

Kana Ishimaru

Lunar and Planetary Laboratory, the University of Arizona. 1629 E University Blvd., Tucson AZ 85721.
kana@arizona.edu

EDUCATION

Ph.D. candidate at the Lunar and Planetary Laboratory, the University of Arizona	Present
M.S. in Planetary Science, the University of Arizona	2022
B.S. in Earth and Planetary Environmental Science, the University of Tokyo	2019

RESEARCH INTERESTS

I'm interested in understanding the history and evolution of carbonaceous asteroids through spacecraft remote sensing and laboratory work to investigate how those primitive asteroids could have contributed to the origin of life on Earth. My current project focuses on comparing morphology of boulders on asteroid Bennu and its returned sample obtained by NASA's OSIRIS-REx mission.

PUBLICATIONS

-
- Lauretta, D. S., Connolly, H. C., ... **Ishimaru, K.**, ... & the OSIRIS-REx Sample Analysis Team. (2024). Asteroid (101955) Bennu in the Laboratory: Properties of the Sample Collected by OSIRIS-REx. Accepted to *Meteoritics & Planetary Science*.
- Ishimaru, K.**, & Lauretta, D. S. (2024). Analysis of layered boulders on asteroid (101955) Bennu and their implications for fluid flow on the parent body. *Meteoritics & Planetary Science*, 59(1), 193-210.
- Kaplan, H. H., Lauretta, D. S., ... **Ishimaru, K.**, ... & Enos, H. L. (2020). Bright carbonate veins on asteroid (101955) Bennu: Implications for aqueous alteration history. *Science*, 370(6517), eabc3557.
- Tasker, E. J., **Ishimaru, K.**, Guttenberg, N., & Foriel, J. (2020). Earth-Like: an education & outreach tool for exploring the diversity of planets like our own. *International Journal of Astrobiology*, 19(3), 264-275.

RESEARCH and PROFESSIONAL EXPERIENCE

Teaching Assistant The University of Arizona	August – December 2022
Teaching Assistant The University of Tokyo	April – July 2019
Satellite Design Contest	April – July 2019
Research Internship The University of Arizona	May – August 2018
Technical Trainee JAXA	August 2017 – March 2018

AWARDS and GRANTS

Graduate Teaching Assistant Excellence Award. Lunar and Planetary Laboratory	2023
NASA US Students Award. The Meteoritical Society	2021 – 2023
Galileo Circle Scholarship. The University of Arizona	2021
Career Development Registration Award. Lunar and Planetary Institute	2021
Japan Space Forum Award. Satellite Design Contest	2019
O. Richard Norton Award. The Meteoritical Society	2019
Study and Visit Abroad Program 2018. The University of Tokyo	2018

SKILLS

Research instruments: SEM, EMP, FIB, μ -FTIR, FTIR, XRD, EBSD, optical microscope, μ -XCT.
Programming: Python, MATLAB, Fortran, R, DaVinci, HTML, CSS, Bottle, pythonanywhere, C++.
Applications: Small Body Mapping Tool, USGS ISIS3, SAOImage DS9, Meshlab, Cloud Compare, ArcMap.
Languages: Japanese – native, English – proficient.

AFFILIATIONS

The Meteoritical Society	2019, 2021 - Present
Students for the Exploration and Development of Space (SEDS) the University of Tokyo/ SEDS Japan	
• President of SEDS UTokyo/ Japan in 2018.	2017 – 2019