



16 – 19 SEPTEMBER 2026



SECOND CZECH – JAPAN

WORKSHOP

ADVANCED MULTISCALE MATERIALS

PROGRAM



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Ministry of Education,
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of the Czech Republic



Chairs' Welcome Message

It is my great pleasure to welcome all participants to the Second Czech-Japanese Meeting on Advanced Multiscale Materials, organized within the framework of the AMULET (Advanced MULTiscale materials for key Enabling Technologies) project.

While our first meeting in 2024 was strongly focused on the rapidly developing field of 2.5D materials, this year's event has a broader ambition. Beyond presenting the latest scientific achievements, we aim to identify new opportunities for long-term Czech-Japanese collaboration and to explore joint research directions in emerging technologies that will shape the coming decades.

The Czech Republic and Japan share a long tradition of scientific cooperation, dating back more than a century to the pioneering work of Jaroslav Heyrovský and Masuzo Shikata. Today, this partnership continues through joint research projects, researcher exchanges, and collaborations between leading universities and research institutes in both countries.

The scientific programme reflects the multidisciplinary nature of the AMULET project, covering advanced materials, nanotechnology, energy conversion and storage, sensing, photonics, and data-driven materials design. Particular attention will be devoted to future-oriented research areas, including quantum materials and quantum technologies, which are expected to play a key role in next-generation computing, communication, sensing, and sustainable technological development.

We believe that addressing the most challenging scientific questions requires international cooperation and the combination of complementary expertise. Bringing together researchers from the Czech Republic and Japan provides a unique opportunity to exchange ideas, develop new partnerships, and lay the foundations for future joint projects with global impact.

We would like to thank all participants, speakers, and organizers for their contribution to this meeting. We look forward to inspiring discussions and to the new collaborations that will emerge from our shared commitment to scientific excellence and innovation.

Prof. Martin Kalbac & Prof. Jana Kalbacova Vejpravova

Chairs of the Second Czech - Japanese Meeting on Advanced Multiscale Materials



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PROGRAM

Day 0 – 16 th September 2026		
	Arrival	Hotel Duo
19:00	Informal dinner	Hotel Duo

Day 1 – 17 th September 2026		
9:00	M. Kalbáč, J. Kalbáčová Vejpravová	Opening
9:10	Prof. Hiroki Ago	Science and Applications of 2.5 Dimensional Materials
9:40	Dr. Jiří Červenka	From Electrolyte Chemistry to Interfaces: Designing Stable Aqueous Zinc-Ion Batteries
10:10	Prof. Yasumitsu Miyata	Talk Japan 2
10:40	Coffee break	
11:00	Prof. Kazunari Matsuda	Advanced Robotic Fabrication of 2D Material and its Application for Quantum Technology
11:30	Dr. Romana Mikšová	2D materials/polymers modified by ion beams for multifunctional use
12:00	Prof. Tomoki Machida	Talk Japan 4
12:30	Lunch	
13:45	Prof. Yukiko Yamada- Takamura	Talk Japan 5
14:15	Dr. Luka Pirker	Metal-Assisted Exfoliation of MoS ₂ and TMDC Heterostructures
14:45	Prof. Toshiaki Kato	Talk Japan 6
15:15	Coffee break	
15:30	Prof. Hidehiro Sakurai	Talk Japan 7
16:00	Dr. Jan Sýkora	Self-assembled supported lipid bilayers formed on modified graphene surfaces tailored for super-resolution optical microscopy
16:30	Michal Gulka	Dense Fluorination of Nanodiamonds for Quantum Sensing
17:00 – 18:30		Excursion I
19:00	Dinner – all participants	Cobolis https://www.cobolis.cz/



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Day 2 – 18 th September 2026		
9:50		Welcome
10:00		Round table – funding schemes follow up (Horizon Europe, Bilateral projects,)
11:10	Coffee break	
11:40		Roud table - Collaboration opportunities within AMULET project (mobilities, joint experimental proposals)
12:30	Lunch	
14:00 – 18:00		Excursion II
19:00	Dinner	? Strahov/Brevnov

Day 3 – 19 th September 2026		
9:30	J. Vejpravova, M. Kalbac	Welcome
9:40		Round table – joint degree, student and postdoc exchange – opportunities within AMULET project
12:00		Wrap-up, Closing



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