

Multi-Spectral Radiation Analysis for Materials Innovation Symposium

- From Cultural Heritages to Medical Applications -

Date and Time

November 28 (Fri.) - 29 (Sat.), 2025

Reception starts at 8:30AM, Symposium starts at 8:50 AM

Venue

Kunibiki Messe (Shimane Prefectural Convention Center) Multipurpose Hall
1-2-1 Gakuen Minami, Matsue City, Shimane Prefecture
690-0826, Japan

Open to everyone

Participation is free

Japanese-English simultaneous interpretation Available

We are pleased to announce the upcoming international symposium introducing the unique research platform, "**Technology for Material Analysis and Evaluation Using Multi-Optical Measurement**", developed by Shimane University, along with cutting-edge research from around the world. This event aims to unveil the propagation routes of Izumo culture, promote the revival of regional industry, and explore new business models.

Let's open a way for a sustainable future from Shimane!



Nov.28 (Fri.)
from 8:50-

Symposium

We will introduce the latest research utilizing various analytical techniques.

*For details, please check the schedule on the back of the flyer.

Nov.28 (Fri.)
from 18:40-

Poster Session

Poster session will be held for students and Early-Career researchers.

*We can only accept the first 40 applicants as presenters.

The student Award and the Early-Career Researcher Award will be presented.

Nov.29 (Sat.)
from 12:30-

Historical Site Visit

We will hold a field trip connecting the historical traditions and science and technology of Shimane.



Course A:
Izumo Taisha (Izumo Grand Shrine) Course



Course B:
Sugaya Tatar Course

*Each course is limited to the first 50 applicants.

Please note that the course may be cancelled if there are too few participants.

Exhibition Booth

Exhibition booths by local governments and companies are available.

Please register on our website.

Registration Deadline
November 14
(Fri.)

*Please note that the registration period may close earlier than scheduled depending on demand.

*An online broadcast is planned for interested participants later (limited period, registration required).

Online streaming available

Accommodation information available



<Organizer>



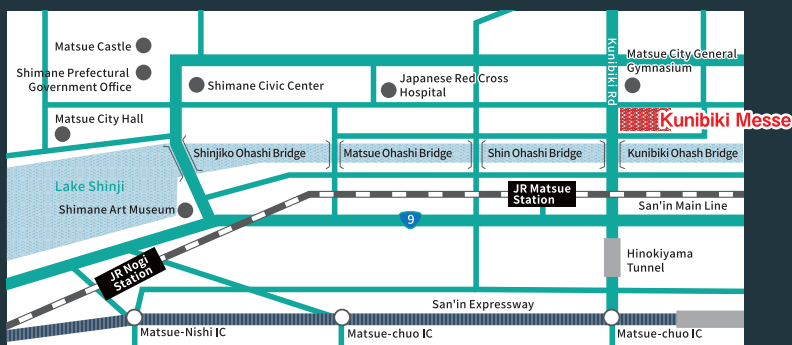
SHIMANE UNIVERSITY

<Co-organizers>

Shimane Prefectural Government, Matsue Convention Bureau Kunibiki Messe
Next Generation Tatar Co-Creation Centre(NEXTA Forum held simultaneously)

Time Schedule

| | Time | Title | Presenter |
|----------------------|---|---|--|
| November 28th (Fri.) | 8:50-9:00 | Opening Remarks | President Hiroki Otani (Shimane University) |
| | Optical imaging | | |
| | 9:00-9:40 | Quantitative microscopy in understanding neurodegeneration: Scope and limitations of confocal microscopy | Associate Professor Lopamudra Giri (Indian Institute of Technology Hyderabad) |
| | 9:40-10:20 | Metabolomics based on Raman spectroscopy | Professor Malgosia Baranska (Jagiellonian University) |
| | 10:20-11:00 | Raman spectroscopy for prevention, pre-disease and diagnostic analyses | Professor Hidetoshi Sato (Kwansei Gakuin University) |
| | 11:00-11:40 | Advances in Clinical Optical Imaging Technologies | Principal Innovator Hrebesh Subhash (QuantaMetra AI LLC) |
| | 11:40-12:00 | Applications of AI-assisted Raman spectroscopy: From single cell biology to diagnostics | Associate Professor Hemanth Noothalapati (Shimane University) |
| | 12:00-13:00 | Lunch + Poster Session | |
| | Multi-spectral Radiation Analysis for Industrial applications | | |
| | 13:00-13:40 | Holographic Optical Elements in Optical Interferometry: New Frontiers in Quantitative Phase Imaging and Precise Temperature Measurement | Professor Chandra Shakher (Indian Institute of Technology Delhi) |
| | 13:40-14:20 | Optical Sensing Technology tailored for advanced industrial applications | Professor Rajan Jha (Indian Institute of Technology Bhubaneswar) |
| | 14:20-15:00 | To be determined | Dr. Yuichi Yoshimura (Kajima Corporation) |
| | 15:00-15:20 | Multimodal Metrology Using Digital Holography for Industrial Application: Multispectral Shape Measurement and Defect Detection Techniques | Professor Masayuki Yokota (Shimane University) |
| | 15:20-15:40 | Luminescence-Based Imaging Analysis of metals | Professor Susumu Imashuku (Shimane University) |
| | 15:40-16:00 | Coffee Break | |
| | Microscopic characterization of materials | | |
| | 16:00-16:40 | Titanium phosphate glasses: Beyond tetrahedral network structures | Professor Philip Salmon (University of Bath) |
| | 16:40-17:20 | Under Invitation | |
| | 17:20-18:00 | Development and Application of Magnetic-field-free Atomic-Resolution Electron Microscopy | Professor Naoya Shibata (University of Tokyo) |
| | 18:00-18:20 | In-situ transmission electron microscopy of defect dynamics of in metallic materials | Professor Kazuto Arakawa (Shimane University) |
| | 18:20-18:40 | Biological Imaging from the Macro to Nanoscale | Associate Professor Ben Urban (Shimane University) |
| | 18:40-20:30 | Banquet + Poster Session | |
| November 29th (Sat.) | Synchrotron and Histirical resources of Shimane | | |
| | 9:00-9:30 | The acquisition and utilization of raw materials for dōtaku using lead isotope analysis | Associate Professor Kunihiro Shimizu (Shimane University) |
| | 9:30-10:00 | Development of a Nationwide Sediment Database Using Synchrotron Radiation | Senior Principal Researcher Keiichi Osaka (Japan Synchrotron Radiation Research Institute) |
| | 10:00-10:30 | Development of a non-destructive analysis method for obsidian artifacts using WD-XRF | Professor Atsushi Kamei (Shimane University) |
| | 10:30-11:00 | Improvement of thermoelectric properties of Skutterudite materials by utilization of Synchrotron radiation | Principal Researcher Takeshi Shimada (Proterial, Ltd.) |
| | 11:00-11:30 | Strategic Approaches for a Decarbonized Society | (Environmental Energy Department, Matsue City) |
| | 11:30-12:00 | Current Status and Significance of Corporate Efforts in Preserving Tamahagane and Traditional Blade Materials (Tentative Title) | (Proterial, Ltd. Yasugi Works) |
| | 12:00-12:10 | Closing Remarks | Vice President Hideo Miura (Shimane University) |
| | 12:30- | Historical site visit | |



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