#### QUANTUM INNOVATION PROGRAM 2025 QI2025 Satellite Workshop on Solid-state/Nano Quantum Sensing

# **Date/Time**

Monday, July 28, 2025, 14:00-19:00

## Venue

Icho-Kaikan, The University of Osaka Suita Campus, The University of Osaka, Japan

# **Program** (Tentative)



14:00 - 14:50 Lab Tour (optional)



Satellite Workshop		enue: Hankyu Corporation-Sanwa Bank Hall, 3rd Floor, Icho Kaikan	
15:00 – 15:03	Opening Remarks by Prof. Yoshie Harada (The University of Osaka)		
15:03 – 16:33	Invited Talks (Including Q&A)		
15:03	- Dr. Huan-Cheng Chan	g Distinguished Research Fellow, Academia Sinica, Taiwan	
15:33	- Dr. Shingo Sotoma	Assistant Professor, Kyoto Institute of Technology, Japan	
15:53	- Dr. Ronald Ulbricht	Group Leader, Max Planck Institute, Germany	
16:13	- Dr. Naota Sekiguchi	Assistant Professor, Institute of Science Tokyo, Japan	

16:33-17:00 Break

#### 17:00-17:30 Short Poster Presentations (1-2 minutes per presenter)

No.	Name	Department, Affiliation	Title
1	Yuta Araki	D2, Science Tokyo	Filtered Boxcar-Averaging Detection of Diamond NV Ramsey- based Magnetometry for Enhancing DC Field Sensitivity
2	Keisuke Fujita	WPI-PRIMe, UOsaka	Correlation Analysis of Intracellular Temperature Heterogeneity and Subcellular Structures
3	Masanori Fujiwara	Institute for Chemical Research, Kyoto Univ.	Single tin-vacancy center in nanodiamond synthesized via detonation process
4	Koyo Hirai	M2, Institute of Science Tokyo	Bright Single Lead-Vacancy Center in Diamond Solid Immersion Lens
5	Junya Hirata	Graduate Student, Kyoto institute of technology	Development of gold nanorods with structural stability and strong aggregation resistance
6	Yuki S. Kato	4th-year undergraduate student, UOsaka	Fluorescent Thermometers Based on Carbon Quantum Dots with Various Detection Modes for Intracellular Temperature Measurement
7	Yuki Sakurai	M1, Kyoto institute of technology	Microwave-Assisted Synthesis of Carbon Quantum Dots from Corncobs and Their Characterization
8	Suzune Shimomura	Master's Student, Kyoto Institute of Technology	Hexagonal Boron Nitride Nanoparticles as Intracellular Temperature Nanosensors
9	Kota Shiraya	Master's Programs, Kyoto Institute of Technology	All-Optical Thermometry and Multicolor Fluorescent Labeling with Carbon Quantum Dot and Fluorescent Nanodiamond
10	Hayate Yamano	Toyota Motor Corp. Science Tokyo	Non-destructive Metal Particle Inspection Using Diamond Quantum Sensors

### Venue: Large Meeting Room, 3rd Floor, Icho Kaikan

17:30-19:00

Technical Discussions & Networking Session (with light refreshments) A session for technical discussions on individual posters, advisor feedback, and information exchange.

# Organizing Committee

- Chair: Prof. Yoshie Harada (UOsaka)

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- Vice Chair: Prof. Tadashi Sakai (Science Tokyo)
- Prof. Takayuki Iwasaki (Science Tokyo), Prof. Norikazu Mizuochi (Kyoto U), Dr. Yuichi Yamazaki (QST), Dr. Hiromitsu Kato (AIST), Dr. Shingo Sotoma (KIT) (Tentative as of July 22, 2025)



