

Lasers4EU

A central platform for laser research and innovation

Duration: 01 Oct 2024 – 30 Sept 2028
EU Funding: 5 M€



Objectives

continue, enlarge & improve services to users by

- **providing coordinated access to high-quality services**
from primary and secondary laser sources to a wide range of laser-based instruments & techniques
through **3 different access routes** for laser-based **curiosity-driven fundamental science & applications**
- **increasing the European basis of human resources**
through user training & professional staff development
- **shaping the European landscape of laser Research Infrastructures** through networking & science diplomacy

Participants: the power of diversity

- **25 Beneficiaries in 15 countries**
- **29 Partners : 27 APIs + ELI ERIC & Laserlab-Europe AISBL**
All members of ELI ERIC and Laserlab-Europe AISBL are associated partners



Transnational Access (TNA) (1/4)

3 routes to pioneering laser research



Single-instrument

For users interested in transnational access and looking for a suitable laboratory for their access project, from fundamental science to validating a practical application.



Multi-instrument

For users who need access to as many installations as required in different facilities, over several years if necessary. Requires only a single proposal for the whole duration.



Industry

Allows companies to access the most recent techniques and methods in research laboratories and to benefit from the services of the partner facilities of Lasers4EU.

> 3000
access days

300
user projects

80%
of total budget

for researchers
across the globe



portfolio of techniques
& instrumentation



Partner profiles & access search tool

Field: Category:




[About](#) [Become a user](#) [Training](#) [Activities](#) [Industry](#) [Publications](#) [News & Events](#)

HILASE (Dolní Břežany, Czech Republic)

Institute of Physics of the Czech Academy of Sciences, v.v.i. (FZU)

HILASE operates two diode-pumped Yb:YAG solid state laser facilities: Bivoj, delivering over 1 kW of average power in 105 J, 10 ns pulses at 10 Hz, for laser shock peening and ion generation, and Perla, a high average power laser platform generating < 2 ps pulses in broad spectral region from 206 nm to 3 microns for laser processing.

Website: www.hilase.cz

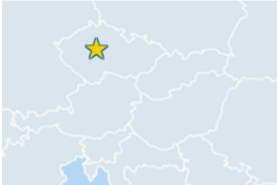
Contact: [Tomáš Mocek](#)

Research highlights

Expertise

Services for industry

Equipment offered to external users



<https://lasers4.eu/find-a-lab/>

Browse our services

This search tool helps identify how advanced laser technologies may support your company.

Your Industry sector:

Please select the industry sector that best fits your business

All sectors

All sectors
Built Environment & Infrastructure
Manufacturing & Production
Technologies & Components
Energy, Environment & Transport
Healthcare & Pharmaceuticals
Agri-Food & Forestry
Chemicals & Process Industries
Heritage & Conservation
Security & Defence

Your core activity:

Please select the option that most closely reflects your primary activity

All categories

Our services

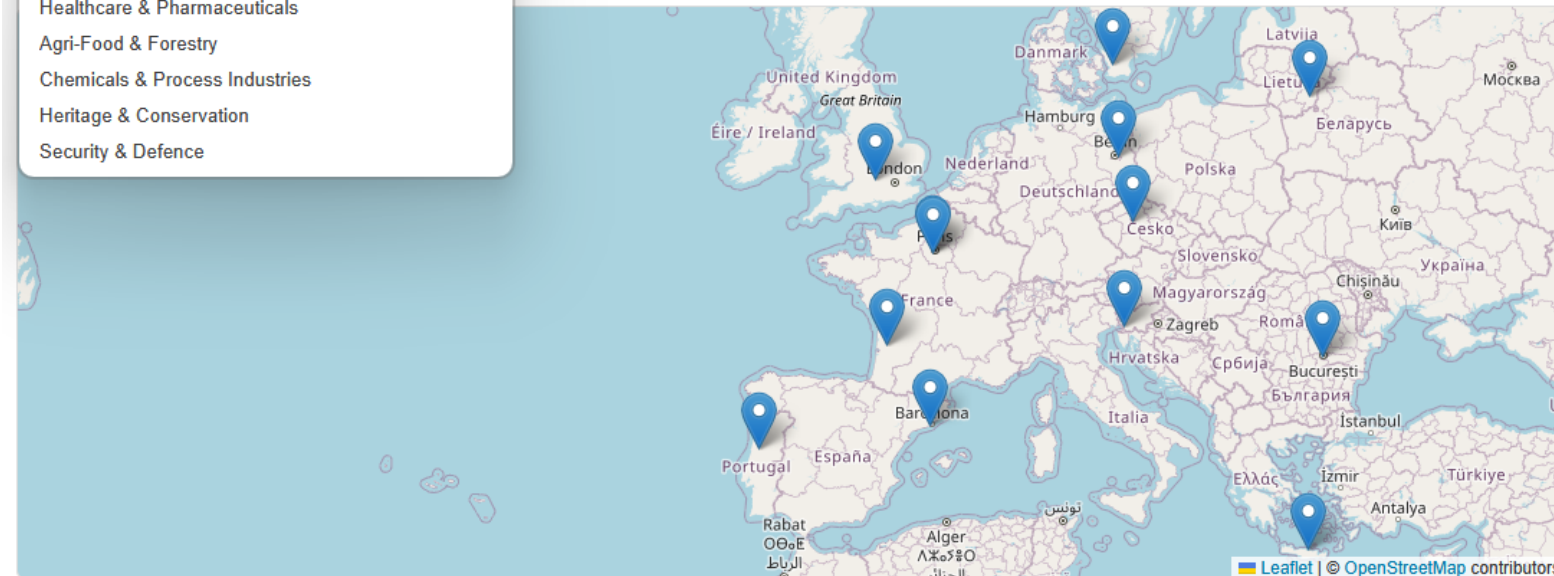
Please select the service you require to solve your technical challenges

All services

Reset Filters

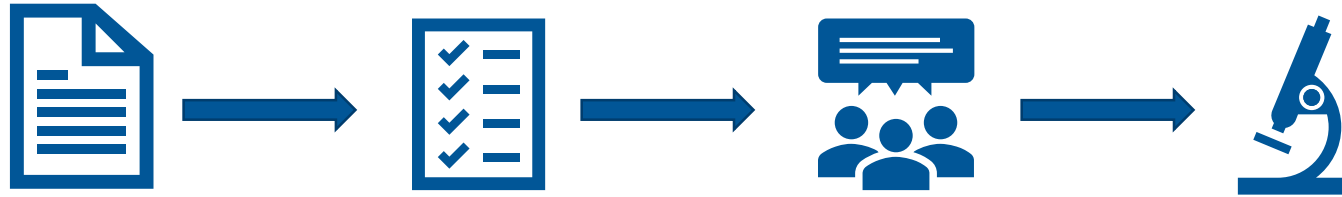
Industry Search Tool

<https://lasers4.eu/industrysearchtool>



Transnational Access (TNA) (4/4)

How does it work?



💡 All proposals must be submitted through a single central online portal.

1. **Submit a proposal:** Researchers apply via a central online portal, selecting a facility that best suits their technical and/ or scientific needs.
2. **Transnationality requirement:** The host lab has to be in another country than the scientist's home institution.
3. **Scientific review:** Proposals are evaluated by an independent panel based on scientific excellence and feasibility.
4. **Free access to the research infrastructures:** Selected users receive free access to the infrastructure, including scientific, technical, and logistical support.
Where relevant, training for equipment use is also provided.

Cross-facility services

Check the webpage regularly for calls



Yearly user training schools

- Training for non-specialists
- Training of young scientist and users

Pre-project training

- Preparation and training visit to the API for young researchers

Online Software tools

- Creation of an online tool box for users to support with the preparation, execution and analysing of the experiments



**Lasers4EU training event:
Women in Photonics**

24 Mar 2025
project , training

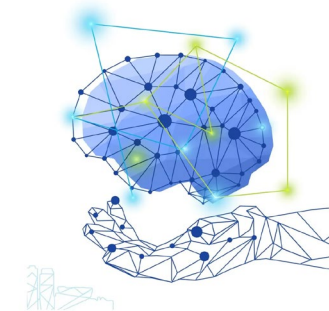
360 Carla
Manufacturing
Industry 4.0
Training
Dolní Brezany

**High-Power Lasers for
Industrial Applications**
Focused training on cutting-edge laser applications
in manufacturing and industry

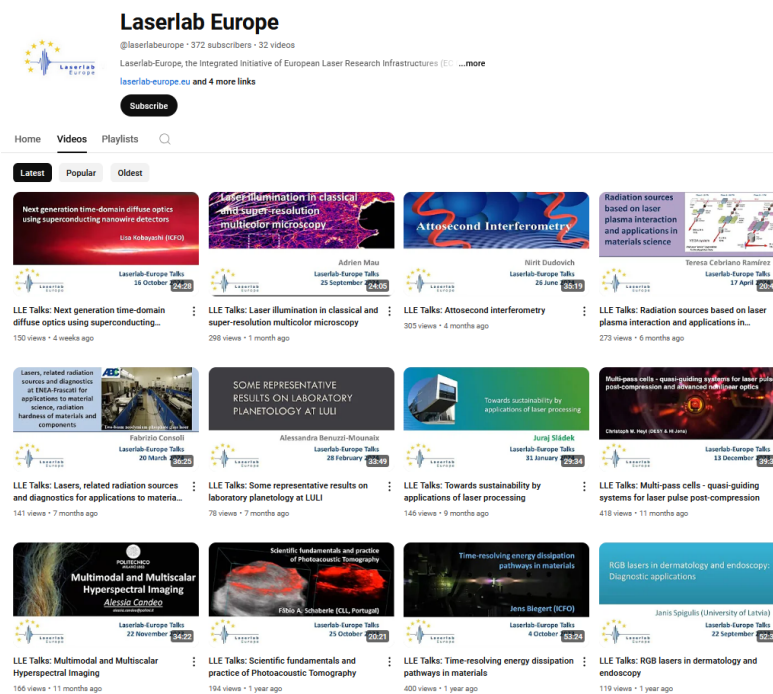
October 16-17, 2025
HilASE Centre
Institute of Physics of the Czech Academy of Sciences
Žo Radvici 828, CZ - 252 41 Dolní Brezany

hilose LASERS4EU MCH Laserlab Europe PHOTONICS

MINDLAB: Manipulating and Investigating Neural Dynamics for Learning and Ageing in the Brain



- Access to monthly **scientific and technical webinars**, showcasing research and applications enabled by laser-based technologies are presented
- Organisation of **Lasers4EU webinars** dedicated to topics as:
 - Diversity and inclusion
 - Intellectual Property rights
 - Open Science
 - Data management
 - Patenting and technology transfer



Lasers4EU Webinars

Open science and the societal impact of scientific research

24 September 2025
4:00 pm - 5:00 pm CEST
Online
www.lasers4.eu

- Newsletter Laserlab Forum every 8 months focusing on
 - access opportunities
 - user projects
 - recent research highlights
 - new services available for users
- Publications database & knowledge management
 - Publications resulting from access projects and cross-facility services will be listed on Lasers4EU
 - Open access to peer-reviewed publications and datasets



- **Networking**

- **Network of points of contact** in under-represented countries to increase the visibility of the Laserlab-Europe Network
- **Online inventory platform** to support the donation and reuse of second-hand scientific equipment.



- **Outreach**

- **Lasers4EU User Awards** for curiosity-driven and for industrial projects (acknowledgment for the quality and impact of the user projects).
- **User Meetings** fostering collaboration and knowledge exchange among current and prospective users, as well as access providers, across disciplines.
- **Lasers4EU Conference** to present results and success stories from the community.



Any questions?
Contact me:



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the European Union**

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