

Did you know that it will take 135 years to achieve gender equality on Earth according to current projections? [1] That was just one of the opening questions posed to the 80 women (and men) attending the United Nations Office for Outer Space Affairs (UNOOSA) Space4Women event in Daejeon (South Korea); an event designed to discuss how women and girls can increase their access to the space industry.

Over the 4 day event, four topics were highlighted including:

1. Train-the-trainers: Suggesting ways in which we can support advocates, mentors and teachers to make STEM education accessible and inspiring.
2. Women space entrepreneurs: Comparing the opportunities and challenges of promoting female entrepreneurship in space.
3. Measuring the participation of women in the space sector.
4. Understanding the impact of gender empowerment activities in the space sector.

My focus was on topic 3; where we discussed ideas and strategies for conducting measurements on the existing participation of women within the space industry, as a team. We began by identifying key trends and the statistics behind women employed in various space organisations. To this extent, we were fortunate that many studies are available, and a number of organisations have already run surveys to measure the participation of women in the space sector. With the facts and figures in our hands, we were able to summarise the findings, outcomes of the discussions and make key recommendations related to future studies on the end of day 3, including:

1. To address gaps and challenges:
 - Take a phased approach
 - Prioritise of gap and challenges
 - Standardise data collection and create guidelines
 - Involve professionals to tackle challenges of terminology and unconscious bias
2. Measures/actions to be taken by Governments:
 - Measuring share of women by groups including leadership positions
 - Creation of data sharing platform
 - Involvement of Non-Government Organisations
 - Introduce policies
3. Measures/actions to be taken by private sector/civil society:
 - Private sector: demonstration of commitment, implication into communities
 - Academia: scientific publishing targeting women audience
 - Civil society to seek minimise gender stereotypes, and raise general awareness

Whilst the event has resulted in more research areas which need to be addressed and lots of recommendations for the UN; the immediate benefit was the shared perspectives and feeling created within the cohort of participants which has motivated each of us to take steps in our own professional and personal lives to improve access to space for women.

During the Space4Women event, we were each inspired by the stories and perspectives of:

- Dr. Soyeon Yi, the first Korean astronaut who spoke about her journey to space and how she feels we can improve gender diversity. Dr. Soyeon shared some very personal

stories about the challenges and obstacles she faced through her journey, including being doubted because of her gender.

- Dr. Jung Sun Kim, Ph.D. the president of the International Network of Women Engineers & Scientists (INWES), who highlighted how organisations like INWES can bring together women's voices to collectively make a change.

Whilst in South Korea, I also participated in the Space Generation Advisory Council (SGAC) hackathon; a comparatively more intimate event where we were tasked to come up with a business idea that used space technology or know how to improve gender equality on Earth. I joined a team alongside 3 other international participants, from France, South Korea and India. At the end of the two days I pitched the idea on behalf of my team in front of a panel of judges, one of which was the first Korean astronaut Dr. Seyeon Yi.

I was also privileged enough to get a tour of the Korean Aerospace Research Institute (KARI) and the Korean Astronomy and Science Institute (KASI). These were both very interesting visits and I learnt about South Korea's space situational awareness centre, as well as the solar weather monitoring centre.

A common discussion point during these events was how we can get more men involved as sustainable gender equality can only be achieved if we work together.

Overall I benefited from meeting participants from around the world who provided me with new perspectives on issues which I was not aware of. Through both events I left with the experience of presenting and communicating, an increased global network and tangible actions to continue to contribute to improving gender equality. I thank the IET for the travel scholarship as it has greatly impacted me positively and I am looking forward to continuing to raise awareness of engineering and technology to the younger generation.

For now there's lots of actions to implement before the next event in Canada in 2023!

[1] - Global Gender Gap Report 2021, World Economic Forum, 30 March 2021

<https://www.weforum.org/reports/global-gender-gap-report-2021>



