



Current status and Perspective on Diversity in Physics-related Fields in Japan

*NONAKA, Chiho^{1,3,4,5}, MATSUKI, Nobuyuki^{2,6}, SHOJI Ichiro^{2, 7},
CHIKUMOTO, Noriko^{1, 8}, HAMAGUCHI, Koichi^{1,9}, ITAKURA, N. Akiko^{1,10},
KOBAYASHI, Kaya^{1,11}, NOJIRI, Mihoko^{1,12,13,14}*

¹The Physical Society of Japan

²The Japan Society of Applied Physics

³Hiroshima Univ., Japan

*⁴Int. Inst. Sustainability with
Knotted Chiral Meta Matter / SKCM, Japan*

⁵Kobayashi Maskawa Institute, Nagoya Univ., Japan

⁶Kanagawa Univ., Japan

⁷Chuo Univ., Japan

⁸Chubu Univ., Japan

⁹The Univ. of Tokyo, Japan

¹⁰National Institute for Materials Science, Japan

¹¹Res. Inst. for Interdiscip. Sci., Okayama Univ., Japan

¹²Theory Center, IPNS, KEK, Japan

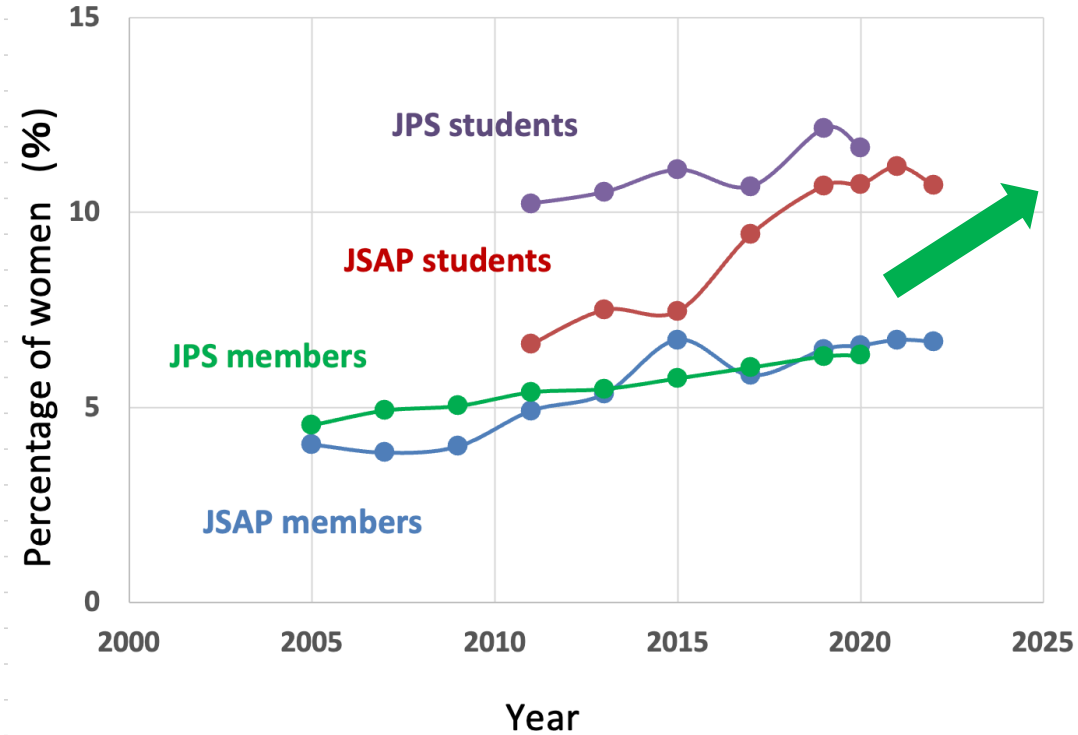
¹³The Graduate Univ. of Advanced Studies (Sokendai), Japan

¹⁴Kavli IPMU (WPI), Univ. of Tokyo, Japan

JPS & JSAP: features and activities for diversity

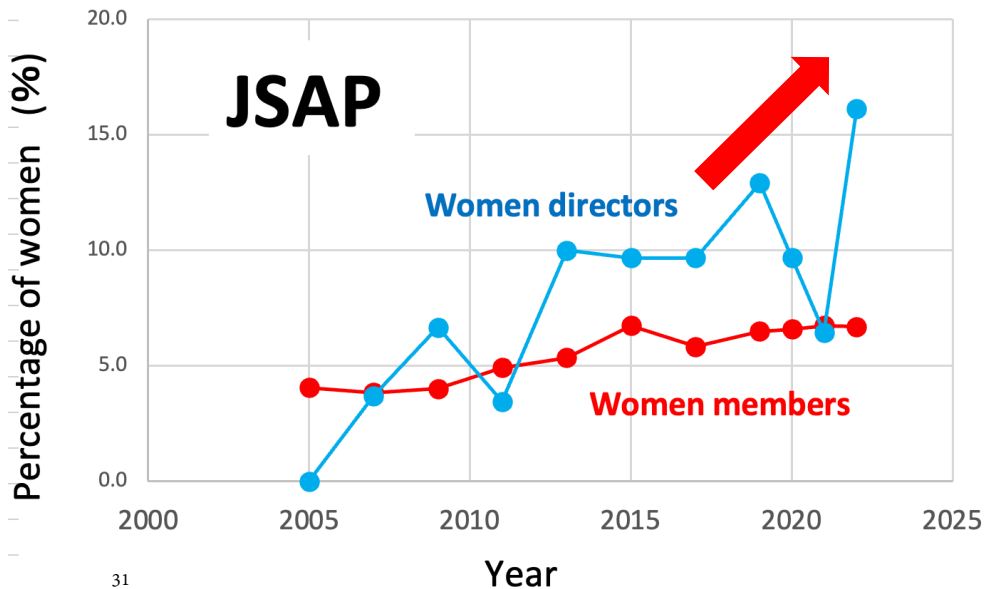
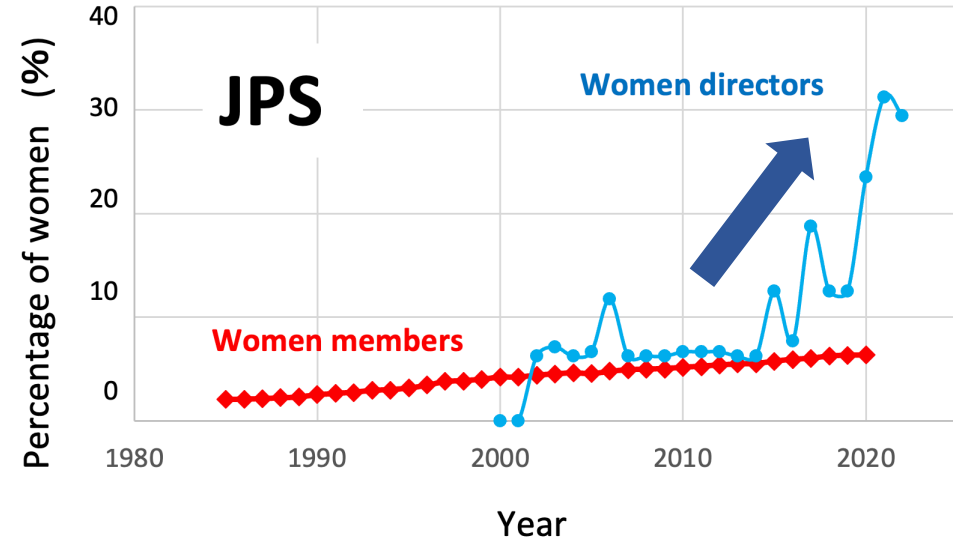
	The Phys. Soc. of Japan (JPS)	The Japan Soc. of Appl. Phys. (JSAP)
Founded year	1877 (as Tokyo Mathematics Society)	1932 (as Jpn. Journal of Appl. Phys.)
Established year	1946	1946
Total number of members	~16,000	19,581 (June 24, 2023)
Nobel laureates from the society	15 members (1949-2021)	4 members (2014-2019)
Committee for diversity	Diversity Promotion Committee (est. 2002) 12 members	D&I committee (est. 2002) 21 members
Activities for diversity	Summer School for Girls Junior High and High School Students (collaborative)	
	Installation of Child Care Rooms at Annual Conferences (Individual)	
	Annual Symposium to Discuss Diversity in Science and Engineering (Individual)	
	Fumiko Yonezawa Award	Div. & Incl. Award
	The Jpn. Inter-Society Liaison Assoc. Comm. for Prom. Eq. Part. of Men and Women in Sci. and Engineer.	

Number of Members and Affiliation

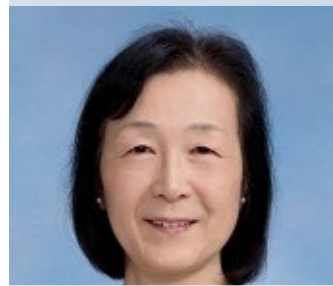


- Percentage of woman members is gradually increasing
- The number of woman directors is rapidly increasing recently

Expectations for Women's Leadership



JPS 52nd Pres.
Prof. Fumiko Yonezawa



JPS 77-78th Pres.
Prof. Setsuko Tajima



JSAP 33rd Pres.
Prof. Mutsuko Hatano



#1 Natsu Gaku (Summer) (Study)

Gov.br./ NPO
~2017/2018~

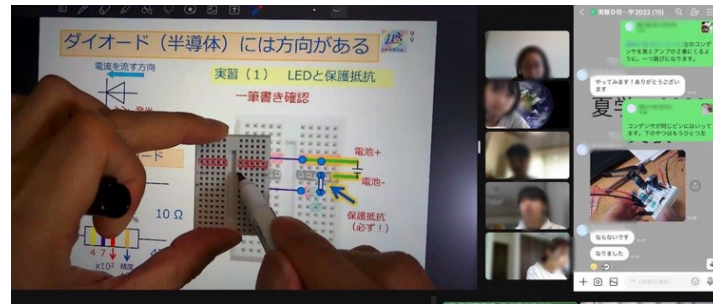
since 2005 (all over Japan)
3-days science camp
Online during the Pandemic

Seminars on carrier path, experiments, group discussions etc.

2019: making spectroscope



2022: optical communication (online)



making use of Zoom & LINE(an SNS)

For the next one in August, 2023, it is getting back to the in-person camp.

#2 Kansai Science School for girls

since 2006
groupwork series

Run by five Universities in Kansai area.

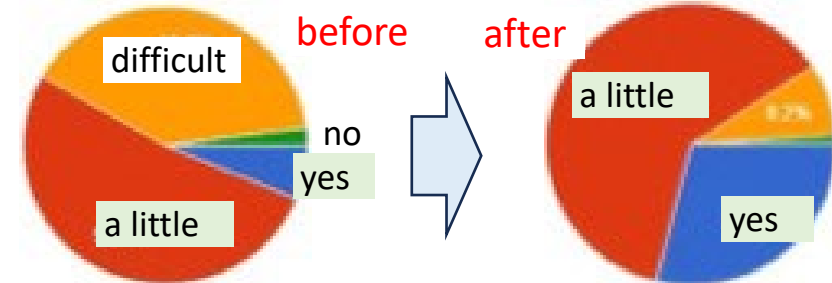
Supported by companies in the area and JPS



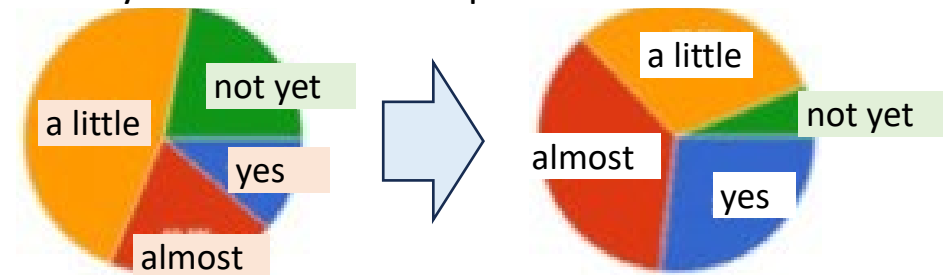
Seems effective for the entry point. However, carrier path is still an issue to be improved.

Questionnaire in #1 Natsu Gaku

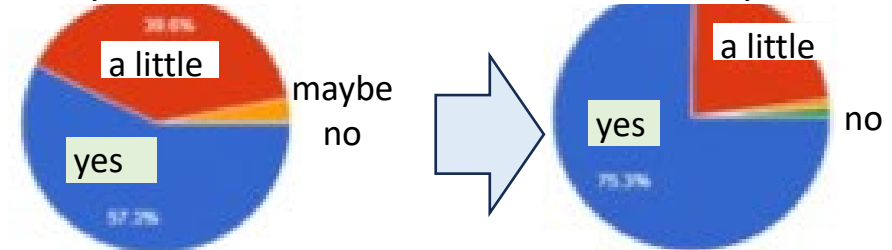
Q1: Can you imagine that you are working in the future ?



Q2: Do you determine the specific field in STEM?



Q3: Do you want to choose STEM in University and Jobs?



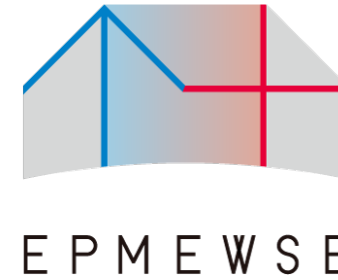
After the summer camp, almost all answers turned to be positive.



The Japan Inter-Society Liaison Association Committee for Promoting Equal Participation of Men and Women in Science and Engineering (EPMEWSE)

What's EPMEWSE?

- Female professionals: only 10.7% in 2001.
- Especially low in STEM (Sci., Tech., Engineer., Math.)
- To overcome above situation, **EPMEWSE** was established at the initiative of JPS and JSAP in 2002.
- Currently, approximately 100 societies in STEM fields participate in EPMEWSE.



The **EPMEWSE** logo consists of ♂ & ♀ and a house-shaped silhouette, expressing the cooperative relationship between men and women.

Large-Scale Surveys on Gender Equality in STEM

- 4th (2017): Large-Scale Survey; **19,505** answers.
- 3rd (2013): Large-Scale Survey; **18,159** answers.
- 2nd (2007): Large-Scale Survey; **14,100** answers.
- 1st (2003): Large-Scale Survey; **19,291** answers.

Annual EPMEWSE symposium (2001-)

20th (2022) Symposium theme was: "**Considering Measures to Improve Positive Gender Inequality (e.g., Female-only Recruitment and Quota System)**".

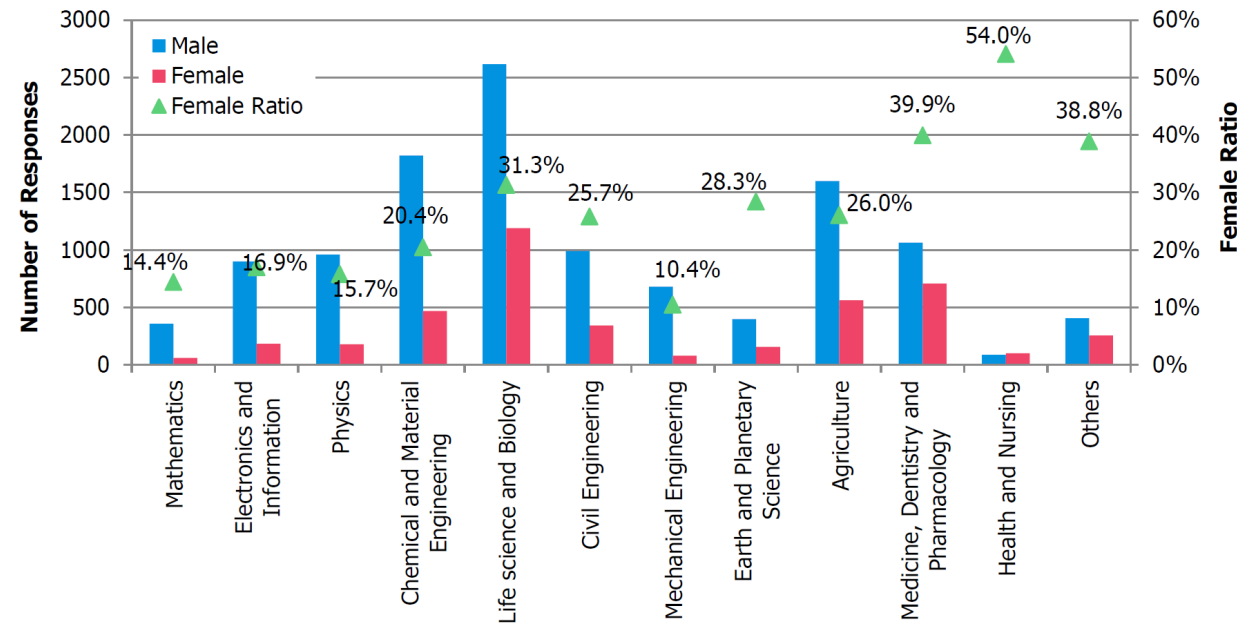


Figure 1.10 Number of Respondents by Profession (Single Answer)

(From the 4th Large-Scale Survey (2017).)

Summary/perspective

1. Features and activities for diversity in JPS & JSAP are introduced. Numbers of female members, especially steering members are continuously increasing.
2. Natsugaku: Summer School for Girls – Sci., Tech., and Human Encounters is effective to promote increase of female students in STEM fields.
3. The Japan Inter-Society Liaison Association Committee for Promoting Equal Participation of Men and Women in Science and Engineering (EPMEWSE) provides necessary information and positive impact on academia as well as society in Japan.
4. Through these activities, we will further promote diversity in the field and in decision-making organizations in physics-related fields.

Website Links for details

JPS



<https://www.jps.or.jp/english/>

JSAP



The Japan Society of Applied Physics



<https://www.jsap.or.jp/english>

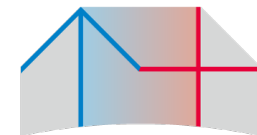
Natsugaku:

Summer School for Girls



<https://natsugaku.jp/en/>

EPMEWSE



EPMEWSE



<https://djrenrakukai.org/en/index.html>