

The stagnation of low percentage of female scientists in Japan and initiatives for improvement

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The percentage value of female researchers in Japan is 18.5% (F vs. M: 0.1828 million vs. 0.8065 million) in the 2023 survey. This value has improved compared to that of 9 years ago (14.7%) but is the lowest among OECD countries (av. 36% except Japan in 2021 data).

The percentage of female members of JpGU remains around 20%, which is higher than the average in Japan, but still low compared to the percentage of female geoscientists in EGU and AGU. The Geological Society of Japan, which is the one of the biggest academic societies concerning to Geoscience filed in JpGU, has about 10% female members (ca. 300 of 3000 total members). These absolute value of female members keeps around the same level while the total numbers of the Geological Society of Japan are decreasing, then the female percentage is increasing in these two decades.

One of the reasons for the low number of female scientists/geoscientists in Japan is the low percentage of female students entering science and engineering fields in Japan. Recently the Science Council of Japan's Subcommittee on Gender and Diversity in Science and Engineering analyzed this problem and pointed out that its cause lies in the environment of education system during elementary and junior high schools (Opinion of SCJ, 2023). In Japan, the following factors are considered to have contributed to the decline in the number of female students going on to study science and engineering, even though surveys such as PISA (2018) and TIMSS (2019) show that both male and female 15-year-olds have equal academic achievement and interested in science and mathematics in the early education stage.

(1) The percentage of female science teachers in junior high school and above is significantly lower than in the OECD countries → Few role models.

(2) Often exposed to obvious “implicit bias” that has no evidence to support it (for example, girls are not good at mathematics. Science and engineering professions are not suitable for girls).

This talk will share information on the current situation in Japan comparing with other countries in the field of geoscience and discuss effective initiatives to promote diversity.

Keywords: Diversity in Science, Gender, Opinion of SCJ