



The stagnation of low percentage of female scientists in Japan and JpGU's initiatives

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The percentage of female scientists in Japan is 17.5% in the 2021 survey. This percentage is the lowest among OECD countries. The percentages of female doctoral students in science and engineering graduate programs nationwide are 21.0% and 19.2%, indicating a gap between the percentage of female prospective researchers and the percentage of women actually employed. It is pointed out that this is due to gender bias at the time of recruitment. On the other hand, 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. One of the reasons for the low number of female scientists in Japan is the low percentage of female students entering science and engineering fields in Japan (27% in science and 16% in engineering). 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).

JpGU and Japanese universities actively conduct outreach programs for female junior high and high school students every year to foster future female scientists. However, only a small percentage of them in whole Japan participate in such events, and these initiatives does not give us a full solution.