Extreme Light Infrastructure (ELI) (Dolní Břežany, Czechy)

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Introduction

X-ray spectroscopy with pulsed X-ray source





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Funding

- 1 January 31 December 2017
 project title: "Development of time-resolved X-ray spectroscopy methodologies at Extreme Light
 Infrastructure (ELI) facility (Prague) for worldwide user services"
 project no.: 21630257
 funding: International Visegrad Fund
- 2. 1 October 2018 20 November 2019 project title: "Pioneering experiments with ultrafast X-ray techniques at the Extreme Light Infrastructure" project no.: 21820326
 - funding: International Visegrad Fund
- 3. 5 October 2020 31 May 2022 project title: "Association of complementary X-ray and optical spectroscopy methods and communities"
 project no: 22020037

project no.: 22020037

funding: International Visegrad Fund

4. 2020 – 12 December 2022

project title: "Development of multipurpose liquid sample delivery system for X-ray spectroscopy applications"

project no.: PAN-20-20

funding: Bilateral agreement between the Polish Academy of Science and the Czech Academy of Science



Publications

- A. Zymaková, K. Khakurel Prasa, A. Picchiotti, W. Błachucki, J. Szlachetko, M. Rebarz, J. Uhlig, J. Andreasson, "Implementation of a crossed-slit system for fast alignment of sealed polycapillary X-ray optics", *Journal of Synchrotron Radiation* 27, 1730 (2020). https://doi.org/10.1107/S1600577520012217
- A. Zymaková, V. Kantarelou, S. Stancek, D. Bursak, A. Danielisová, D. F. Anagnostopoulos, M. G. Zakova, W. Błachucki, J. Andreasson, D. Margarone, "A fast-integrated X-ray Emission spectrometer dedicated to the investigation of Pt presence in gold Celtic coins (3rd 1st century BCE)", X-Ray Spectrometry, Under Review

3.



1.	16 – 18 December 2019
	Extreme Light Infrastructure (ELI) Beamlines (Dolní Břežany, Czechy)
	Experiment: Commissioning the von Hámos spectrometer
2.	14 – 15 October 2020
	ELI Beamlines User Conference
	Visegrad kick-off meeting, 1st CELIXS (Consortium around ELI for X-ray spectroscopy) meeting
3.	23 February 2021
	ELI Beamlines
	2nd CELIXS meeting
4.	20 – 24 September 2021
	ELI Beamlines
	Experiment: Photo-enhancement of biological reactivity of phenanthroline-based Cu compounds studied with stimulated Raman
	scattering and transient absorption
5.	12 – 22 September 2021
	ELI Beamlines
	Experiment: Cu tape source commissioning
6.	29 – 31 May 2022
	National Synchrotron Radiation Centre SOLARIS
	Visegrad project closure meeting
7.	12 – 16 December 2022
	ELI Beamlines
	Experiment: Testing wire-guided jet versus liquid cell with microstirrer
8.	6 – 10 March 2023
	ELI Beamlines
	Experiment: Determination of ultrafast carrier dynamics in colloidal ZnSe quantum dots
9.	5 – 9 May 2023
	DESY synchrotron (Hamburg, Germany)
	Experiment: Comparative study of liquid sample systems (cylindrical jet, flat flow cell, microliter-stirred cylindrical cell, colliding jets
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