 – 15:00: From QCL Manufacturing Challenges to Research-Enabled Quality Control: The ALPES LASERS Perspective

Abstract: This presentation will explore how ALPES LASERS approaches research collaboration from the perspective of a photonics SME, starting from concrete industrial and manufacturing needs. Using the Demos.Axia collaboration with FORTH as a case study, it will focus on the challenge of identifying subsurface defects in InP/QCL wafers early enough to support manufacturing decisions before further processing cost is incurred. The presentation will also highlight the value of combining industrial know-how with advanced research capabilities, such as multiphoton characterization, and the importance of validating research results against real manufacturing requirements before they can translate into practical industrial value.

Speaker: Dr. Dimosthenis Toliopoulos, Project Manager, ALPES Lasers

15:00 – 15:30: From Lab Results to Innovation: The Questions Researchers Need to Ask

Abstract: *Researchers are increasingly expected to move beyond scientific excellence and consider how their results can generate real-world value. But what questions should a researcher actually ask when a promising result emerges from the laboratory? This session takes a practical, researcher-centred look at the journey from research result to innovation, addressing questions around real-world needs, users, validation, scalability, intellectual property, collaboration and market relevance. Rather than presenting another innovation model, the session will offer a simple framework to help researchers critically assess the potential of their results, identify what may still be missing, and understand when and with whom they need to engage to move towards meaningful impact.*

Speaker: Dr. Eleni Petala, Project Manager, FORTH

15:30 – 16:00: Coffee Break

16:00 – 18:00: Industry Needs & Market Opportunities

Content: What industry is actually looking for, Barriers to adopting new technologies, How research can better respond to market needs, Opportunities for collaboration

Panel discussion

Panel Representatives:

Lead: Emmanuel Stratakis (Director, Institute of Electronic Structure and Laser, FORTH)

Industry: Alexandros Mimidis & Alexandra Bourtereau (Biomimetic), Lazaros Tsounis (PDOT),

Dimosthenis Toliopoulos (ALPES Lasers)

Regional Innovation & Technology Transfer: Michalis Panteris (PRAXI Network),

Maria Petrantonaki (Regional Development Company of Crete – P.AN.ETAI.K.)

Research & Innovation: Eleni Petala, Christina Stangel & Sotiris Psilodimitrakopoulos (FORTH), Brigita

Jurasic & Ivan Prieto (INL), Yeoryios Stamboulis (Department of Economics, University of Thessaly),

Konstantinos Petridis (Hellenic Mediterranean University)

DAY 3 — Friday 25 September: Lab Tour, Consortium Meeting & Next Steps

09:30 – 10:30: Lab Visits & Demonstrations

10:30 – 12:00: DemosAxia WP1 Consortium meeting (only for DemosAxia consortium)

12:00 – 12:30: Wrap-up & Next Steps