

Japan-India Materials Science School for Young Scientists 2025 Successfully Concludes

The Institute for Materials Research (IMR) at Tohoku University hold an annual Materials Science School for Young Scientists. This year marked the 20th time the event has been held since its inception in March 2005. In 2025, as a special initiative focusing on the rapidly expanding collaborative research between Japan and India, the “Japan-India Young Scientists Materials Science School 2025” was held at the IMR Auditorium from November 17 to 19, welcoming approximately 40 participants, including 22 attendees from India (both on-site and online).

Expert Lectures and International Exchange

The three-day school featured lectures delivered by specialists in the field. A total of six lecturers contributed their expertise: three lecturers from India lectured online, while from Japan, two lecturers lectured on-site and one lecturer presented online.

Lecturers:

Prof. Ashok Kumar Ganguli,

Indian Institute of Technology- Delhi (Online)

Dr. Kaustuv Manna,

Indian Institute of Technology- Delhi (Online)

Prof. Mukannan Arivanandhan,

Anna University (Online)

Assoc. Prof. Seigo Soma,

AIMR, Tohoku University (On-site)

Prof. Masashi Watanabe,

IMR, Tohoku University (Online)

Assoc. Prof. Kei Kamada,

IMR, Tohoku University (On-site)

Participants listened attentively to the diverse presentations over the course of the three days, fostering a broad intellectual exchange.



Valuable On-Site Experience for Indian PhD Students

A notable highlight was the attendance of five selected PhD students from India, who traveled to

Japan specifically for the school. Beyond attending the lectures, they gained valuable, multi-faceted experiences. This included touring various experimental facilities within IMR and visiting Tohoku University's cutting-edge Nano Terrace facility. This successful in-person engagement further deepened the international exchange among the young scientists, providing them with essential practical exposure.



Japan-India Material Science School for Young Scientists 2025

Date: November 17-19, 2025

Venue: Institute for Materials Research, Tohoku University and Online Hybrid

Program

November 17		
10:00-10:30	Onsite attendant Gathering Welcome and guidance	
10:30-11:30	Exchange 1	Short Presentation by Onsite Attendants
11:30-13:00	Break	
13:00-14:00	Lecture 1	Prof. Mukannan Arivanandhan, Anna University <i>Thermoelectric Materials: From Fundamentals to Future Applications"</i>
14:00-14:30	Break	
14:30-15:30	Lecture 2	Assoc. Prof. Manna Kaustuv, IIT- Delhi <i>Topology in Magnetism and Transport</i>
15:30-16:00	Break	
16:00-16:30	Exchange 2	Dr. Kushwaha Varun Kumar, IMR <i>My Research life in Japan and IMR</i>
16:30-17:00	Free Discussion	
November 18		
9:30-10:30	Laboratory Visit	High Magnetic Field Laboratory for Superconducting Materials
10:30-11:00	Break	
11:00-12:00	Lecture 3	Prof. Masashi Watanabe, Tohoku University <i>Tunneling Electron Microscope for Materials Science</i>
12:00-13:30	Break	
13:30-14:30	Lecture 4	Prof. Ashok Kumar Ganguli, IIT- Delhi <i>Material Synthesis for Strongly Correlated Electron and 2D Materials,</i>
14:30-15:00	Break	
15:00-16:00	Lecture 5	Assoc. Prof. Kei Kamada, Tohoku University <i>Physics and Chemistry of Scintillators</i>
16:00-17:30	Free Discussion	
17:30-19:00	Mixer	
November 19		
9:30-10:15	Laboratory Visit	Cooperative Research and Development Center for Advanced Materials
10:30-11:30	Lecture 6	Assoc. Prof. Seigo Soma, Tohoku University <i>Synchrotron radiation for Materials Science</i>
11:30-11:45	Closing	
11:45-12:50	Break	
12:50-15:00	Laboratory Visit	Nano Terasu Laboratory Toor