55th Virtual UNISEC-Global Meeting April 19, 2025

Innovative Space Endeavors by Students in Japan

Opening Remarks

Hiraku Sakamoto, Ph.D.

Chairperson of UNISEC-Japan (since Oct. 2024-)



New chairperson of UNISEC Hiraku Sakamoto, Ph.D.





2004, **Ph.D.** in Aerospace Eng.

University of Colorado at Boulder, USA

2004-2005, **Postdoc**, CU

2005-2006, Postdoc, MIT

2007-2008, Postdoc, Nihon Univ.

2008-2024, Assistant/Associate Professor, Dept.

Mechanical Engineering, Tokyo Institute of

Technology (Tokyo Tech), Japan

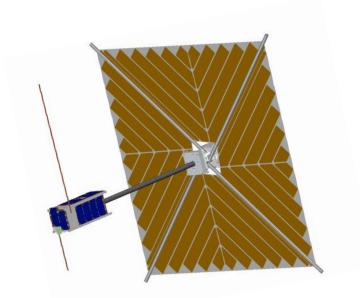
2019-2020, Visiting scholar, Aalto University, Finland

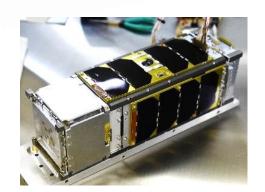
2024-, Professor, Mechanical Engineering,

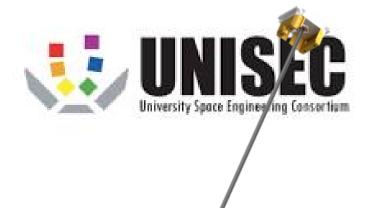
Institute of Science Tokyo (formerly Tokyo Tech)

New chairperson of UNISEC Hiraku Sakamoto, Ph.D.

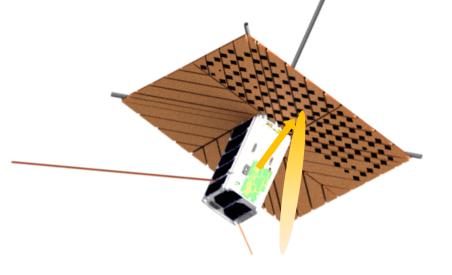
OrigamiSat-1 (2019)







OrigamiSat-2 (2025)



University Space Engineering Consortium (UNISEC-Japan) Brief History



- 1999: 1st ARLISS (CanSat launch campaign in USA)
- June 30, 2003: CubeSat launch by Univ. Tokyo and Tokyo Tech
- UNISEC was established in 2002, became NPO in 2003.
- 2013: UNISEC-Global started.



UNISEC-Japan current activities



UNISEC Student Organization (UNISON)

- Rover competition
- CanSat working group ARLISS
- Satellite working group
- Rocket working group
- UNISEC Academy: online lecture series
 - KiboCUBE Academy (in English): https://ma.unisec.jp/ma/12-01-kibocube/
- HEPTA-Sat training
- Small Satellite Mission Assurance activities
 - Website: https://ma.unisec.jp/ (only in Japanese)
- UNISEC Job Fair
- ... others

Message from new chairperson of UNISEC Hiraku Sakamoto, Ph.D.





https://unisec.jp/unisecen/chairpersonen

UNISEC has become a community of space pioneers determined to "integrate individual skills and passions to create a new future together." In this turbulent era, I believe we already embody Dr. Alan Kay's words: "The best way to predict the future is to create it."

With this in mind, I would like to focus on three key perspectives that will help enhance and advance our activities as a community:

1. Improving the Reliability of Space Systems through Practical System Integration

We must focus on building space systems, integrating them into working systems, and ensuring they function reliably. "Only when you did your best to succeed, you could learn something even if you failed." (Guiding Principles for UNISEC-Global, Article 3)

2. Developing Space Missions into Successive Programs

We will define satellite and rocket development as continuous programs rather than isolated events. We must also ensure that the outcomes of our missions are elevated to academic and universal values.

3. Contributing to Human Society: Creating New Space-Era Values and Ethics

We must avoid limiting our activities to serving only a few and instead focus on embracing diversity. Our space missions aim to contribute to the sustainability of the world and the well-being of all people, leaving no one behind. Let us discuss and share the values and ethics of the new space era.

The 55th Virtual UNISEC-Global Meeting Timetable

Theme: Innovative Space Endeavors by Students in Japan

Date: April 19, 2025 (Saturday)

Time: 22:00-24:00 (Japan standard time, GMT+9)

Please check your time.(https://www.worldtimebuddy.com/)

HOST: UNISEC-Japan

Moderator: George Maeda, ArkEdge Space

Subject to change. As of April 1, 2025

Japan Time	Title of presentation	Presenter
22:00 - 22:10	Opening Remarks	Hiraku Sakamoto, Institute of Science Tokyo
22:10 - 22:30	Overview of Tottori Rover Challenge	Sota Kaneko , The Graduate University for Advanced Studies, SOKENDAI
22:30 - 22:50	Challenge of ARES Project	Danishi Ai, Tohoku University
22:50 - 22:55	Group Photo session	
22:55 - 23:15	Introduction to ARLISS (A Rocket Launch for International Student Satellites)	Kota Matsuhashi, Tohoku University
23:15 - 23:35	Activities and Future Plans for UNISON Satellite Working Group	Nagisa Sone, Nihon University
23:35 - 24:00	Announcement and Acknowledgement	Haruka Yasuda, UNISEC-Global and those who have announcements