



# Towards an excellence centre on quantum photonics in Latvia (ToEQPL)

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Quantum Photonics Excellence

# Towards An Excellence Centre On Quantum Photonics In Latvia (ToEQPL)

The project aims to establish a roadmap for the creation of a Centre of Excellence for Quantum Photonics in Latvia which can bridge the field of quantum algorithms and photonics together.

-HORIZON-WIDERA-2023-ACCESS-02-01  
-Start date: 01 September 2024  
-End date: 31 August 2027  
-Budget: 1 500 k€

-Coordinator:  
LATVIJAS UNIVERSITATES CIETVIELU FIZIKAS INSTITUTS

-4 participants:  
Institute of Solid State Physics, University of Latvia  
Riga Technical university  
University of Trento  
Université de Technologie de Troyes

-Advisory Board

<https://toeqpl.eu/>



1. **Research Excellence:** Toward quantum photonics centre of excellence, 10 year scientific and applied research roadmap with partners, strengthen research management and administration capacity, towards high-impact scientific publications, raise the research profile of the staff (young researchers), infrastructure, funding acquisition, to close the still research and innovation gap within the European Union
2. **Innovation:** Improved creativity supported by development of new approaches, enabling of technology transfer, expansion from fundamental to applied research, collaboration with start-up hubs and organizations, communications with local industries and other stakeholders. Strong focus on low power quantum photonics sources.
3. **Regional and International Networking:** Establish ISSP as regional leader in quantum photonics, well-established environment for research and innovation, and a modern and attractive partner for entrepreneurs, scientists, investors. Collaboration with local industries to create national ecosystem in quantum photonics.
4. **Outreach and Dissemination:** Promote ISSP as an attractive partner for R&D&I, well recognized and known in Baltic States and beyond by entrepreneurs, scientists, investors, and policy makers. Public awareness and reputation of ISSP and the Project in the eyes of regional society will be promoted, to generate positive feedback on Research and Innovation activities of ISSP in a large audience.



Work package No	Work Package Title	Lead Participant No	Lead Participant Short Name	Person-Months	Start Month	End month
1	Project management	1	ISSP	23.3	1	36
2	Learning & Development	4	UTT	42.3	1	36
3	Strategy & Roadmap for sustainable finance	1	ISSP	23.1	4	36
4	Excellence in Fundamental Research	3	UT	46.4	1	36
5	Regional ecosystem	1	ISSP	21.3	1	36
6	Exploitation and Dissemination	2	RTU	17.1	1	36



Indicator	2024	2026	2030
High impact factor (>5) publications	2	>10	>15
Invited communications: plenary session presentations/talks/lectures as invited guest on high level conferences/exhibition/other events	-	>5	>10
Number of joint R&D projects with world leading research centers & companies	-	1	3
Number of applications for projects where ISSP UL is a coordinator	-	2	>4
Number of students per year doing PhD in quantum photonics (at least 50% in ISSP UL)	1	2	4
Gender balance: % of female attendees at conference events	15	25	35

**Some of the deliverables:**

- Conferences, workshops, secondments
- Report Latvian quantum photonics market, funding roadmap and for the Centre of Excellence
- Educational and training materials (visits to schools)
- Materials for policy makers and public organisations
- Project website and social media accounts and communication/dissemination
- Specific research related deliverables on quantum photonics: integrated single photon sources made of organic molecules



News • 09.06.2025

## ToEQPL Project Administrators Take Part In 2nd Training Workshop



News • 30.05.2025

## Participation In Deep Tech Atelier 2025



News • 26.03.2025

## The Quantum Science Generation Workshop 2025

## Questions?

