

Actions for Gender Equality in the Japan Society of Applied Physics

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□ The Japan Society of Applied Physics: Profile

Establishment 1946 (Est. of the Society Journal: 1932).
 Number of members 20,896 (13th July, 2017).
 Member affiliations Non-government/Companies: 34.2%, univ./colleges: 52.0%, national institutes: 8.3%, academic societies: 1.1%, others: 4.5%.
 Current President Prof. Dr. Kazuo Hotate (32nd), executive vice-president of the University of Tokyo.
 Regular meetings Spring and Autumn, 6,000–7,000 attendees present at each meeting (Fig. 1).
 Recent topic Three Nobel laureates in physics (2014) from JSAP members: Professors Isamu Akasaki, Hiroshi Amano, and Shuji Nakamura (Fig. 2).

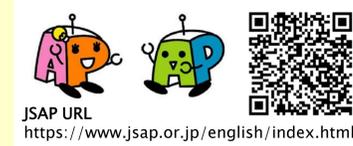


Fig. 1 JSAP meeting.



Fig. 2 From the left: Prof. S. Nakamura, Prof. H. Amano and Prof. I. Akasaki.

□ Issues on Gender Equality in the Field of Applied Physics in Japan

Too small fraction of women in the field of applied physics (AP):

- Woman researchers% in the field of engineering (Fig. 3) [1]: 5.0%
- Univ./college woman students% in the field of engineering [2]: 14.0%
- Woman Professors% in the field of engineering [3]: Prof. 3.1%, Assoc.-Prof. 8.3%, Lecturer 13.6%, Assist.-Prof. 11.3%, Res.-Assoc. 21.2%.

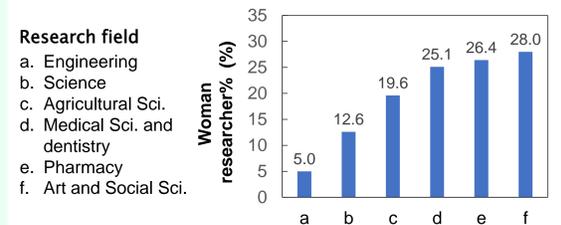


Fig. 3 Woman researcher% in various research field in Japan.

□ Commission for Gender Equality in JSAP

1999 Jun. Basic Act for Gender Equal Society, Act No. 78 of 1999, June 23, Cabinet Office, Japan.
 2001 July Establishment of the Gender Equality Committee in JSAP.
 2002 Oct. Establishment of the Japan Inter-Society Liaison Association Committee for Promoting Equal Participation of Men and Women in Science and Engineering (EPMEWSE) in cooperation with the Physical Society of Japan and other 12 societies.
Members Chairperson, vice-chairperson, 12 committee persons, 6 advisors and a vice-president of JSAP, from companies, national institutes, universities and a national agency for science and technology.

□ Our Actions on Women's Empowerment and Diversity

- NEWMAP (NEtwork of Women and Men in Applied Physics, est. Mar., 2016): Luncheon meetings to promote forming interdisciplinary network.
- Summer school for junior high school and high school girls to promote their interests in sci., technol., engineer. and math (STEM) fields as their career.
- On-site nursery service in every meetings.
- Presentations in international conferences: APPC-AIP (2016), ASEPS (2010), Gender Summit (2015, 2017), IUPAP-WIP (2008, 2014) and WIP of APPC12 (2013).
- Publicity activities: An original website, booklets and columns in the membership journal of JSAP.
- Awards for promotion and nurturing of woman researchers contribution (Fig. 4).
- Special symposiums in JSAP spring meetings to discuss various issues on women's empowerment and diversity in AP fields (Fig. 5).
- Discussion on a focused theme in each committee meeting.



Fig. 4 The award ceremony.



Fig. 5 At a symposium in 2017.

□ Outcomes/Recommendations

The ratio of JSAP woman member shows an increasing trend (Fig.6 (a)). The ratio of the representatives (Fig. 6 (b)), once fell from '05 through '09, has been recovered recently. The ratio of woman executive (Fig. 6 (c)) and editorial board members (Fig. 6 (d)) had been steadily increasing until around 2013, however, it appears to be rather saturated. The number of woman members in the gender equality committee of JSAP was higher than that of man members in the earliest years; the difference has been eliminated (Fig. 6 (e)).

The gender equality in JSAP is being improved, while the gap remains significantly large; essential change in the working and educational environment is required to shrink the gap.

Our recommendations derived based on the actions and discussion in 2016:

Work-life balance

- To provide suitable working hours to each person, but not to apply uniformed shortening of the working hours.
- To promote utilizing stay-home work and meeting systems extensively.
- To implement personnel decisions in view of individual life events such as childbirth, caregiving and work-life balance.

Assessment system

- To emphasize qualitative assessment than quantitative one.
- To introduce various evaluation axes for diverse human resources.
- To compensate (extend) contract period if a fixed-term employee was involved in individual life events such as caregiving.

Science education

- To provide balanced education opportunity both in science/engineering and literature/culture.
- To promote participation of high school students in JSAP meetings.
- To leverage post-docs. for education in schools to promote student's interests in STEM fields.

References

- [1] From the Statistical Topics No. 80, Statistics Bureau, Ministry of Internal Affairs and Communications, Japan (2014).
- [2] From the Basic Survey on Education, Ministry of Education, Culture, Sports, Science and Technology, Japan (2012).
- [3] From the White Paper on Gender Equality Bureau, Cabinet Office, Japan (2012).

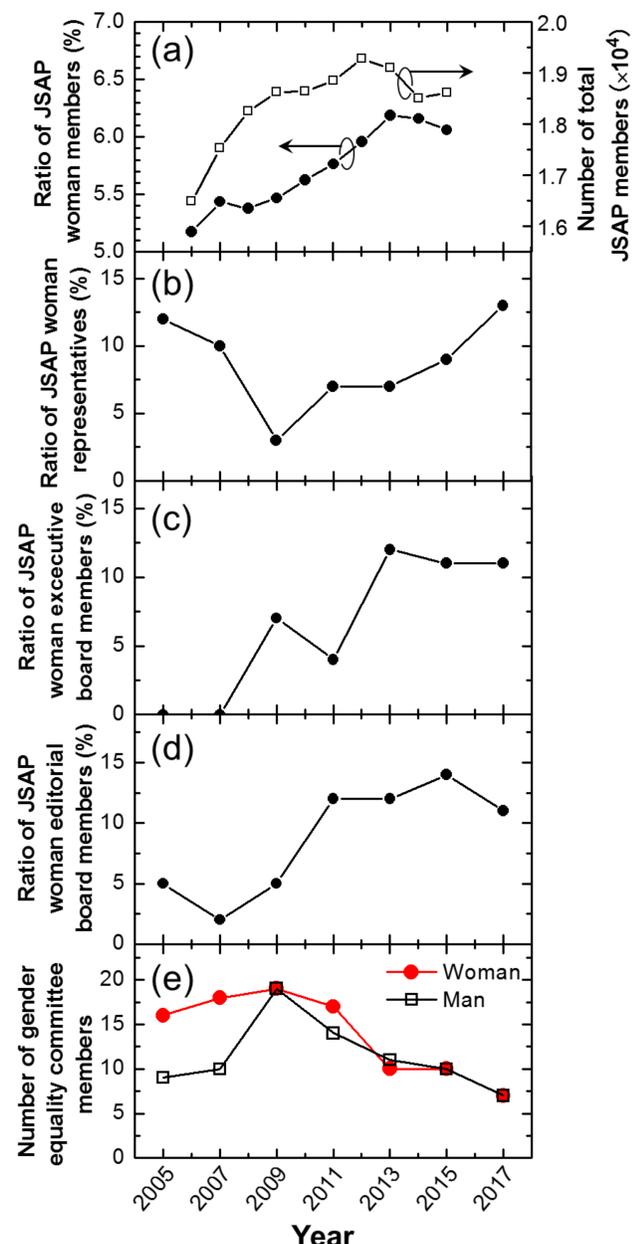


Fig. 6 The annual trend of the ratio of woman member and number of total members (a), the ratio of woman representatives (b), the ratio of woman executive board members (c), the ratio of woman editorial board members (d), and the number of woman and man committee members at the gender equality committee (e) in JSAP.