UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS



Photo credits

Page 1: UNOOSA Director Simonetta Di Pippo/UNIS

Page 2: NASA astronauts Jessica Meir (left) and Christina Koch (right) put on their spacesuits as they prepare to leave the International Space Station for the first-ever all-female spacewalk in October 2019/NASA

Page 3: The ESA-RAL Advanced Manufacturing Laboratory on Harwell Campus, United Kingdom, assesses new material processes, joining techniques and 3D printing technologies for application in space/ESA

Page 4: NASA astronaut Karen Nyberg/NASA

Page 5: (Top) UNICEF/UN0145554/Karin Schermbrucker (Bottom) Marta Bohn-Meyer, formerly chief engineer at the NASA Armstrong Flight Research Center in Edwards, California, and an aerobatic pilot/NASA

Page 6: CMSA astronaut Wang Yaping in space in the Tiangong-1 Spacelab as crew of the Shenzhou-10 space mission/CMSA

Page 7: Sekigawa Chisato, JAXA Flight Director, Human Spaceflight Technology Directorate, JAXA/JAXA

Page 8: Inbal Kreiss, Head of Innovation, Systems, Missiles and Space Division, Israel Aerospace Industries Ltd; Chairperson RAKIA – scientific and technological mission





"As a woman astrophysicist who built a path in the space sector, I know how having mentors and inspirational figures can make a big difference. The Space4Women project has brought together a network of inspirational space leaders worldwide, committed to making the sector more inclusive by supporting young people in pursuing their ambitions in the space industry. At UNOOSA, we are particularly proud of this project as it provides resources and inspiration to both young women and men, in order to envision and build a different, more inclusive space sector and society for the future."

SIMONETTA DI PIPPO, DIRECTOR, UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS

Why do we need Space4Women?

Women represent only 35 per cent of all students enrolled in science, technology, engineering and mathematics (STEM)-related higher education, and only 20–22 per cent of the workforce in the space industry. This disparity is common to most roles and levels within STEM fields, including space, and becomes particularly dire at higher levels and in leadership positions.

Although women are increasingly pursuing careers outside traditional gender expectations, STEM fields, which are known for advancing human ingenuity, potential and living standards, are not fully leveraging the talent of women and girls.

Several factors contribute to the low participation rates of women and girls in STEM education and careers. Many of these can be overcome by promoting gender equality and women's empowerment in these fields.



What is Space4Women?

Space4Women is a project of the United Nations Office for Outer Space Affairs (UNOOSA), established to facilitate access to space and STEM education and careers for women and girls around the world. At the same time, the project aims to ensure that women can take equal advantage of the benefits of space exploration, science and technology. The project directly contributes to two of the United Nations Sustainable Development Goals, namely Goal 4: <u>Quality Education</u> and 5: <u>Gender Equality</u>.

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How does it make a difference?

Role models are important for encouraging women and girls to take up opportunities in sectors that are traditionally male-dominated, such as space. Women and girls need the support of industry leaders – both men and women – to break the barriers that prevent them from pursuing their dreams.

The Space4Women Network brings together female role models and mentors to inspire, guide, encourage and support women and girls in the pursuit of further education in STEM fields and careers in the space sector.

The ever growing number of mentors represent a range of professions within the space sector and STEM fields and come from a variety of countries and backgrounds. Young women and men can connect with these mentors to seek support and guidance for their education and career. At the same time, the network brings together current space industry leaders to attain the common goal of promoting gender equality in the sector and helps them raise awareness about the issue.

The Space4Women website also provides a platform for discussion on gender equality in space and STEM, as well as showcasing the valuable contributions women have so far made to these sectors and their inspirational stories. It raises awareness and hosts events and conferences, such as the Space4Women Expert meeting, which facilitate multilateral and global dialogue on gender equality in the space sector.

Space4Women action areas include:

- Communicating opportunities in STEM education and facilitating access to space education and careers
- Helping institutions and governments raise awareness on "Space for Women " and "Women for Space" through policyrelevant advice, research and data
- Facilitating capacity-building and training for women on access to, and use of space-technology to generate skills, and foster knowledge
- Offering a network of mentors, leaders in the space sector, whom young women and men can connect with for guidance and advice
- Creating a Space4Women Network of leaders advocating for gender equality in space and STEM, and
- Empowering young women and girls to be both the beneficiary of, and active and integral contributors to space solutions





How can you contribute?

The Space4Women project needs your help: we are always looking for inspiring stories of women in the space and STEM fields. Send us yours via <u>space4women@un.org</u>

If you work in these sectors and would like to help young people break glass ceilings, you can <u>apply</u> to become a Space4Women mentor.

If you want to learn and get inspired by women who have already made it in the STEM field, <u>apply</u> to become a mentee.

We are also looking for <u>partners and sponsors</u> to help us implement Space4Women activities and promote gender equality in space and STEM all over the world.

MENTORS

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"UNOOSA's Space4Women platform has the vital role of forging and maintaining connections among knowledgeable and experienced female professionals in the space sector worldwide, who can share their expertise and act as advocates for girls and young women pursuing educational goals, young women beginning their careers, and women of all ages working to expand their knowledge and skills in the STEM/STEAM areas."

JAN MILLSAPPS

Writer/ Director/ Educator and Professor Emeritus of Cinema, San Francisco State University

"I believe that mentoring and coaching are critical to inspire and empower talent and to create a bigger pipeline ensuring the success of our industry. Through Space4Women we have a unique opportunity to reach further, to set the agenda and to change structures, and not least to capture the hearts and minds of women across the world, creating an unstoppable positive force as the sky is no longer the limit."

KARIN NILSDOTTER

CEO, Spaceport Sweden; Tech Woman of the Year; Founder, Women in Space; Member of the Virgin Galactic Future Astronaut Program

"The fact that UNOOSA has a platform where mentors can work on common goals seems to me a great step towards achieving gender equality in the space sector. There is certainly a lot to do but collaborating together from different aspects and places in the world, helps us reach more people and have a broader notion of how to achieve our goals. Thanks to the team and to UNOOSA Director, Simonetta Di Pippo for making it happen and for being a role model for all of us."

VERANIA ECHAIDE NAVARRO

Interinstitutional Specialist, Mexican Space Agency

"The Space4Women network has given me the opportunity to connect with like-minded women from all over the world, many of whom I would have never known about. The initiative is so important in raising the profile of professional women within the space industry and highlighting them as role models to the emerging generations of young women, which is crucial as it waves a big red flag at them saying – yes, dream big, you can do it, it is possible, there is a place for you in the future of space exploration!"

THAIS RUSSOMANO

Space Physiology and Aerospace Medicine; Founder and CEO of InnovaSpace Ltd, United Kingdom "I've met so many wonderful people, extending the network of women I know and idolize. It's really inspiring to see women in places I one day hope to be. I've also grown as a person and as a learner, and have begun to expand my interests as I realize that all fields relate to and can be applied to so many others."

LYNN WAHAB

Lebanese computer science and psychology student at the American University of Beirut

Space4Women offered the opportunity for our space education community to raise awareness about the missing representation of girls and women in space."

ETTY DOLEV Community director at Horizon TLV, Is

"The idea of living in a world where there is no need to fight for gender equality is incredible, however, it is still too far from reality. We should not wait for this change to happen. We need to be the change! The Space4Women programme has given me the honour of being part of this change and, by helping teachers, inspiring a future generation of women in STEM!"

PATRÍCIA CRUZ

Astrophysicist, Spain

"The experience of participating in the Space4Women programme was refreshing to me. Working for girls and women in science has been empowering, encouraging me to persist in a work environment that is sometimes so hostile and not inclusive."

CLÁUDIA NICOLI

Space physicist, Brazil

MENTEES



THE UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS (UNOOSA)

IS RESPONSIBLE FOR ADVANCING INTERNATIONAL COOPERATION IN THE PEACEFUL USES OF OUTER SPACE AND HELPS ALL COUNTRIES USE SPACE SCIENCE AND TECHNOLOGY TO ACHIEVE SUSTAINABLE DEVELOPMENT.

BRINGING THE BENEFITS OF SPACE TO HUMANKIND