



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

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

<sup>1</sup>The Physical Society of Japan

<sup>2</sup>The Japan Society of Applied Physics

<sup>3</sup>Hiroshima University

<sup>4</sup>Int. Inst. Sustainability with

Knotted Chiral Meta Matter / SKCM,

<sup>5</sup>Kobayashi Maskawa Institute, Nagoya University

<sup>6</sup>Kanagawa University <sup>7</sup>Chuo University

<sup>8</sup>Chubu University

<sup>9</sup>The University of Tokyo

<sup>10</sup>National Institute for Materials Science

<sup>11</sup>Res. Inst. for Interdiscip. Sci., Okayama University

<sup>12</sup>Theory Center, IPNS, KEK

<sup>13</sup>The Graduate University of Advanced Studies (Sokendai)

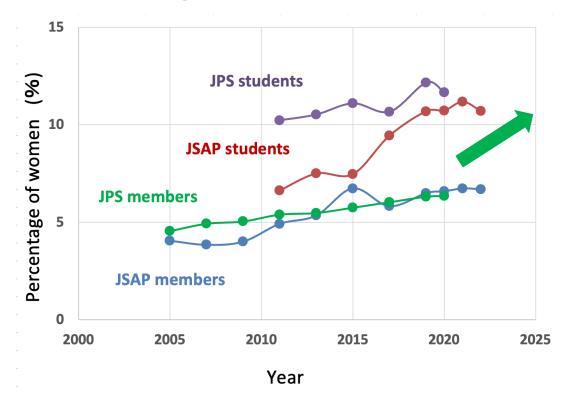
<sup>14</sup>Kavli IPMU (WPI), The University of Tokyo

## 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
· • • • • • • • • • • • • • • • • • • •	1340	1340
Total number of members	15,014 (June 1, 2023)	19,581 (June 24, 2023)
Nobel laureates	15 members	4 members
from the society	(1949 - 2021)	(2014 - 2019)
<b>Committee for</b>	Diversity Promotion Committee	D&I committee
diversity	(est. 2002) 12 members	(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
	Participation in the Japan Inter-Society Liaison Association Committee for Promoting Equal Participation of Men and Women in Science and Engineering (EPMEWSE)	

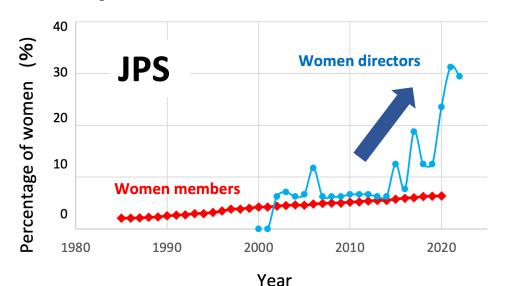
### JPS & JSAP: transition on woman/man ratio of members

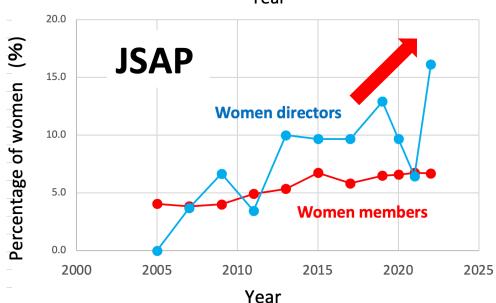
### **Percentage of Women members**



- 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

### Natsugaku: Summer School for Girls – Sci., Tech., and Human Encounters



The Japan Society of Applied Physics

#1 Natsu Gaku (Summer) (Study)



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

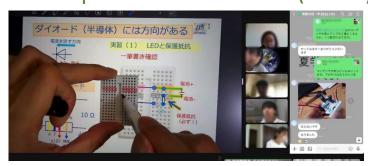
Seminars on carrier path, experiments, group discussions etc.

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 ->

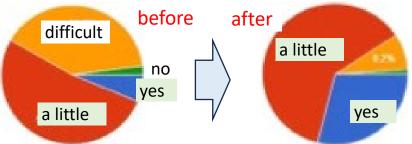


since 2006 groupwork series

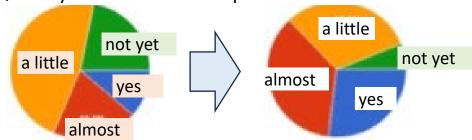
Run by five Universities in Kansai area. Supported by companies in the area and JPS

### Questionnaire in #1 Natsu Gaku

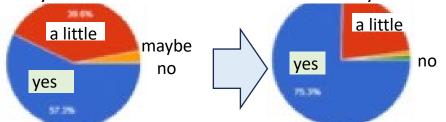
Q1:Can you imagine that you are working in the future?



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.

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

# 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.

### **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) ".

So far, EPMEWSE has submitted written requests to the Cabinet Office for the 4th to 6th "Basic Plan for Science, Technology and Innovation" (2010 – 2021).

E P M E W S E

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

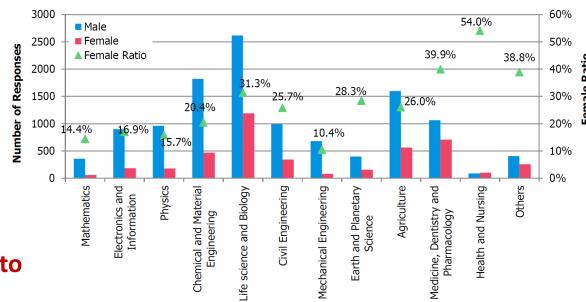


Figure 1.10 Number of Respondents by Profession (Single Answer)

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

### Summary and perspective of activities by JPS&JSAP

### **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 workplace and in decision-making organizations in physics-related fields.

### **Website Links for details**



