



Heisook Lee

Principal Research Fellow, Center for Gendered Innovation in Science & Technology Research (GISTeR); WIE-Up Professor, Handong University, Pohang, Korea; Professor Emeritus, Ewha Womans University, Seoul, Korea.

Having served as the founding president of the Center for WISET (Women in Science, Engineering and Technology), Professor Heisook Lee now focuses on Gendered Innovations research in STEM fields at GISTeR. Professor Lee was a co-organizer of the Gender Summit 6 Asia-Pacific in 2015. Serving as the founding director of the Women in Science and Engineering (WISE) programme from 2001 to 2010 and was president of the Korea Federation of Women Scientists associations (KOFWST) from 2006 to 2007, Professor Lee has been an advocate of gender equality in STEM. She was formerly a member of the Presidential Advisory Council on Science & Technology and National Science & Technology Commission.

She received her BS, MSc, and PhD degrees in Mathematics from Ewha Womans University, Korea, and the University of British Columbia and Queen's University, Canada, in 1971, 1974 and 1978 respectively. As a Professor of Mathematics at Ewha Womans University in Seoul Korea, Prof. Lee was Dean of the College of Natural Sciences, and Dean of Research affairs between 1997 and 2001. She also served as Dean of the Graduate School from 2006 to 2008. She served as chief Editor of Communications of the Korean Mathematical Society (KMS) from 1986 to 1988 and as Chief Editor of the Journal of KMS from 1994 to 1996.

Gender inclusive innovation for the 4th industrial revolution

The purpose of this presentation is to show how and why scientific understanding of sex and gender differences between men and women can enhance the successful innovation through science and technology. Historically gender issues in STEM have focused on fixing number to promote gender equality in career progression for scientists and engineers and fixing institutions to change perception, attitude, behavior, social norms towards women in STEM society.

However it often overlooked that sex and gender matter in research contents and services developed mainly by men and tested on men not recognizing that:

- The quality of knowledge and contents created may not be the same effect for women as for men.
- The effectiveness of innovation process is dependent on who the actors and decision makers are.
- Trained women are not sufficiently included in solving technological problems.
- The need and preferences of women may be different to those of men.

Our main concern will be about scientific, technological and organizational relationships. Discussions will be that:

- What the threats and opportunities of women in 4th industrial revolution are.
- Why integrating sex and gender analysis into research and development is necessary by showing scientific evidences.
- The concept of gender inclusive innovation will be introduced using three gender dimensions: participation, outcomes and cross cutting impacts.