

FROM CONCEPT TO COORDINATION: TOWARD CACE, AN ALLIANCE OF SPACE RESOURCES CENTERS

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CSRI

Japan's first research center dedicated to space resources



CSRI

Center for Space Resources and Innovation

University of Tokyo

Established October 2025

The newest node in CACE — and the host of SRI-3

STRUCTURE

University-wide research organization spanning Engineering, Science, Humanities & Social Sciences, and Frontier Sciences.

FOUNDATIONAL SUPPORT

JAXA Space Strategy Fund — **Research hub for space resources and lunar surface development.**

*Up to 2 billion-yen scale • 2025-2032**

ACTIVE RESEARCH

Ongoing joint research — science instruments for various space missions

5+ universities, 10+ commercial partners

* Subject to future stage-gate evaluation

THE PROBLEM

Agencies scale up. Researchers stay siloed.

Space-resource science is a global effort run mostly through national channels. The connective tissue between research centers has been informal and personal — it does not scale.

National programs

Artemis, ISRU roadmaps, agency missions — well funded, formally coordinated.

HEAVY

The missing middle

No light, standing layer for centers to align agendas, share people, and speak with one voice.

ABSENT

Individual labs & PIs

World-class work, connected by ad-hoc personal ties — fragile and hard to scale.

FRAGMENTED



CACE fills the missing middle.

A standing, lightweight layer that connects centers without replacing what already works.

DEFINITION

CACE — a coordinating alliance, lightweight by design

WHAT IT IS



A standing alliance of academic centers

A durable framework, not a one-off MOU.



A coordination layer

Aligns agendas, events, and student mobility across members.



A single front door for partners

Agencies and industry reach four centers through one contact.

WHAT IT IS NOT



Not a new consortium

No heavyweight governance, no secretariat to feed.



Not a funding vehicle

It does not raise or distribute money.



Not a hierarchy

No member sits above another; centers stay autonomous.



Lightweight is the design goal — low overhead is what lets four busy centers actually sustain it.

THE ALLIANCE

CACE

*A lightweight academic alliance
for space resources*

Four centers. Spread across the globe.



CSR

Colorado School of Mines
Golden, USA

ATCSR

Andy Thomas Centre, U.
Adelaide
Adelaide, Australia

CSRI

The University of Tokyo
Tokyo, Japan

ESRIC

European Space Resources
Innov. Centre
Luxembourg

From a shared idea to a standing alliance

CACE did not appear overnight — it grew out of conversations the four centers were already having.



SRI-II

Nov 2025 · UTokyo

Center directors meet; a “global alliance” is put on the table.

SRR XXVI

Jun 2026 · Golden

CACE introduced to the wider community — today.

SRI-III

Nov 2026 · UTokyo

YOU ARE HERE



Space Resources Week

May 2026 · Luxembourg

CACE is formally launched by the four founding centers.

Space Resources Fundamentals

Oct 2026 · Adelaide

Instruments, People, Missions that cross borders

Aureon Space Systems
Joined Cohort 6

RANCH × CSR

UTokyo × Colorado expertise

CSRI
IITokyo · JP

• ESRIC →

(JSPS fellow; LIBS)

residence

MMX (Phobos Sample
Return mission by JAXA)

Instruments

istry match

ESRIC
Lux

TSUKIMI
Lunar mission

ispace
M1 and M2

CSR
2025)

Lunar Terahertz Surveyor for
Kilometer-scale Mapping

TSUKIMI

ATCSR
Adelaide · AU

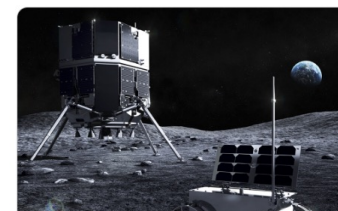
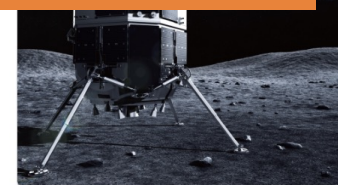
M1
Lunar Landing
Mission 1
2022

The first mission was planned to perform a soft landing on the Moon.

HAKUTO-R

M2
Lunar Surface
Exploration
Mission 2
2025

The second mission successfully completed deep space maneuvers and entered lunar orbit before attempting to perform a soft landing and deploy a rover for



Space Resources Initiative III



<https://csri.u-tokyo.ac.jp/>

Save the date

26 – 27

NOVEMBER 2026

University of Tokyo · Hongo Campus

HOSTED BY

University of Tokyo (CSRI)

IN COORDINATION WITH

CSR — Colorado School of Mines

ATCSR — Adelaide University

ESRIC, Luxembourg

TENTATIVE THEMES

International instrument collaboration ·

Early-career session · Policy & regulatory
dialogue

Open to participation from all SRR attendees.

Join us in shaping CACE

The four centers welcome:

- **Feedback** from this community — what would make CACE most useful?
- **Conversations** during SRR with any of the four authors.
- **Connections** with other initiatives that share these goals.

Thank you — see you at

SRF, Adelaide, October 2026

SRI-3, Tokyo, November 2026