The 190th ISIJ Meeting

Date

September 17 to 19, 2025

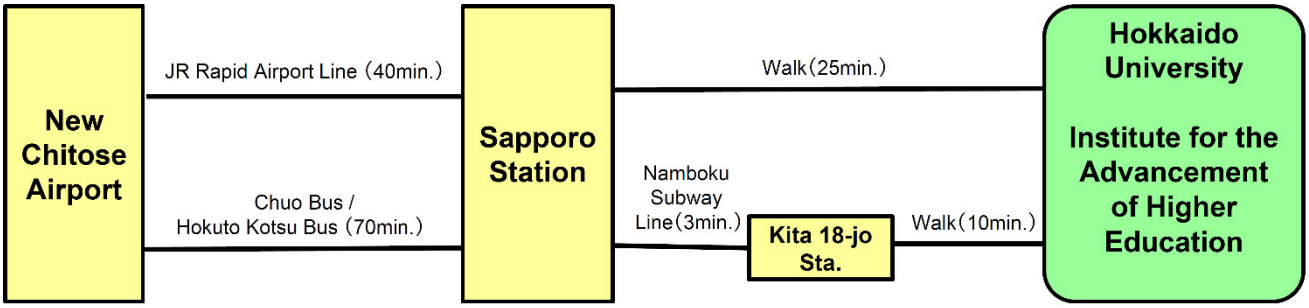
Reception: 8:30- 16:00 (September 17-18),8:30 - 14:00 (September 19)

Venue

Hokkaido University

Kita 8, Nishi 5, Kita-Ku, Sapporo, Hokkaido, 060-0808 Japan

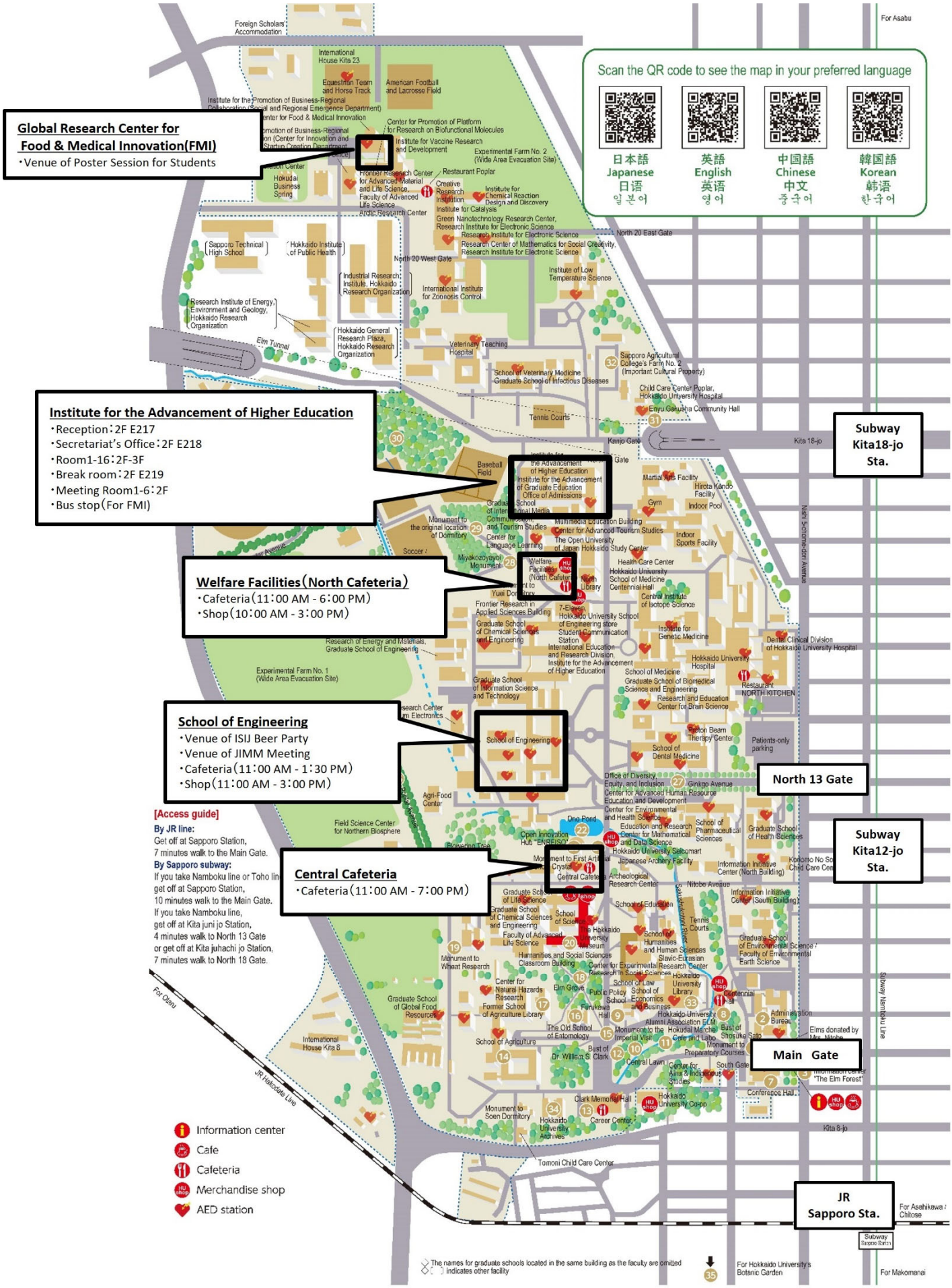
Access to Hokkaido University



＊For more information, please see the following website.

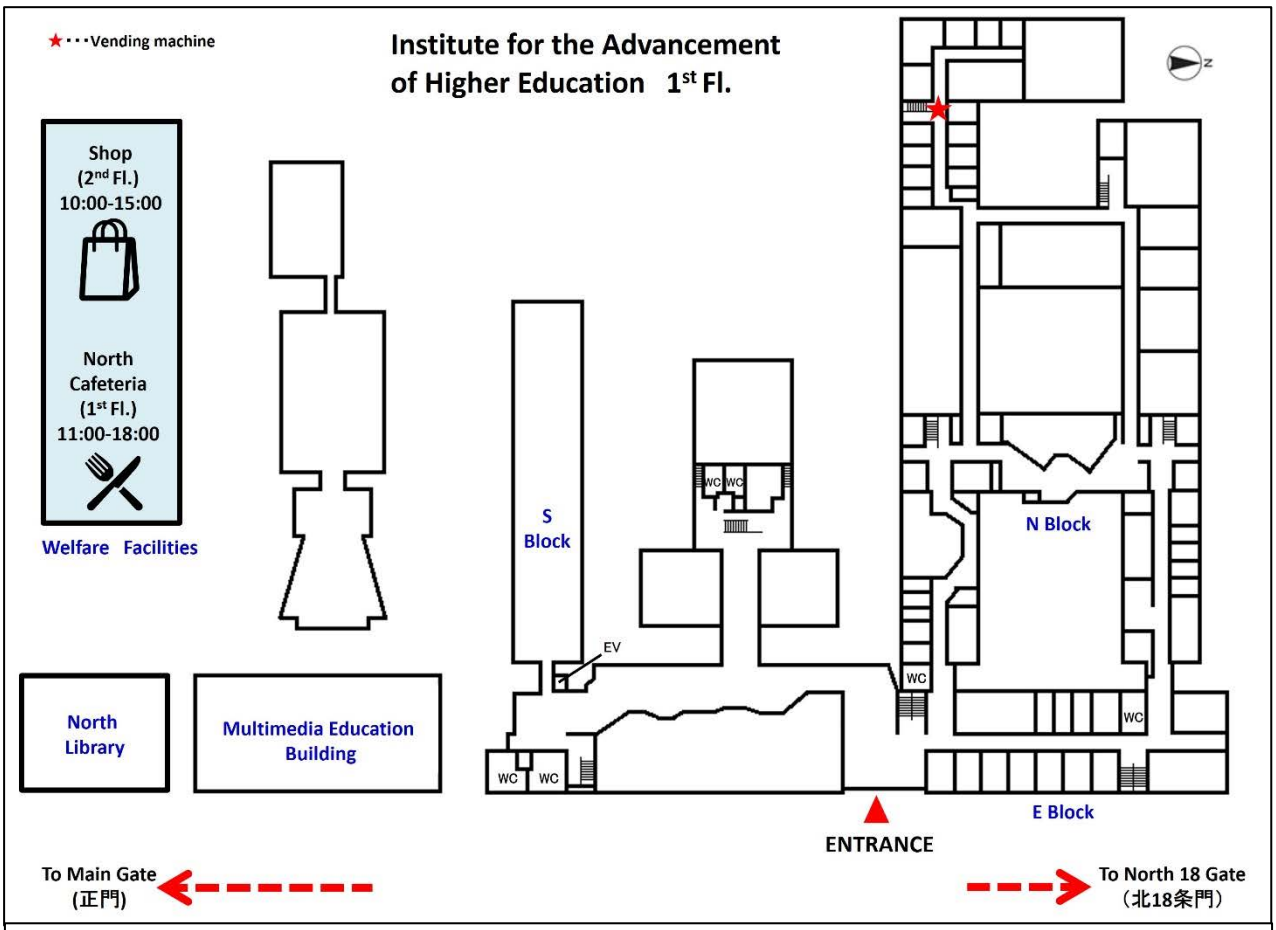
https://www.global.hokudai.ac.jp/access/sapporo-campus

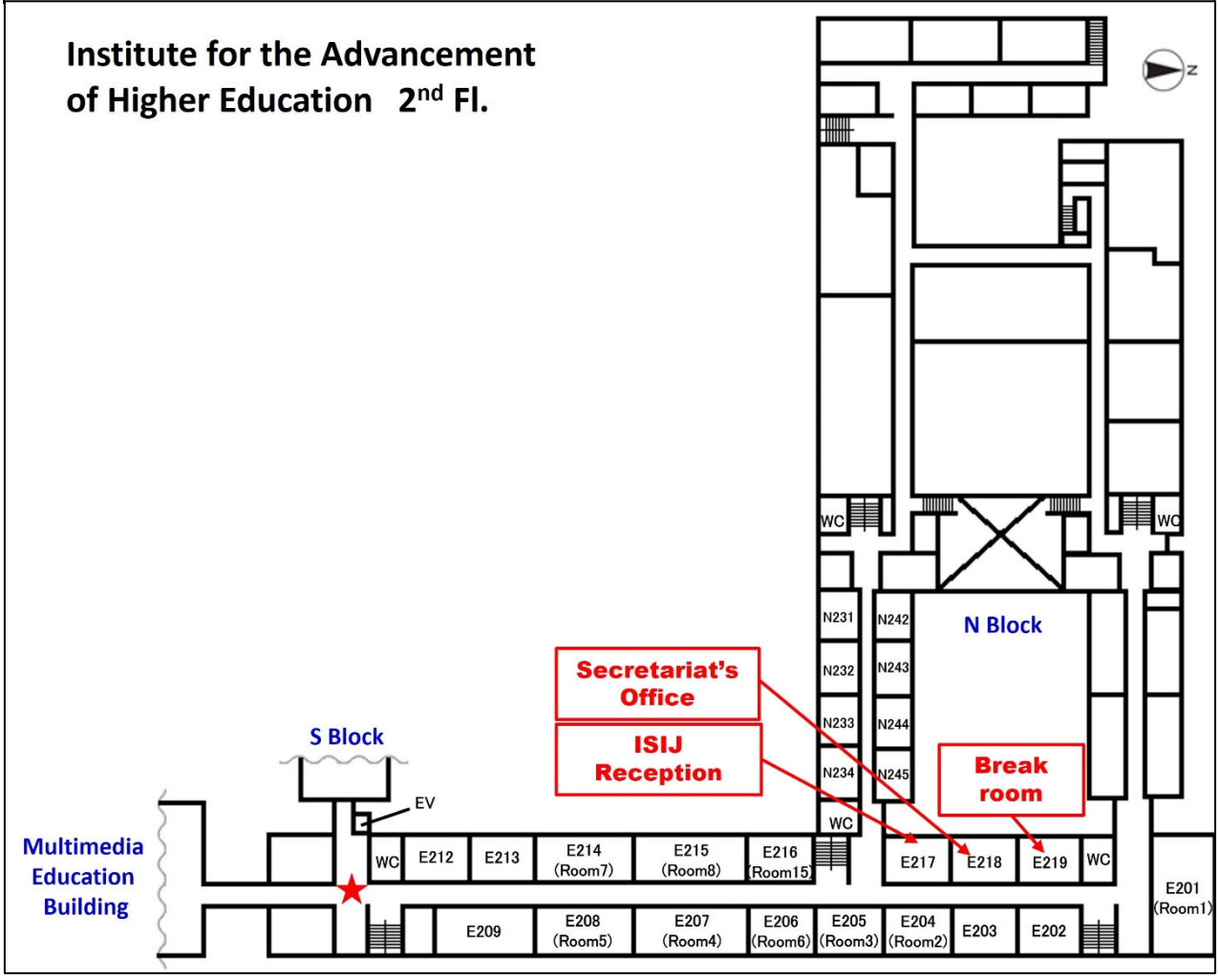
Campus map



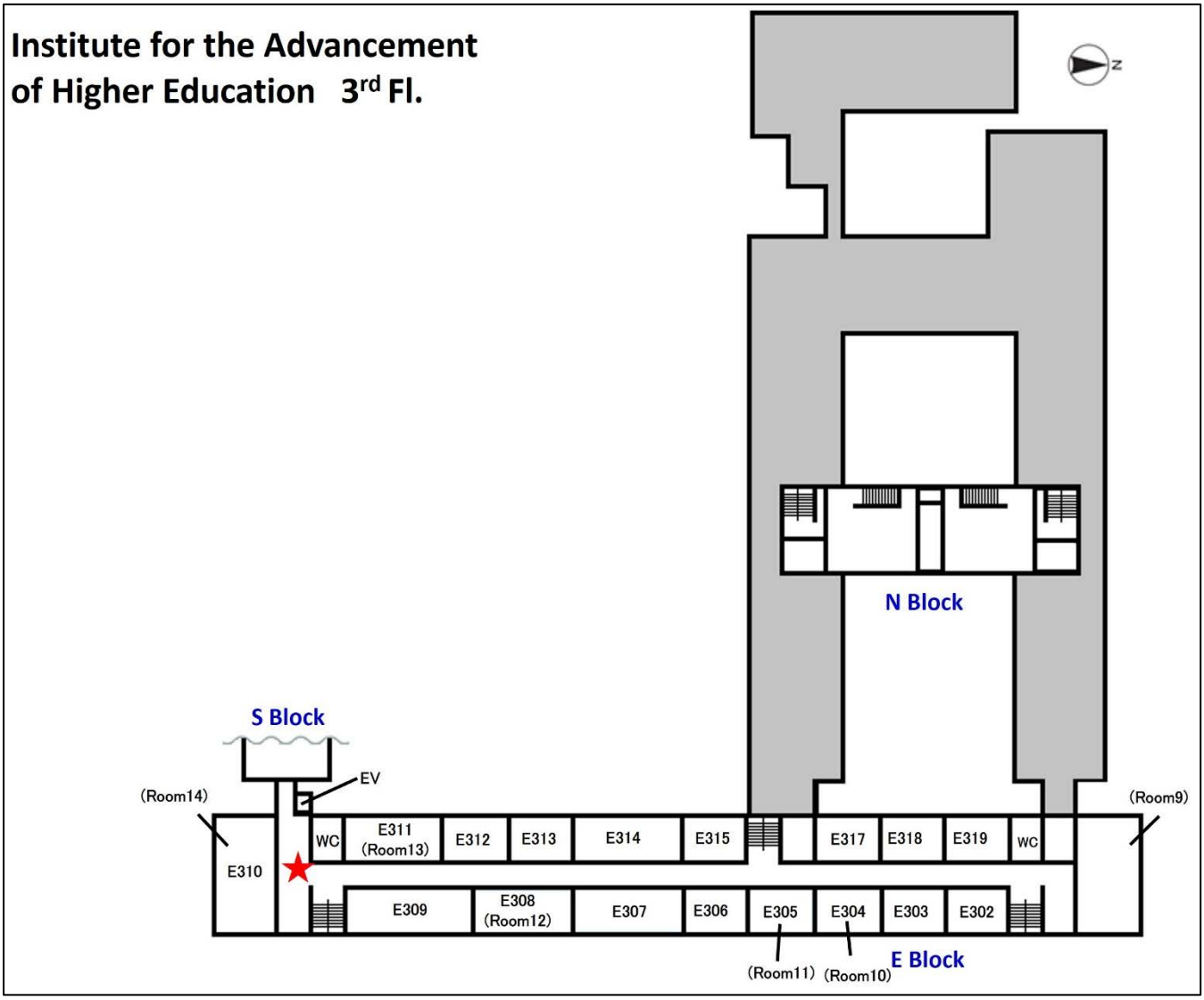
* https://www.global.hokudai.ac.jp/maps/sapporo

Institute for the Advancement of Higher Education





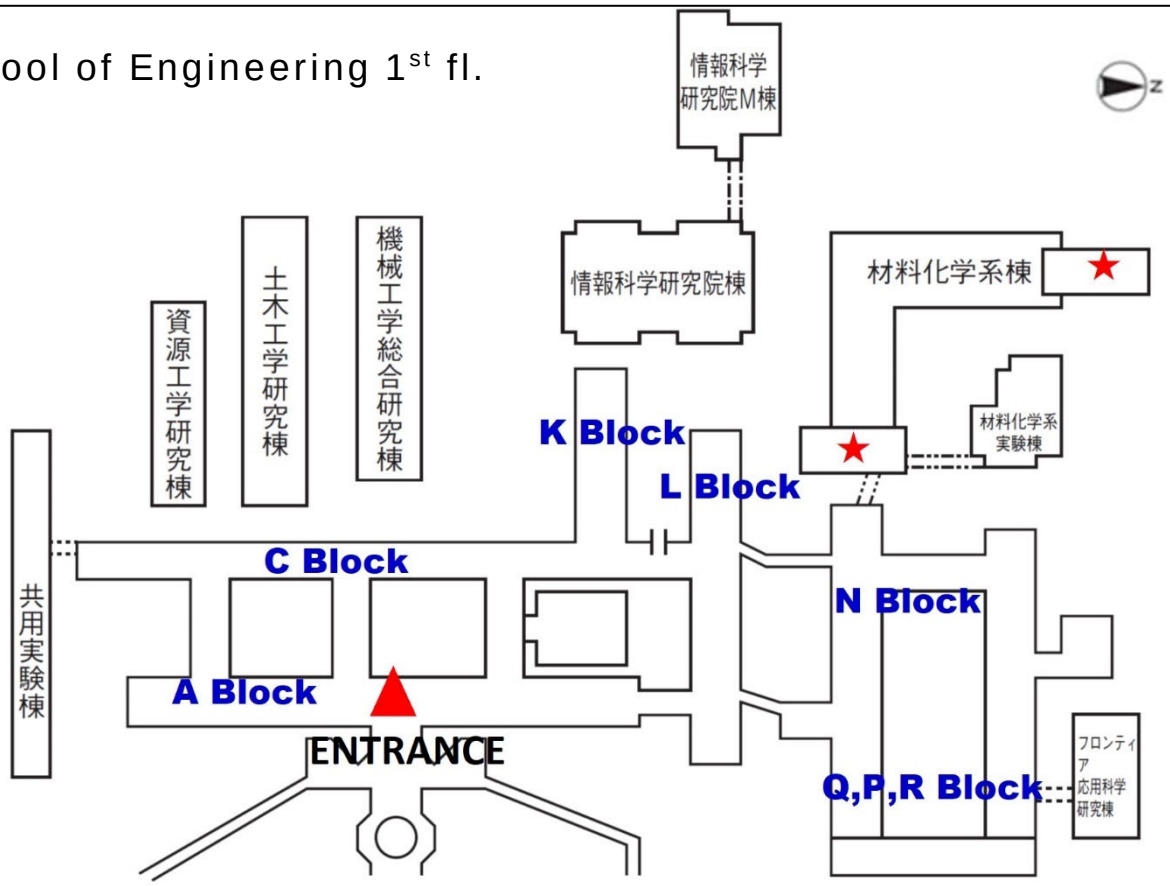
Institute for the Advancement of Higher Education 3rd Fl.



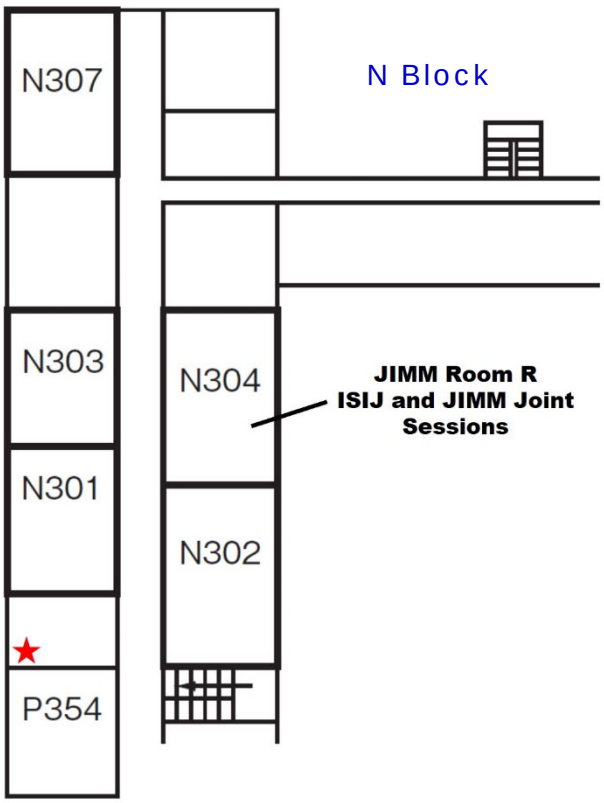
School of Engineering

(Venue of JIMM Meeting)

School of Engineering 1st fl.



School of Engineering 3rd fl.



The timetable of the 190th ISIJ Meeting
(September 17-19, 2025 at Hokkaido University)

ISIJ Room (Session Room1～16)⇒Institute for the Advancement of Higher Education
JIMM Room, ISIJ Beer Party ⇒Engineering Bldg.
Poster Session for Students ⇒Global Research Center for Food & Medical Innovation (FMI)

Session Room	Sept. 17 (Wed.)		Sept. 18 (Thu.)		Sept. 19 (Fri.)	
	AM	PM	AM	PM	AM	PM
Session Room 1 2F E201	Shaft furnace, Direct reduction [1-5] (9:20-11:00)	Blast furnace 1・2・3 [6-16] (13:35-17:25)	Development of hydrogen reduction technology to realize carbon neutrality in Japanese steel industry [D6-D18] (9:20-17:00)		Production and characterization of iron ore sinters for hydrogen reduction blast furnace [D1-D5] (9:20-12:20)	Sinter / Non-ferrous smelting [75-81] (13:20-15:55)
Session Room 2 2F E204	Young engineer session of iron making 1・2 [17-23] (9:20-11:55)	-	Frontiers in thermophysical properties and thermodynamics of materials research 1 [42-44] (10:00-11:00)	Frontiers in thermophysical properties and thermodynamics of materials research 2 / Properties of liquid materials [45-51] (14:00-16:45)	Refining process aiming at carbon neutrality 1・2 [82-88] (9:20-12:00)	Electric furnace / Converter and Secondary refining [89-95] (13:00-15:35)
Session Room 3 2F E205	Inclusion / Continuous casting [24-31] (9:20-11:55)	Thermodynamics 1・2 / Transport phenomena, High temperature reactions [32-41] (13:15-17:05)	Quantification of solidification phenomena using multiple approaches V-1・2 [52-58] (9:20-12:00)	Quantification of solidification phenomena using multiple approaches V-3 / Fundamentals of solidification [59-66] (14:00-16:55)	Young engineer session of coke-making 1・2 [96-104] (9:20-12:30)	Cokemaking technology [105-108] (13:30-14:50)
Session Room 4 2F E207	Development of green technology in surface treatment for high performance and corrosion resistance of steelsⅢ (9:30-12:00) [Charge-Free]	Ironmaking system and recycle [109-111] (13:15-14:15)	Introduction of research topics in novel processing forum / Slag and dust treatment [67-74] (9:20-12:15)	Slag treatment and recyele / Waste material recycling [112-118] (14:00-16:35)	Thermal energy storage technologies for carbon neutrality of iron & steel industry (9:20-13:00) [Charge-Free]	-
Session Room 5 2F E208	The development of emerging and advanced seed technologies through the 'Steel carbon neutral research grant' [D19-D27] (10:20-16:30)		Cutting-edge of green technologies for carbon neutrality of steelmaking industry [119-122] (10:30-11:50)	Towards suitable maintenance and management of steel structures (13:25-16:30) [Charge-Free]	Interrelated environmental challenges of the steel sector (9:20-11:50) [Charge-Free]	-
Session Room 6 2F E206	Production optimization / System [123-129] (9:20-12:00)	Advances in systems and technologies enhancing carbon productivity (13:30-16:20) [Charge-Free]	Equipment diagnostics in ironworks using 3D area sensing [D28-D34] (9:25-12:00)	Instrumentation [130-134] (14:00-15:40)	-	-
Session Room 7 2F E214	Control technology for free-cutting-17 (1)・(2) [135-141] (9:20-12:00)	Deformation and microstructure / Rolling [142-149] (13:15-16:10)	Reliability evaluation of weld 7 (1)・(2) [153-160] (9:20-12:20)	Forming technologies for tube materials derived from closed cross-sectional characteristics [161-165] (14:30-16:10)	Novel materials processing for the innovative plate rolling [D35-D42] (9:35-15:50)	
Session Room 8 2F E215	-	Pickling and oxidation scale [150-152] (13:15-14:15)	The technical session by young engineers of plate rolling [250-253] (10:40-12:00)	Speciation and control of Mn in steel slag (14:00-16:30) [Charge-Free]	Modeling of various phenomena in metal forming and its application [166-169] (9:20-10:40)	-
Session Room 9 3F E301	Hydrogen embrittlement 1・2 [170-177] (9:20-12:15)	Hydrogen embrittlement 3 [178-181] (13:15-14:35)	Final report of research group on "Extraction of essential factor technology for hydrogen embrittlement evaluation" (9:20-15:20) [Charge-Free]		Hydrogen embrittlement 4・5 [254-259] (9:20-11:35)	Frontiers of materials development to support a hydrogen society (13:00-16:00) [Charge-Free]
Session Room 10 3F E304	Symposium on approaches to grain boundary engineering for achieving high-performance steels II (10:00-16:20) [Charge-Free]		Exploring the frontiers of next-generation microbiologically influenced corrosion research [Int.-1-Int.-5] (10:20-16:20)		Electrical steel 1・2 [260-267] (9:20-12:15)	Recrystallization, grain growth 1・2 [268-273] (13:30-15:50)
Session Room 11 3F E305	New processing technology and alloy design of Ti (9:20-11:55) [Charge-Free]	Long-standing & new issues in heat resistant steels and alloys (14:00-16:30) [Charge-Free]	The technical session by young engineers of Hot rolling / The technical session 1 by young engineers of Cold rolling [206-213] (9:20-12:20)	The technical session 2 by young engineers of Cold rolling / The technical session by young engineers of coating [214-221] (13:25-16:25)	Clarification of various structural factors in hot-dip galvanized coatings for creating high functionalities (9:20-15:00) [Charge-Free]	
Session Room 12 3F E308	Strength and deformation behavior 1・2 [182-189] (9:20-12:15)	Strength and deformation behavior 3 [190-194] (13:15-14:55)	Strength and deformation behavior 4 / Grain boundary [222-230] (9:20-12:35)	Material prediction and modeling [231-234] (14:00-15:20)	Toughness, ductility and wear / Fatigue [274-282] (9:20-12:35)	-
Session Room 13 3F E311	Surface treatment and corrosion 1 [195-198] (10:30-11:50)	Surface treatment and corrosion 2・3 [199-205] (13:15-15:50)	Heat resistant materials for next generation nuclear reactor 1・2 [235-242] (9:20-12:15)	Heat resistant alloys / Heat resistant steels [243-249] (14:00-16:35)	Stainless steels 1 [283-287] (9:20-11:00)	Stainless steels 2・3 [288-297] (12:20-16:00)
Session Room 14 3F E310	ISIJ and JIMM Joint Sessions Materials science of martensitic and bainitic transformations and its applications 1 [J19-J23] (10:00-11:40)	ISIJ and JIMM Joint Sessions Materials science of martensitic and bainitic transformations and its applications 2・3 [J24-J31] (13:00-16:00)	ISIJ and JIMM Joint Sessions Materials science of martensitic and bainitic transformations and its applications 4・5 [J32-J39] (9:20-12:20)	ISIJ and JIMM Joint Sessions Materials science of martensitic and bainitic transformations and its applications 6・7 [J40-J46] (14:00-16:30)	Diffusion and diffusionless transformation / Microstructural evolution [298-306] (9:20-12:35)	-
Session Room 15 2F E216	-	Crystal structure analysis / Crystal structure analysis/Precipitate and inclusion analysis [307-312] (14:00-16:15)	-	-	-	-
Session Room 16 3F E317	Technology and culture of iron in Hokkaido and Tohoku region (9:20-16:30) [2,000yen, Student 1,000yen]		-	-	-	-
JIMM Room R Engineering Bldg. N 3F N304	-	ISIJ and JIMM Joint Sessions Titanium and its alloys 1・2・3 [J1-J10] (13:20-17:00)	ISIJ and JIMM Joint Sessions Titanium and its alloys 4・5 [J11-J18] (9:00-11:50)	-	-	-
	Banquet (18:30-20:30 at Sapporo Beer Garden Poplar Hall (〒065-0007 Sapporo City Higashi Ward Kita 7 Jo Higashi 9 Chome 2-10) [Pre-registration only]		Poster Session for Students (12:00-14:30 at Foyer, 1F, Global Research Center for Food & Medical Innovation (FMI)) [Charge-Free] ISIJ Beer Party (17:30-19:00 at Cafeteria (Engineering Bldg.)) [1,000yen]			

[ ]: Lecture Number
( ): Lecture Time
: Event to be held during the ISIJ Meeting (Symposium, Poster Session for students)

Program of the 190th ISIJ Meeting (September 17-19, 2025)

Discussion Sessions

High Temperature Processes

Sustainable Systems

Instrumentation, Control and System Engineering

Processing for Quality Products

Novel materials processing for the innovative plate rolling

International Organized Sessions

2025/9/18 Room 10

Lecture No. Title Speaker Page

Exploring the frontiers of next-generation microbiologically influenced corrosion research

10:20-10:40
Opening Address: Y. Miyano [Akita Univ.]

Chair: K. Eguchi [JFE]

10:40-11:40
Int.-1 (Keynote Lecture) Intersection of microbiologically influenced corrosion and corrosion science
Kansai Univ. ○T. Haruna ・・・ 458

11:40-12:20
Int.-2 (Invited Lecture) Microbially influenced corrosion: aspects of varied waters and tribocorrosion
VTT Technical Research Centre of Finland Ltd ○V. Ratia-Hanby・Q. Nguyen・A. Bordbar-Khiabani・M. Nuppunen-Puputti・A. Alimbekova ・・・ 459

Chair: N. Hirai [Suzuka. Tech. Colle.]

14:00-14:40
Int.-3 (Invited Lecture) Microbiologically influenced corrosion failures of mild steel cooling water pipework at the high-rise complex
SRG Global Asset Care ○B. Panchal ・・・ 461

14:40-15:20
Int.-4 Microbiologically-influenced corrosion of stainless steel in fresh dam-water
Kurimoto ○J. Liao ・・・ 465

15:20-16:00
Int.-5 Metagenomic perspectives on the complexity of microbiologically influenced corrosion across environmental and material contexts
JAMSTEC ○S. Wakai ・・・ 466

16:00-16:20
Closing Address: Y. Miyano [Akita Univ.]

Program of the 190th ISIJ Meeting (September 17-19, 2025)

High Temperature Processes

Sustainable Systems

Instrumentation, Control and System Engineering

Processing for Quality Products

Modeling of various phenomena in metal forming and its application

Microstructure and Properties of Materials

Lecture No. / Plenary Session — Title — Speaker — Page

Hydrogen embrittlement 1

Hydrogen embrittlement 2

Hydrogen embrittlement 3

Strength and deformation behavior 1

Strength and deformation behavior 2

Strength and deformation behavior 3

Surface treatment and corrosion 1

Surface treatment and corrosion 2

Surface treatment and corrosion 3

The technical session by young engineers of Hot rolling

The technical session 1 by young engineers of Cold rolling

The technical session 2 by young engineers of Cold rolling

The technical session by young engineers of coating

Strength and deformation behavior 4

Grain boundary

Process Evaluation and Material Characterization

ISIJ and JIMM Joint Sessions

Materials science of martensitic and bainitic transformations and its applications 6

Materials science of martensitic and bainitic transformations and its applications 7