

Agenda for the 11th Korea-Japan Joint Seminar on Space Environment Utilization Research

July 24–25, 2014
The University of Tokyo,
3-8-1 Komaba, Meguro-ku, Tokyo 153-8902, Japan

Seminar Coordination
Prof. Makoto ASASHIMA / Prof. Chi-Hwan LEE

July 24 (Day 1)

The University of Tokyo,
Komaba Faculty House, 1F, Seminar Room

09:30-10:00

■ **Seminar Registration**

10:00-10:10

*Workshop Facilitator: **Dr. Yoshinori FUJIMORI**

■ **Opening and Welcome Remarks**

[Opening and welcoming remarks](#)

**Professor Emeritus Makoto ASASHIMA,
The University of Tokyo**

**Fellow and Director, Research Center for Stem Cell Engineering, National Institute of
Advanced Industrial Science and Technology (AIST)**

10:10-10:40

■ **Seminar Perspectives**

*Session Chair: **Prof. Osamu FUJITA**

10:10-10:25

[ISS "Kibo" utilization research in Japan](#)

Prof. Makoto ASASHIMA, The University of Tokyo and AIST

10:25-10:40

[Perspective of microgravity science research in Korea](#)

Prof. Chi-Hwan LEE, Inha University

10:40-11:25

■ **General**

*Session Chair: **Prof. Inho CHOI**

10:40-10:55

[Recent and ongoing experiments in Kibo](#)

Dr. Muneo TAKAOKI, Miina Science

10:55-11:10

[Updates on microgravity research in KARI](#)

Dr. Joo-Hee LEE, Mr. Youn-Kyu Kim and Dr. Gi-Hyuk Choi, KARI

11:10-11:25

Coffee Break

11:30-12:00

■ **Combustion Science**

*Session Chair: Prof. Masahito WATANABE

11:30-11:45

[Mechanism to control solid material flammability in microgravity](#)

Prof. Osamu FUJITA, Hokkaido University

11:45-12:00

[Heat transfer and attendant burning characteristics of ethanol droplets combustion in microgravity](#)

Prof. Seul-Hyun PARK, Chosun University

12:00-13:10

Lunch Break

13:15-14:15

■ **Material Science**

*Session Chair: Prof. Joonho LEE

13:15-13:30

[Terrestrial experiments for the analysis of the effect of oxygen on the surface tension of liquid alloys](#)

Prof. Joonho LEE, Korea University

13:30-13:45

[Interfacial phenomena and thermophysical properties of molten steel and oxides](#)

Prof. Masahito WATANABE, Gakushuin University

13:45-14:00

[Ba\(Ti_{1-x}Zr_x\)₂O₅ ceramics prepared by aerodynamic levitation](#)

Prof. Won-Seung CHO, Inha University

14:00-14:15

[Effect of magnetic field on the half zone Marangoni convection of low Prandtl number fluid](#)

Assoc.Prof. Toshio TAGAWA, Tokyo Metropolitan University

14:15-15:15

■ **Life Science, Molecular & Biomedical Engineering-1**

*Session Chair: Hideyuki TAKAHASHI

14:15-14:30

[Microgravity-induced signal transduction in skeletal muscle cells](#)

Prof. Takeshi NIKAWA, The University of Tokushima

14:30-14:45

[Heat shock protein: a key regulator of skeletal muscle preservation](#)

Dr. Taesik GWAG and Prof. Inho CHOI, Yonsei University

14:45-15:00

[Simulated microgravity activates AMP dependent kinase](#)

Prof. Junsoo PARK, Yonsei University

15:00-15:15

[Development of orphan drug and sleep-monitoring device](#)

Prof. Yoshihiro URADE, University of Tsukuba

15:15-15:30

Coffee Break

15:35-16:35

■ Life Science, Molecular & Biomedical Engineering-2

*Session Chair: Prof. Junsoo PARK

15:35-15:50

[Bacterial community structure in the International Space Station-“Kibo”](#)

Assis.Prof. Tomoaki ICHIJO, Osaka University

15:50-16:05

[Gravity regulation of auxin transport responsible for plant growth and development](#)

Prof. Hideyuki TAKAHASHI, Tohoku University

16:05-16:20

[Challenges and Opportunities for Bone Health](#)

Prof. Han Sung KIM, Yonsei University

16:20-16:35

[‘Bioscience’ mission initiative with CubeSat-Platform Technology](#)

Prof. Tae-Sung YOON, Korea University of Science & Technology

16:35-16:50

■ [Closing Comments / Summary of Seminar](#)

*Session Chair: Dr. Yoshinori FUJIMORI

Prof. Makoto ASASHIMA, The University of Tokyo and AIST

Prof. Chi-Hwan LEE, Inha University

16:50-17:00

■ [Memorial Address](#)

Dr. Yoshinori FUJIMORI

17:00-17:10

■ Adjourn, [Photo Time](#)

17:10-20:00

■ Workshop Dinner



July 25 (Day 2)

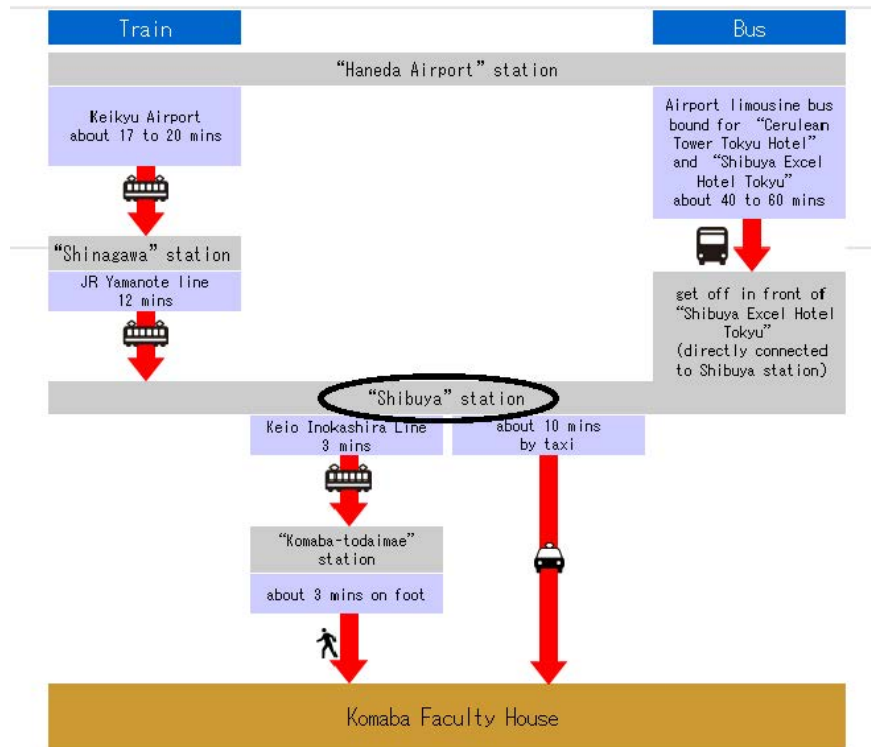
SPACE EXPO 2014

Makuhari Messe - International Exhibition Halls 10-11

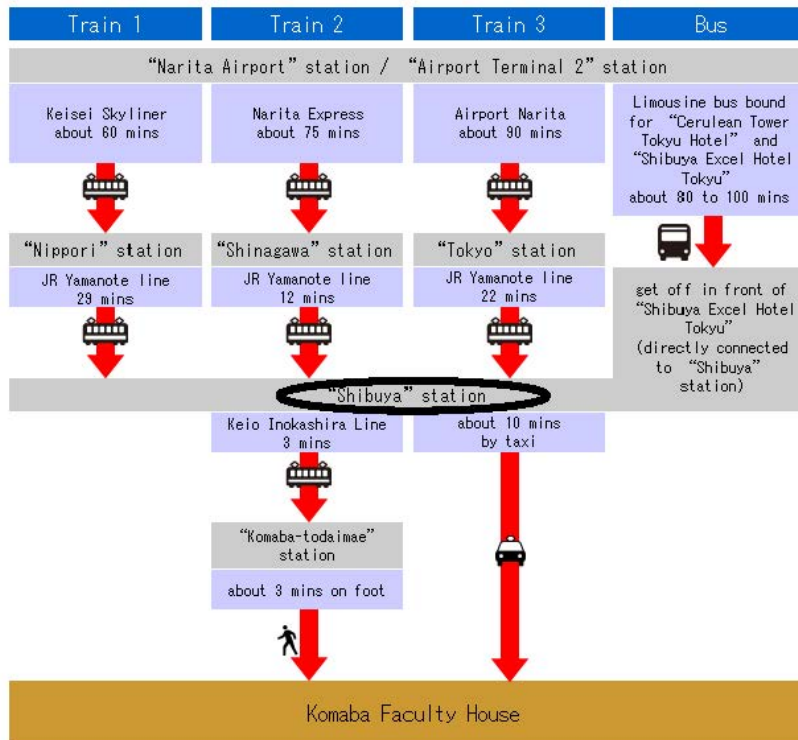
2-1, Nakase, Mihama-ku, Chiba-city

■ Workshop Tour

How to get to the workshop room from "Haneda Airport"

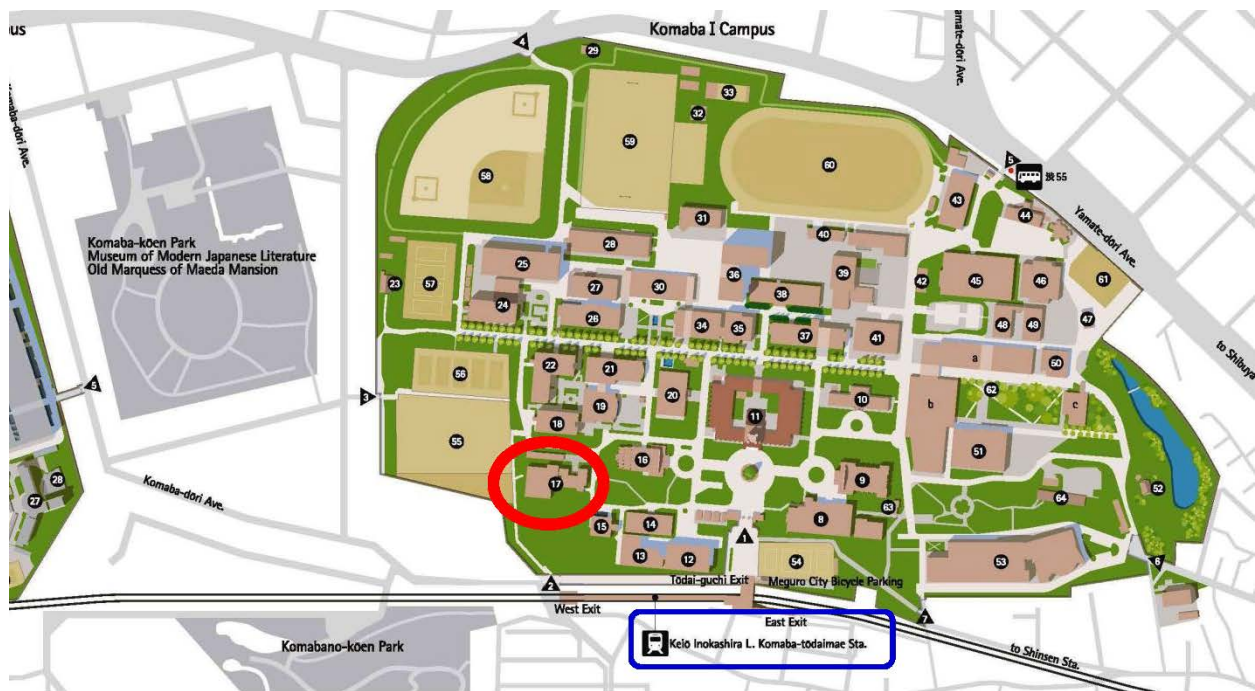


How to get to the workshop room from "Narita Airport"



Komaba Faculty House in Komaba Campus of the University of Tokyo.

http://www.u-tokyo.ac.jp/en/about/documents/Komaba_CampusMap_E.pdf



Getting to the Komaba I Campus

- Shibuya Station (JR Yamanote Line, other lines)
<Train>Inokashira Line for Kichijoji
→ get off at Komaba-todaimae Station.
- Shimo-kitazawa Station (Odakyu Line) or
Meidaimae Station (Inokashira Line)
<Train>Inokashira Line for Shibuya
→ get off at Komaba-todaimae Station.

Getting to the Komaba II Campus

See the homepage (<http://www.iis.u-tokyo.ac.jp>) for more details.

- Yoyogi-uehara Station (Odakyu Line, Subway Chiyoda Line)
12 minutes' walk.
- Higashi-kitazawa Station (Odakyu Line) 7 minutes' walk.
- Komaba-todaimae Station West Exit (Inokashira Line)
10 minutes' walk.
- Ikenoue Station (Inokashira Line) 10 minutes' walk.

Komaba I Campus

▲ Main Gate	17 Komaba Faculty House	25 Bldg.18	24 Volleyball Courts
▲ Sakashita Gate	18 Bldg.2	27 Bldg.8	25 Athletic Field 2
▲ West Gate	19 Bldg.12	Disability Services Office	26 Tennis Courts
▲ North Gate	20 Bldg.11	29 Bldg.9	27 Tennis Courts
▲ Rear Gate	21 Bldg.13	29 21 Komaba Center for Educational Excellence	28 Baseball Field
▲ Suji Gate	22 Bldg.14	40 Extra Curricular Activities Bldg.	29 Rugby Field
▲ Bairin Gate	23 Zanmar-do	41 Bldg.105	30 Athletic Field 1
⑧ Administration Office	24 Bldg.15	42 Locker Rooms	31 Tennis Courts
⑨ Komaba International Office	25 Bldg.16	43 Training Gym	32 Komaba Communications Plaza
⑩ Komaba Museum	26 Bldg.6	44 Sports Science Bldg.	a. KCP North Bldg.
10 Bldg.101	27 Bldg.17	45 Gym 2	b. KCP South Bldg.
11 Bldg.1	28 Bldg.3	46 Gym 1	c. KCP Japanese-style House
⑪ Komaba Student Counselling Center	29 Greenhouse	47 Day Care Center	33 First-Year Activity Center
Academic Guidance Center	30 Bldg.5	48 Campus Plaza Bldg. A	34 Math Sci GCOE Annex
12 Information Education Bldg. A	31 Advanced Research Laboratory	49 Campus Plaza Bldg. B	
13 Information Education Bldg. B	32 Gym	50 Multipurpose Hall	
14 Komaba Health Service Center	33 Kyudo Range	51 Komaba Library	
15 Bldg.102	34 Bldg.7	52 Hakuinsha Pavilion	
16 Lecture Theater	35 Bldg.10	53 Graduate School of Mathematical Sciences Bldg.	