

Joint Workshop

# LANL / NIMS

**Quantum and  
functional Materials**  
and MANA International Symposium 2024

**October 15-17, 2024**

## Event Outline

Venue / WPI-MANA Bldg. , Namiki-site  
National Institute for Materials Science (NIMS)  
1-1 Namiki, Tsukuba, Ibaraki 305-0044 JAPAN

Contact / [mana-workshop@nims.go.jp](mailto:mana-workshop@nims.go.jp)



abstract



Website



## Joint workshop

# LANL / NIMS Quantum and functional Materials and MANA International Symposium 2024

This is a joint workshop between Los Alamos National Laboratory (LANL)- National Institute for Materials Science (NIMS) workshop and MANA International symposium 2024 to promote active research exchange. Research Center for Materials Nanoarchitectonics (MANA), which is one of the research centers in NIMS will manage the joint workshop for three days. The main topic of LANL-NIMS workshop is “Quantum and Functional Materials”, and researchers from both LANL and NIMS will present their latest research achievements. Such quantum materials open the door to the development of new types of quantum computing devices, superconductors and quantum sensors that could revolutionize the computational speed, efficiency, and sensitivity of electronic devices.

MANA also holds an international symposium every year to discuss the latest important research achievements and future prospects of materials science based on cutting-edge nanotechnology with leading researchers from around the world. It will be held on the third day of the joint workshop this year. At MANA, there are two main research fields, the “Nanomaterials Field” and the “Quantum Materials Field”. This year's MANA International Symposium will focus on the former field of Nanomaterials, since the latter is the main theme of the LANL-NIMS workshop, and will be held simultaneously with the LANL-NIMS workshop to promote research exchange through synergistic effects.

## Day1 10.15

### Opening Session

- 09:00 **Kazuhiro Hono**  
President, NIMS
- 09:05 **Michael Pettes**  
Deputy Group Leader, LANL

### 09:10-10:25 Session1

#### Quantum Materials 1

- 09:10 **Michihiro Hirata**  
Staff Scientist, LANL
- 09:35 **Shunsuke Yoshizawa**  
Senior Researcher, NIMS
- 10:00 **Taichi Terashima**  
Group Leader, NIMS

### Group Photo & Coffee Break

### 10:45-12:25 Session2

#### Quantum Materials 2

- 10:45 **Elizabeth Peterson**  
Staff Scientist, LANL
- 11:10 **Toshikaze Kariyado**  
Senior Researcher, NIMS
- 11:35 **Terumasa Tadano**  
Group Leader, NIMS
- 12:00 **Michael Pettes**  
Deputy Group Leader, LANL

### Lunch

### 14:00-15:40 Session3

#### Quantum Materials 3

- 14:00 **Jinkyoun Yoo**  
Co-leader, LANL
- 14:25 **Kazunari Yamaura**  
Group Leader, NIMS
- 14:50 **Yongqiang Wang**  
Team Leader, LANL
- 15:15 **Yusuke Kozuka**  
Group Leader, NIMS

### Coffee Break

### Poster Session (Viewing)

## Day2 10.16

### Plenary Talk

- 09:00 **Avadh Saxena**  
Senior Scientist, LANL

### Morning Coffee Break

### 10:00-11:15 Session4

#### Quantum Materials 4

- 10:00 **Andrei Piryatinski**  
Scientist, LANL
- 10:25 **Hiori Kino**  
Principal Researcher, NIMS
- 10:50 **Atsushi Togo**  
Group Leader, NIMS

### Lunch

### 13:00-13:50 Session5

#### Nanomaterials 1

- 13:00 **Diego Dalvit**  
Technical Staff Member, LANL
- 13:25 **Koichiro Yaji**  
Group Leader, NIMS

### Coffee Break

### 14:20-15:35 Session6

#### Nanomaterials 2

- 14:20 **Han Htoon**  
Scientist 5, LANL
- 14:45 **Jun Kikkawa**  
Principal Researcher, NIMS
- 15:10 **Theresa Kucinski**  
Scientist, LANL

### 15:35-16:25 Session7

#### Nanomaterials 3

- 15:35 **Hisato Yamaguchi**  
Scientist, LANL
- 16:00 **Takayoshi Sasaki**  
Fellow/Group Leader, NIMS

### Closing Session

### Poster Session

### MANA International Symposium 2024 Reception

## Day3 10.17

### Opening Session

- 09:30 **Takashi Taniguchi**  
Executive Vice President, NIMS

### Plenary Talk

- 09:35 **Atsuo Yamada**  
Professor, The University of Tokyo

### Group Photo & Coffee Break

### 10:40-12:00 Session8

#### Nanomaterials 4

- 10:40 **Naoji Matsuhisa**  
Associate Professor, The University of Tokyo
- 11:10 **Lingying Li**  
ICYS Research Fellow, NIMS
- 11:35 **Joel Henzie**  
Principal Researcher, NIMS

### Lunch

### Laboratory Tour / Poster Session / Coffee break

### 14:30-16:50 Session9

#### Nanomaterials 5

- 14:30 **Kenji Miyatake**  
Professor, University of Yamanashi
- 15:00 **Takaaki Taniguchi**  
Principal Researcher, NIMS
- 15:25 **Yoshinori Okada**  
Associate Professor, Okinawa Institute of Science and Technology (OIST)
- 15:55 **Shizeng Lin**  
Scientist, LANL
- 16:25 **Daichi Kozawa**  
Senior Researcher, NIMS

### Closing Session

## Informations

### Host Organization

National Institute for Materials Science (NIMS)

Contact [mana-workshop@nims.go.jp](mailto:mana-workshop@nims.go.jp)

Organizing Committee (MANA, NIMS)

Takashi Taniguchi, Director  
Naoki Fukata, Deputy Director  
Yutaka Wakayama, Manager  
Kazunari Yamaura, Group Leader  
Renzhi Ma, Group Leader  
Takayuki Harada, Independent Researcher  
Toshikaze Kariyado, Senior Researcher  
Yu Yamashita, Senior Researcher