

Activities for diversity in physics field in Japan



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The Japan Society of Applied Physics (JSAP) and The Physical Society of Japan (JPS):

There are two major academic societies related to physics in Japan: The Japan Society of Applied Physics (JSAP) and The Physical Society of Japan (JPS). The former serves as an academic interface between science and engineering and an interactive platform for academia and the industry. The latter deepens understanding for nature, enrich our culture, and contribute to the welfare of human being, through search for the truth in the field of physics. This paper introduces current topics on diversity and related issues in both academic societies.

Number of Members and Affiliation:

JSAP members are about 19,000 in 2021. 54% of the JSAP members belong to universities, 9% public research institutes, and 31% private companies. Women fractions are 7% for all members, 5% for members in private companies, and 8% for those in universities. The member record covers researchers and engineers both in academia and industry. JPS members are about 15,000 in 2020, and about 1,000 are women. Majority of the JPS members belong to either a university or a research institute. The member record covers significant Japanese physics researchers. Each year, more than 1,500 new members join as new JPS members, and the ratio of women is typically about 10% since year 2000.

Promotion of Women Researchers:

In JSAP "Promotion and Nurturing of Female Researchers Contribution Award" was established in 2009 based on the fund from Prof. Kashiko Kodate. Senior and young women researchers with great achievement, and members or organizations contributing to nurturing of women researchers are awarded. "Fumiko Yonezawa Memorial Prize" in JPS was established in 2019 for women members in commemoration of Prof. Fumiko Yonezawa, the first woman president of JPS. These prizes are expected to encourage activities of women researchers.

The good news for both JSAP and JPS is that the woman ratio of student member is higher than that of all members, as shown in Fig. 2. It may be expected that the current proportion of women will increase in the future. However, some of students, regardless of gender, withdraw when they graduate from the universities and get a job at a private company, so an increase in the woman student ratio does not necessarily lead to an increase in the woman ratio of members in the future. There are many cases where women withdraw from membership, as reported by JPS in the 2017 WIP-report.

Under Covid 19 Pandemic:

COVID-19 pandemic also forces academic societies to fundamentally change systems of academic conferences, committee meetings, etc. using online system. Sophisticated knowledge and foresight of both presidents are required for overcoming the crisis. Nowadays virtual conferences are frequently held and some are organized in hybrid style. It can be inferred that the new meeting style has advantages in promoting diversity.

Women Presidents in Physics Societies:

The most impressive event is that women members assumed the presidents in these two societies: Prof. Mutsuko Hatano for JSAP (2020-2021 FY) and Prof. Setsuko Tajima for JPS (2021 FY). This is the first time for JSAP and the third time for JPS among 34 and 59 successive presidents, respectively. The first woman president is Prof. Fumiko Yonezawa in 1996, and the second woman president is Prof. Masako Bando in 2006. From this April, Prof. Tajima has been appointed as the third woman president of JPS. Both presidents, Prof. Hatano and Prof. Tajima, have a common career path that they moved from industry to academia.

Expectations for Women's Leadership:

Fig. 1(a) shows the evolution in the ratio of women members of JPS and that of women directors. The percentage of women directors in JPS has been about the same as the percentage of women members from 2003 to 2015. From 2015, active promotion of women began in JPS, expecting the leadership of the women directors. As a result, the percentage of woman director in 2021 becomes higher than ever, but it is still around 30%. JSAP has a similar tendency (Fig. 1(b)). The percentage of women members is rising moderately, while that of women directors increase sharply. The proportion of women in directors exceeds the proportion of women in members. The tendency is the same for both JSAP and JPS.

It is expected that women presidents and directors not only promote activities related to gender equality, diversity and inclusion in each society but also encourage all the activities from the perspective of women, leading to the dawn of a new era.



Prof. M. Hatano
President of JSAP
(2020-2021 FY)



Prof. S. Tajima
President of JPS
(2021 FY)

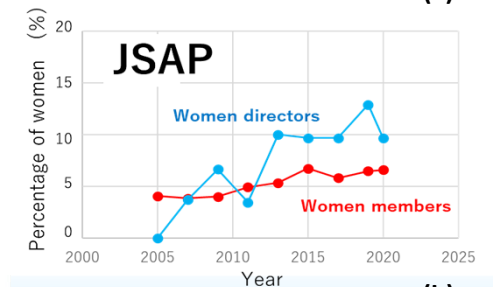
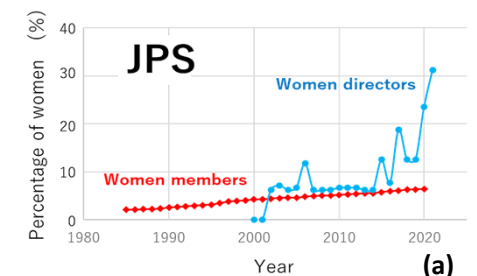


Fig. 1 The percentage of women members and directors in JPS (a) and JSAP (b).

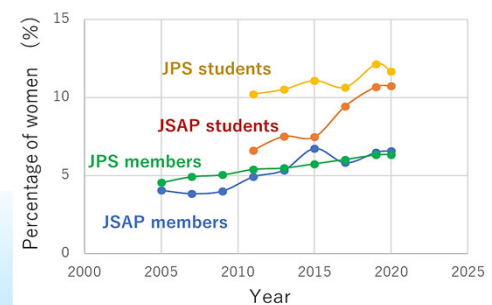


Fig. 2 The percentage of women members and students in JPS and JSAP.