

Superconductivity School 2018

“Superconductivity School 2018” is going to be organized in Tsukuba, Japan on December 9-11th, 2018, which is just prior to ISS2018. The “Superconductivity School 2018” is going to be supported by National Institute of Advanced Industrial Science and Technology (AIST), TIA (a platform for open innovation), and the Applied Superconductivity Constellations of Tsukuba (ASCOT).

■Registration

Overseas students who have interests to participate in Superconductivity School 2018 are required to register by email to “sc-jimu-ml@aist.go.jp” **by Oct. 10th (JST), 2018** with the following information.

- 1) Title, First (&Middle) name, Family name:
- 2) Nationality:
- 3) Participation date:
- 4) Affiliation:
- 5) Supervisor’s name:
- 6) Contact email address:
- 7) ISS2018 registration ID:
- 8) Research interest and reason of your participation:

We will notify you about your participation after review by **Oct.17th**. Approximately 20 seats are available on a first-come and first-served basis in principle.

The students who attend the poster session on Dec.10th are required to submit your poster as well as its oral (within 1 min.) presentation file (ppt) to “sc-jimu-ml@aist.go.jp” **by Oct. 31st**. The size of the poster is A1, and can be prepared in English.

The applicants without the registration and notification from Secretariat of Superconductivity School are unable to attend the school.

■Schedule

Dec. 9th : Basics of superconductivity

(All lectures are **in Japanese.**)

(Overseas students can not attend the technical tour in the afternoon.)

Dec. 10th : Applications of superconductivity

Poster sessions

Social events

(All lectures and Poster session are **in Japanese**)

Dec. 11th: Frontiers of superconductivity (All lectures are **in English**)

■Venue

National Institute of Advanced Industrial Science and Technology (AIST).

AIST Central 1, Auditorium 2F

http://www.aist.go.jp/aist_e/guidemap/tsukuba/center/tsukuba_map_c.html

■ ***Eligible participants***

Overseas' student who has registered as "Student" for ISS2018.

■ ***Participation fee***

Full registration (Dec.9-11th) : Please pay **6000 JPY** at Dec. 9th morning (including lunch, social event)

Participation only on Dec.11th: **Free** (including no lunch; a convenience store is available. No school bus is available: please use public bus/taxi/AIST shuttle bus, refer the link at *Venue* section above.)

■ ***Support***

No financial support is available.

Please refer the following link for domestic students.

<https://www.tia-nano.jp/ascot/school/index.html>

Secretariat of Superconductivity School 2018

sc-jimu-ml@aist.go.jp

Superconductivity School 2018 Curriculum (tentative)

December 9th (Sun.) Basics of Superconductivity (in Japanese)				
	time	title(tentative)	Lecturer	Affiliation
1	08:35-08:40	Opening remarks	Dr. Michiya Okada	AIST
2	08:40-10:00	Physics and Chemistry of Superconductivity	Prof. Setsuko Tajima	Osaka University
3	10:10-11:30	Basics of Superconductivity Electronics	Prof. Akira Fujimaki	Nagoya University
4	11:40-13:00	Basics of Superconductivity Wire	Prof. Takanobu Kiss	Kyushu University
5	13:40-18:30	Technical tour (domestic students only)	Hitachi Ltd.	

December 10th (Mon.) Applications of Superconductivity (in Japanese)				
	time	title(tentative)	Lecturer	Affiliation
1	09:00-10:20	Rotary Machine (Motor, Generator)	Prof. Taketsune Nakamura	Kyoto University
2	10:30-11:30	Development of RE123 HTS Wire	Dr. Yasuhiro Iijima	Fujikura Ltd.
3	12:40-13:40	Electric Power System applications	Mr. Tomoo Mimura	Tokyo Electric Power Company Holdings, Inc.
4	13:50-14:50	Superconducting Maglev	Dr. Junichi Kitano	Central Japan Railway Company
5	15:00-17:00	Poster session		
6	17:00-19:00	Social meeting		

December 11th (Tue.) Frontier of Superconductivity (in English)				
	time	title(tentative)	Lecturer	Affiliation
1	09:00-10:20	Fundamentals of Superconducting Electronics	Dr. Oleg Mukhanov	Hypres, Inc.
2	10:30-11:50	Fundamentals of Superconducting Wire	Prof. David C Larbalestier	NHMFL, Florida State University
3	13:00-14:20	Second Generation High-Temperature Superconducting Wire and the Application	Dr. Valery Petrykin	SuperOx
4	14:30-15:50	HTS Roebel Cables and the AC Application	Prof. Nick Long	Robinson Research Institute, Victoria University of Wellington
5	16:00-17:20	Superconducting Wire and its Magnet Applications	Mr. Michael Tomsic	Hyper Tech Research, Inc.
6	17:20-17:25	Closing remarks	Dr. Michiya Okada	AIST