

# ONE WOMAN LAUNCHES HERSELF INTO SPACE EXPLORATION IN THE NEW ERA

*Sending humans to the moon again—worldwide momentum is currently building toward that goal, which will usher in a new era of aerospace development. Here, KONAKA Mina, a researcher at the Paris Observatory who is setting her goals into space, speaks about the importance of space exploration and what drives her toward her dream.*



KONAKA Mina has worked at the Japan Aerospace Exploration Agency (JAXA) since 2020, where she worked on satellite development and other projects. She says that although Japan is prone to natural disasters, she feels well-protected by aerospace technologies that monitor changes on Earth. “Space may seem very far away, but aerospace technology actually supports our lives in many ways.” PICTURE PRESS/AFLO

KONAKA Mina’s aspiration to explore space was triggered when she was 11 years old. She happened to notice a public campaign to suggest a name for a new lunar explorer that Japan was launching. Almost immediately, she submitted the name “Kaguya,” after a famous Japanese fairytale princess from the moon. “Six months later, having completely forgotten about it, I received a commemorative badge from the Japan Aerospace Exploration Agency (JAXA) and a certificate stating that my suggestion had been chosen,” says Konaka, currently a 26-year-old researcher at the Paris Observatory, a French research institute. “It made me aware, for the first time, of the existence of a national space agency and professions related to outer space.”

Since that time, she would secretly feel proud whenever she saw news reports regarding Kaguya, and began to wish that she could go to the moon as well. This feeling grew ever stronger, and starting in her middle school years or thereabouts, she began to

immerse herself in English, math and science studies, with the goal of becoming an astronaut. When she was 15 and in the United States to study English, a friend’s parent, who was an engineer at National Aeronautics and Space Administration (NASA)



At Tohoku University’s Graduate School, Konaka (center) immersed herself in research on lunar exploration rovers and small satellites under Professor YOSHIDA Kazuya, who is involved in a number of international space projects. SPACE ROBOTICS LABORATORY, DEPARTMENT OF AEROSPACE ENGINEERING, TOHOKU UNIVERSITY

invited her to the Goddard Space Flight Center. “After the tour, the engineer kindly took the time to give me one-on-one answers to my many questions. Until then, NASA had felt like something out of a movie. It was a big realization for me to learn that ordinary people like me were working there.”

After graduating from the Department of Aerospace Engineering at the Tohoku University Graduate School of Engineering, Konaka worked as a satellite system engineer at JAXA. Wishing to hone her expertise by cultivating knowledge and perspectives not just in engineering, but in astronomy as well, she has been studying since 2021 for her doctorate while working at the Paris Observatory. “For me, a job related to going into space combines seven professions: engineer, scientist, diplomat, doctor, educator, pilot, and also artist who conveys the appeal of outer space. In that sense, it brings together all kinds of knowledge and experiences,” says Konaka.

Although the number of women in the aerospace industry is still quite limited, she has never wavered from her path and keeps surging forward. That owes much to the role models she encountered while studying for her master’s degree. “When I participated in a program in the Netherlands, which was organized by the International Space University, I met many women whom I would like to emulate. While my career choice might seem unique from the outside, those inspiring role models really did help me get through.” Wishing to do her part in supporting younger generations, Konaka participated in 2021 as a mentor in Space4Women, a project sponsored by the United Nations to promote the empowerment of young women. For one year, she gave study and career advice to female students worldwide who aspired to

explore space. Even now, after the end of the project, she stays in contact with them.

Konaka says that she will continue to explore the universe in various ways. With the recent surge in momentum for lunar exploration, and the emergence of ambitious projects around the world, both public and private, the opportunities awaiting her are sure to expand. In the course of gaining experience in the aerospace industry, which has always been her dream, her thoughts toward space have also changed. “I no longer want to go to the moon simply to satisfy my own interests or aspirations. It is a mission more important than such personal concerns,” says Konaka. “Unlike the Apollo mission 50 years ago, lunar explorations now mean an ‘expansion,’ since they assume that some people aspire to inhabit the moon and vicinity in the future. This is a challenge that has never been taken up in human history. As a person involved in aerospace development, and as a representative of Japan, I would like to contribute to such an endeavor.”



Konaka stands in front of the “Great Dome” at the Paris Observatory, where she currently works as a researcher. “Although astronomy—the study of celestial bodies and the universe itself—differs significantly from engineering, which is mainly concerned with technological development, the two fields are deeply interrelated. I wish to develop perspectives in both those fields,” she says, adding, “In France, many people including those working in the aerospace industry value their private lives, but work hard when they are on the job. I want to learn about such an outlook on life as well.”