IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

Enabling the Future - Developing the Space Workforce (5)

Author: Ms. Safa Siddiqui Bruce Power, Canada

Dr. Helena Chapman
Earth Science Division, NASA Goddard Space Flight Center, United States
Dr. Erin Tranfield
Instituto Gulbenkian de Ciência, Portugal
Dr. Farhan M. Asrar
University of Toronto, Canada
Dr. Angie Bukley
The Aerospace Corporation, United States

EMPOWERING WOMEN IN SPACE, NUCLEAR, AND STEM DISCIPLINES

Abstract

Women have been pioneers in every field imaginable and there are no exceptions when it comes to the Nuclear and Space Sectors. Women making groundbreaking discoveries date back to Marie Curie and her pioneering research in radioactivity. There are many women who have achieved outstanding milestones which have supported the growth of women in Science, Technology, Engineering, and Math (STEM). Strong women like; Katherine Johnson significantly contributed to NASA's first human space flights, Valentina Tereshkov, the first woman in space, Sally Ride, the first woman in space, So Yeon Yi was the Republic of Korea's first person in space, Roberta Bondar as the first neurologist in space, and Mae Jemison, the first Black physician NASA astronaut in space. This is to name just a few, and certainly not the last.

Despite these significant achievements, the gender gap exists in the labor market, where women hold fewer leadership positions and are underrepresented in research and STEM fields. As a call to action, global leaders should prioritize support for Sustainable Development Goal 4 (quality education) to empower the next generation of female scientists and engineers in their scientific inquiry and discovery.

Women continue to show growth and versatility in the fields of STEM, however, supporting women in the fields of Science, Technology, Engineering, and Math (STEM) has been a challenge. We explore and investigate a number of areas that could assist women to explore STEM careers and provide recommendations such as advocating for focused mentorship of women in STEM, greater engagements and support, among other recommendations that will continue to help engage, encourage, and empower women to take on roles in the Space and Nuclear Sector.