

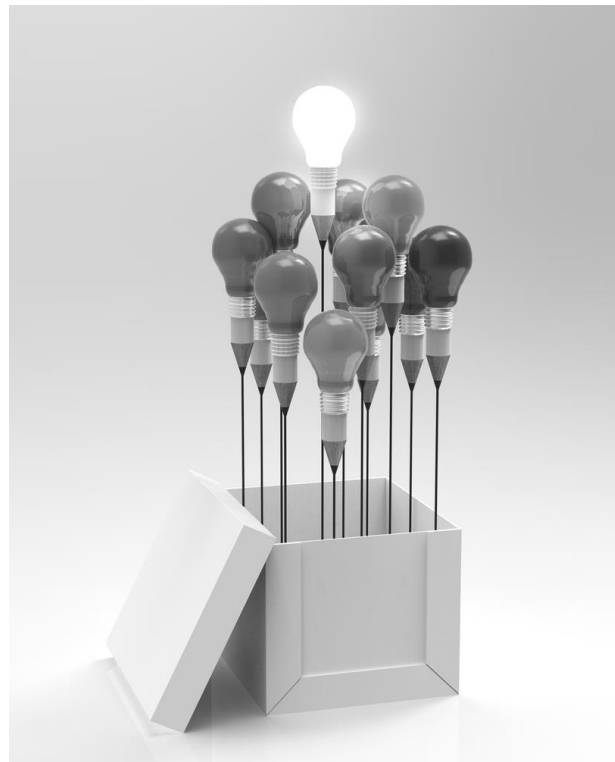
Focus on —
the Future



Our Competence to Your Business

The biggest excellence network of innovation infrastructure, services and competence in the Baltic countries

- A modern, operating open access R&D facilities, equipment, services, and high-level R&D intellectual potential ...
- ...to create and develop R & D activities in engineering and information technology, biomedicine and biotechnology, materials science, physical and chemical technologies, natural resources and agriculture...
- ...easily accessible and located in the three largest cities of Lithuania – Vilnius, Kaunas and Klaipėda and...
- ... concentrated in five integrated science, studies and business valleys - Saulėtekis, Santara, Santaka, Nemunas and marine.



Integrated Science, Study and Business Valleys



- Access to skills and networking – concentration of scientists, researchers, developers and university academia, close collaboration of knowledge-intensive businesses with science and study institutions, opportunity to be co-located with other companies in the same sector (clusters) and region
- Research excellence – open access labs, R&D projects supported by EU/state, application of research results in industry and business
- High-quality infrastructure and premises – infrastructure for research, innovation and new technology development and comfortable conditions to establish new technology-oriented businesses – offices, labs, business incubators.
- Increased international competitiveness

SANTARA S A N T A K A S A U L Ė T E K I S N E M U N A S M A R I N E
V A L L E Y V A L L E Y V A L L E Y V A L L E Y V A L L E Y



Integrated Science, Study and Business Valleys

MARINE VALLEY

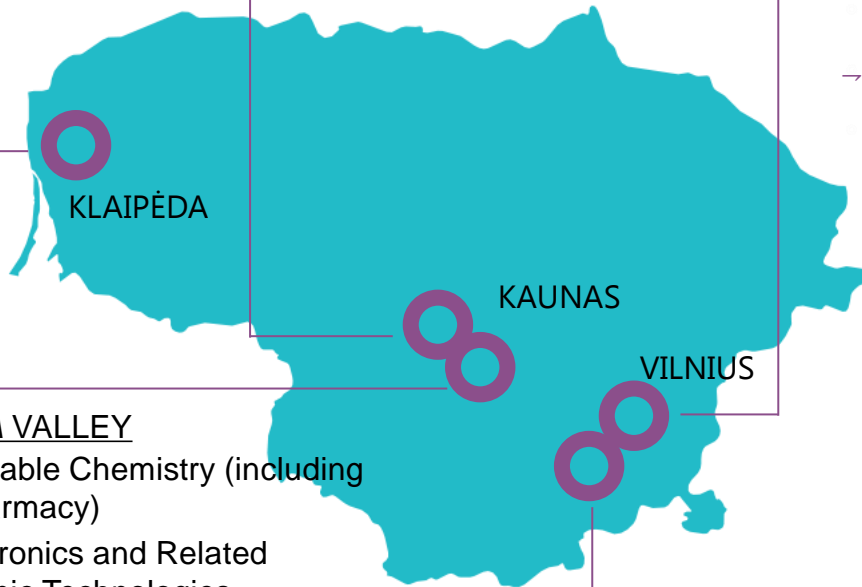
- Marine environment
- Marine technologies

NEMUNAS VALLEY

- Agrobiotechnology, Bioenergy and Forestry
- Food technology, safety and health

SANTARA VALLEY

- Biotechnology;
- Innovative Medical Technologies, Molecular Medicine and Biopharmacy;
- Ecosystems and Sustainable Development;
- Informatics and Communication Technologies



SANTAKA VALLEY

- Sustainable Chemistry (including Bio pharmacy)
- Mechatronics and Related Electronic Technologies
- Future Energy and (including Environmental Engineering)
- Information and Telecommunication Technologies

SAULĖTEKIS VALLEY

- Laser and Light Technologies
- Materials Science and Nanotechnologies
- Semiconductor Physics and Electronics
- Civil Engineering

Open Access Centres

Open access to R&D



Open access centres – centres of excellence with modern equipment, advanced technologies and world-class scientific potential.

- Do you want to create a new advanced research-based product?
- Do you need experimental research or various measurements?
- Do you want to construct a prototype?
- Is it necessary to improve the existing technology?
- Do you need Professional assistance in research, technology and innovation issues?

Researchers and qualified technology transfer professionals working in open access centers, are ready to help you in realizing your business ideas and becoming an innovative market leader.

Open Access Centres located in 5 Valleys



MARINE VALLEY

- National Open Access Centre of Marine Sciences and Technologies



NEMUNAS VALLEY

- Animal Health and Material of Animal Origin Quality Open Access Centre
- Food Science and Technology Competence Centre
- Open Access Joint Research Centre of Agriculture and Forestry



SANTAKA VALLEY

- Centre for the Latest Pharmaceutical and Health Technologies
- National Open Access Scientific Centre for Future Energy Technologies
- National Open Access R&D Centre within Kaunas University of Technology

SAULĖTEKIS VALLEY

- Centre for Physical Sciences and Technology
- Multi-functional laser facility "NAGLIS"
- Civil Engineering Research Centre



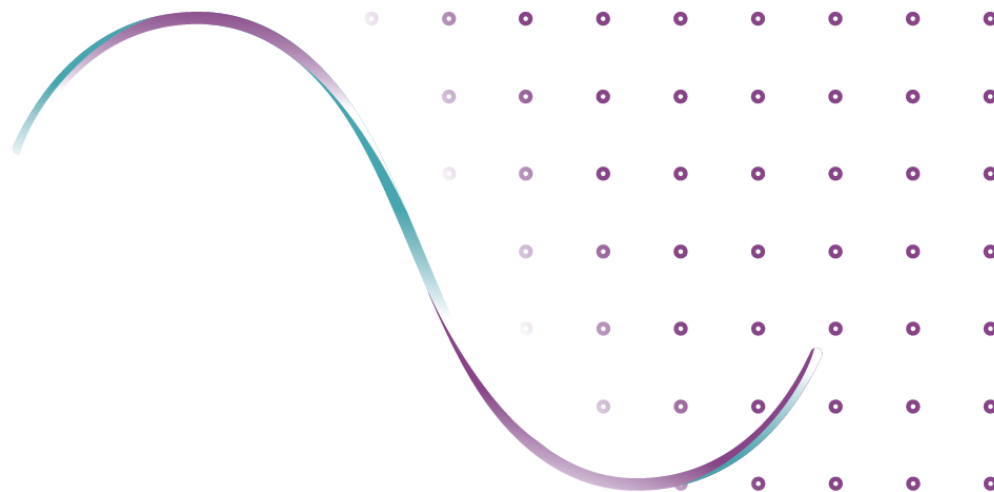
SANTARA VALLEY

- Joint Life Science Centre
- Information Technology Open Access Centre
- Open Access Centre of Nature Research
- Joint Centre of Innovative Medicine

Focus on —
the Future

MULTI-FUNCTIONAL
LASER FACILITY
"NAGLIS"

OPEN R & D
LITHUANIA



Multi-functional laser facility Naglis

SAULĖTEKIS
V A L L E Y

Multi-functional laser facility Naglis



Close cooperation with laser companies

Previous studies of parametric effects were used to create prototypes of optical parametric amplifier TOPAS and other optical parametric amplifier and oscillator. Currently, these products are best sold products by Lithuanian laser companies.

Multi-functional laser facility Naglis



Our services

Laser nanophotonics

„3D printing“ in micro/nano scale

- Scaffolds for stem cells growth
- Implants for tissue engineering
- Multifunctional micro-optical elements (they can be integrated on a tip of optical fiber)

Ultrafast spectroscopy

Analysis of chemical/biological materials, semiconductor properties with ultrafast absorption spectroscopy methods at room and liquid nitrogen temperature.

Optical damage testing

- Laser-induced damage threshold test
- Registration of images of sample morphology with optical microscope

Multi-functional laser facility Naglis



Our services

Femtosecond microfabrication

By combining femtosecond laser pulses together with accurate beam positioning systems we are able to perform material processing with outstanding precision.

- Formation of metal masks
- Drilling of transparent materials
- Topographic analysis of processed samples

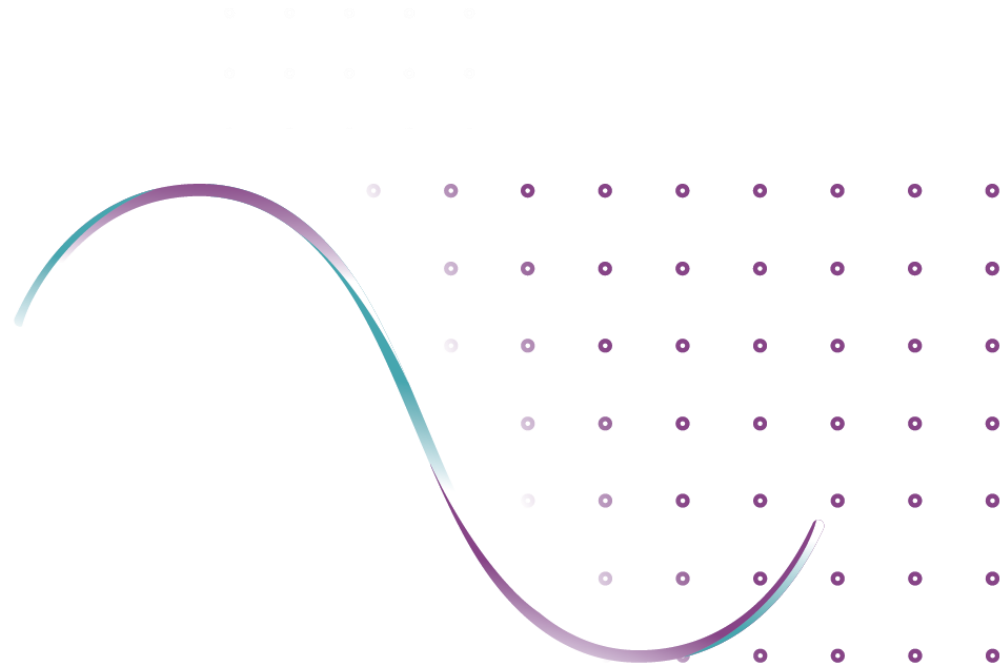
Nonlinear optics

Optical system with femtosecond Yb:KGW laser system „Pharos (6W, 200 kHz, 1030 nm, 300 fs)

- Power increase of
- Laser radiation
- Pumping of optical parametric amplifiers
- Measurement of femtosecond laser pulses contrast

Femtosecond Ti:sapphire laser system (800 nm, 1 kHz, 130 fs)

- Investigation of ultrashort pulses characteristics in transparent nonlinear materials
- Characterization of nonlinear materials nonlinear



Civil Engineering Research Centre

SAULĖTEKIS
V A L L E Y

Application of innovative solutions and excellent knowledge in civil engineering will increase your company's competitiveness and added value.

Modern laboratories employing international level scientists:

- Laboratory of Building Constructions
- Laboratory of Building Materials
- Laboratory of Building Energy and Microclimate Systems
- Laboratory of Road Technologies
- Laboratory of Geodesy
- Laboratory of Environmental Technologies
- Laboratory of Field Experimental Research
- Laboratory of Soil Physical and Mechanical Properties

Scope of our activities and investigations:

Eco-building technologies

- Building microclimate keeping
- Environmental protection
- Efficiency of energy increase
- Renewable energy resources integration
- Creating building structure elements
- Production and testing

Thermo Insulation Materials

Creating, development and testing of new generation heat insulation materials

Sustainable Urban Development

Infrastructure, roads, environmental and geotechnical research studies

Success story

"Our center has already managed to provide services to several foreign companies. German company NUKEM Technologies GmbH ordered to perform testing of construction materials, while concrete sleepers and concrete tests were accomplished for the Polish company "Track Tec SA" and Estonian-Lithuanian company Swetrak UAB.

Virgaudas Juocevičius, Director

Focus on —
the Future

A decorative graphic consisting of a thick, multi-colored sine wave (purple, teal, and blue) that oscillates across the page. The wave is superimposed on a grid of small, light purple dots that are arranged in a regular pattern across the right side of the page.

Let's innovate together

Ričardas Valančiauskas

Chief Officer of Innovation Support and Technology Transfer Division

Agency for Science, Innovation and Technology

Phone: + 370 5 2127 434

E-mail: apc@mita.lt

Website: apc.mita.lt