November 11-13, 2013

# The 5th Japan-China-Korea Women Leaders Forum For Science & Technology 第5回 日中韓女性科学技術指導者フォーラム

Tsukuba satellite meeting

# International Survey for Recruitment and Promotion of Women Researchers in East Asia

東アジア女性研究者の採用とリーダー育成に関する国際調査

**Date:** 10:00-12:00 Wednesday, November 13, 2013 **Venue:** Sengen Central Building Meeting Room No.1,

National Institute for Materials Science (NIMS), Tsukuba, Ibaraki, Japan.

http://www.nims.go.jp/eng/nims/office/tsukuba\_sengen.html

Program: Chairperson: Akiko ITAKURA (NIMS, Japan)

**Opening Remarks: Takao TAKEUCHI (NIMS Human Resources Development Office)** 

Chikako YOSHIDA-NORO (Nihon University, Japan)/Chairperson of the Survey

Report of JISTEC International Survey of Women Researchers in East Asia

Li ZHANG (CAST, China)

Exploring the next generation in science and technology

**Hyomin KIM (UNIST, Korea)** 

Interdisciplinary Education to Empower Women in STEM

Min HU (Peking University. China)

Career Education Program in Environmental Sciences at Peking University

**Eun-Kyoung LEE (Chonbuk National University, Korea)** 

Leadership of Women in S & T, Why Important and How

Hisako OHTSUBO (Nihon University, Japan)

Maximizing the Potential of Scientists in East Asia: promoting equal participation for women scientists through leadership development

Noriko SHIOMITSU (JAXA, Japan)

Effective Support to Empower Female Researchers and Leadership

Free Discussion with Speakers, Invited Persons and You.

Jie TANG (NIMS, Japan) Kayoko SUGAHARA (President, INWES-Japan)

Xuhii WEN (IEE CAS, China) Yan LEI (CAMS, China)

Jeong-a LEE (Chosun University, Korea)

Closing Remarks: Kayoko SUGAHARA (President, INWES-Japan)

主催:日本大学(Nihon University)/国際女性技術者・科学者ネットワーク(INWES-Japan)

後援:文部科学省(MEXT)/経済産業省(METI)/ 内間府男女共同参画局 / 独立行政法人 科学技術振興機構(JST)/ 独立行政法人 物質・材料研究機構(NIMS)/ 独立行政法人 宇宙航空研究開発機構 (JAXA) / 独立行政法人 国立女性教育会館 (NWEC) / 公益社団法人 科学技術国際交流センター(JISTEC) / 男女共同参画学協会連絡会(EPMEWSE)/

IEEE Japan Council Women In Engineering / WIN (Women in Nuclear) - Japan

■ 参加申込。お問い合わせは下記 URL よりお願いいたします

http://www.nihon-u.ac.jp/research/project/chairman\_grant/news/5-jck-wlf.html



The 5<sup>th</sup> Japan-China-Korea Women Leaders Forum for Science & Technology, Tsukuba satellite meeting: International Survey for Recruitment and Promotion of Women Researchers in East Asia

Date: 10:00-12:00, Wednesday, November 13, 2013

Venue: NIMS Sengen Central Building Meeting Room No.1

10:00-12:00 Presentation and Panel Discussion (English)

Chair: Dr. Akiko ITAKURA (NIMS, Japan)

# Speakers

10:00 Opening Remarks, Dr. Takao TAKEUCHI (NIMS Human Resources Development Office)

10:10 Prof. Chikako YOSHIDA-NORO (Nihon University, Chairperson of the Survey)

International Survey for Recruitment and Promotion of Women Researchers in East Asia

10:30 Dr. Li ZHANG (CAST, China)

Exploring the next generation in science and technology

10:40 Dr. Hyomin KIM (UNIST, Korea)

**Interdisciplinary Education to Empower Women in STEM** 

10:50 Prof. Min HU (Peking University. China)

Career Education Program in Environmental Sciences at Peking University

11:00 Prof. Eun-Kyoung LEE (Chonbuk National University, Korea)

Leadership of Women in S & T, Why Important and How

11: 10 Prof. Hisako OHTSUBO (Nihon University, Japan)

Maximizing the Potential of Scientists in Japan: promoting equal participation for women scientists through leadership development

11: 20 Ms. Noriko SHIOMITSU (JAXA, Japan)

# Effective Support to Empower Female Researchers and Leadership

11:30 Free Discussion with speakers, invited person and you.

Dr. Jie TANG (NIMS, Japan),

President Kayoko SUGAHARA (INWES-J, Japan),

Prof. Yan LEI (China Academy of Chinese Medical Sciences, China)

Prof. Xuhui WEN (Chinese Academy of Sciences, China),

Prof. Jeong-a LEE (Chosun University, Korea)

11:55 Closing Remarks: Prof. Kayoko Sugahara (President of INWES-J)

International Survey: https://www.jistec.or.jp/enquete/female.php

HP: http://www.nihon-u.ac.jp/research/project/chairman grant/news/5-jck-wlf.html



# Opening Remarks

Takao Takeuchi Human Resources Development Office

# Policy and mission of NIMS

#### **Policy**

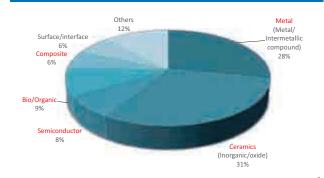
NIMS is charged with basic research and development of materials science, and to advance the level of expertise in the field.

### Mission

- ✓ Fundamental research and generic / infrastructural technology research and development in the field of materials science
- ✓ Dissemination of research results and promotion of their applications
- ✓ Shared use of NIMS facilities and equipment
- ✓ Training of researchers and engineers

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# Materials as the target of NIMS researchers



# Headcount of permanent employees in NIMS

		Number of staff	Number of female staff included	Number of foreign staff included
Executive		6	0	0
Permanent employee	Researcher	396	30	36
	Engineer	47	5	1
	Administrati on Staff	102	23	0
	Total	545	58	37

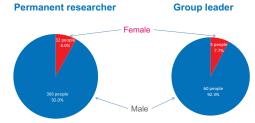
As of April 1, 2013

# Female employees in NIMS (2001-2013)



The number of permanent female researchers and their percentage to the total permanent research staff have been on the increase over the past 10 years, but it still remains about 8%.

# Gender equity in promotion in NIMS

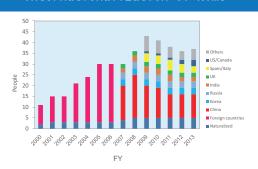


As of November 2013

The percentage of female group leaders to total leaders is almost equal to that of permanent female researchers.

163

# Internationalization of NIMS



Oversea researchers from China, Korea, and other countries are working at NIMS.

# Positive recruitment of female researchers



As an affirmative action in 2013, NIMS created a permanent researcher position which only female candidates can apply for. The number of female applicants increased nearly twofold compared to last year.

# Supports for female researchers in NIMS

NIMS is creating a friendly workplace environment because it believes that the endeavor to promote the full working and family lives of individuals with different values and lifestyles is beneficial to the institute.

- Flexible working systems
  - flex-time system, discretionary work system
- Maternity leave, parenting leave, part-time work for child care, and family care leave
- Personnel expenses to employ a technical or administrative staff for 1 year

# Summary

- Increase in number of female researchers
- Gender equity in promotion
- Positive recruitment of female researchers
- Comprehensive supports for female employees

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The 5th Japan-China-Korea Women Leaders Forum For Science & Technology, Tsukuba satellite meeting International Survey for Recruitment and Promotion of Women Researchers in East Asia

> Date:10:00-12:00, Wednesday, November 13, 2013 Venue:Sengen Central Building Meeting Room No.1 National Institute for Materials Science (NIMS) http://www.nims.go.jp/eng/nims/office/tsukuba\_sengen.html

Speakers and Panelists
Prof. Chikako YOSHIDA-NORO (Nihon University)/Chairperson of the Survey
Prof. Min HU (Peking University, China), Prof. Eun-Kyoung LEE (Chonbuk National University, Korea),
Dr. Li ZHANG (CAST, China), Prof. Hyopmin KIM (UNIST, Korea),
Prof. Hisako OHTSUBO (Nihon University, Japan), Ms. Noriko SHIOMITSU (JAXA, Japan)
Dr. Jie TANG (NIMS, Japan), Dr. Akiko ITAKURA(NIMS, Japan)

This is a satellite meeting of J-C-K Women Leaders Forum for Science and Technology, total 80min from panel and other 40min for free discussion, and a good chance to talk with famous women professors from neighboring Asia. Join us to discuss about your life plan as a researcher and the future positions.

The 5th Japan-China-Korea Women Leaders Forum For Science & Technology
Tsukuba satellite meeting on Nov. 13th at NIMS

International Survey for Recruitment and Promotion of Women Researchers in East Asia

Nihon University Chairman of the Board of Trustees Grant" CareerWay Project International Sympo Co-hosted by INWES-J & supported by MEXT

# **Reports of International Survey** for Recruitment and Promotion of Women Researchers in East Asia

Chikako YOSHIDA-NORO, PhD

Professor, College of Industrial Technology, Nihon University





### 公益社団法人 科学技術国際交流センター ernational Science and Tachenings Englarge Center

International Investigation into the Employment and Treatment of Female Researchers, 2013

Female researchers are an extremely important resource for Japan's science and technology industry. In recognition of this fact, the government is implementing policies with the aim of strengthening the retaining and fostering of women coming through in this area. Despite this, however, the proportion of female researchers in Japan is comparatively low by international standards, though the goal of 25% set in the Third Science and Technology Basic Plan (2011) and goal for the Fourth Science and Technology Basic Plan is set even higher at 30%. Particularly in recent years, Japan ranked at the bottom among the developed countries at about 14%.



dvancement of Technology (2012-2013)



## 公益社団法人 科学技術国際交流センター ational Science and Turbusings Endlarge Conter

International Investigation into the Employment and Treatment of Female Researchers, 2013

Due to this state of affairs, cross-country research (and in particular research focusing on east Asia) that has not been previously undertaken is necessary with the aim of encouraging policies relating to the recruitment  $% \left( \mathbf{r}\right) =\mathbf{r}$  and promotion of women researchers. In collecting and analyzing this data, it is hoped that proposals relating to the new problems facing female researchers can be produced. Furthermore, by building the foundations for a cross-institutional  $% \left( 1\right) =\left( 1\right) \left( 1$ platform for carrying out research, it is hoped that the consolidation of activities relating to promoting discussion of the problems facing female researchers in Japan can be achieved in an ongoing manner.

The reports for this research will be released as they are compiled.



Supported by the Watanabe Memorial Foundation for the Advancement of Technology (2012-2013)



# 公益社団法人 科学技術国際交流センター

International Investigation into the Employment and Treatment of Female Researchers, 2013

### Committee Members for the Survey

Chikako Yoshida-Noro (Chairperson, Nihon University, Biology)

Kashiko Kodate (Nihon Women's University JST Gender-Equality, Applied Physics)
Sanae Ariga (Hokkaido University, Biochemistry)

Akiko Itakura (NiMS, Physics)

Gi-Chol Cho (Ochanomizu Women's University, Physics)

Gi-Choi Cho (Uchanomizu Women's University, Physics)
Yuko Hayashi (Tokyo Institute of Technology, Chemistry)
Kayo Ogawa (Nihon Women's University, IT, Applied Physics)
Eriko Watanabe (The University of Electro-Communications, Applied Physics)
Kayoko Sugahara (President of INWES-japan, Tokyo Univ. of Agriculture and Technology, IT)
Miyoko O Watanabe (UST CRDS Fellow, Chair of JWEF, Applied Physics)
Junko Okayama (JST CRDS Fellow) Hiroko Tatesawa (JST)

Sonoko Watanabe (NISTEP)

Shizuo Hoshiba (JISTEC) Minoru Kuniva (JISTEC) Hiroko Kudo (JISTEC)



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# 公益社団法人 科学技術国際交流センター

International Investigation into the Employment and Treatment of Female Researchers, 2013

### Aim and Policy of the Survey

To collect and analyze data concerning recruitment and promotion of women researchers in East Asia

To collect the data in EU or USA by using Internet

To clarify common features in the East Asia and characteristic problem in Japan

To release the analyzed results in this forum and as a report on the web page

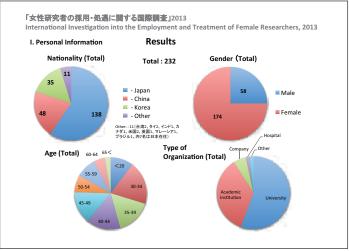
To compile a proposal for measures about the recruitment and promotion of women researchers in Japan

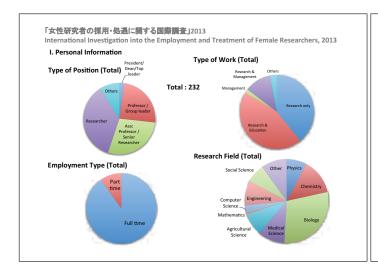
To make a platform for the continuous survey afterward

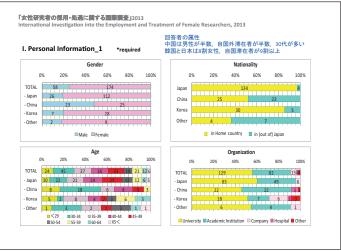


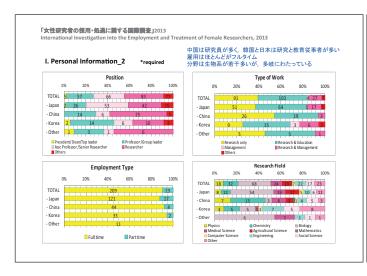
Supported by the Watanabe Memorial Foundation for the Advancement of Technology (2012-2013)

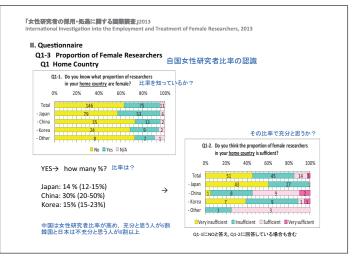


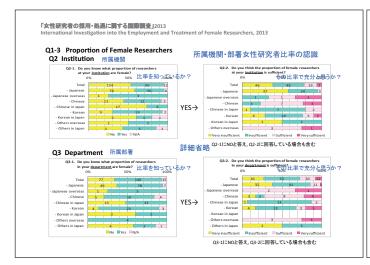


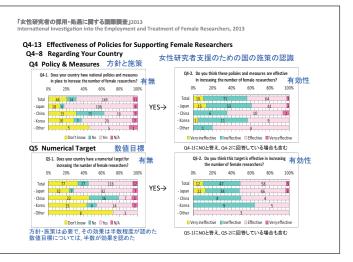


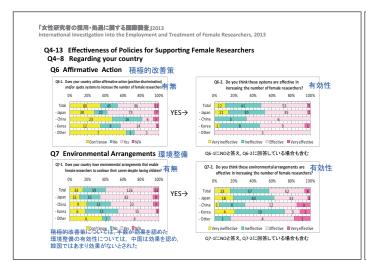


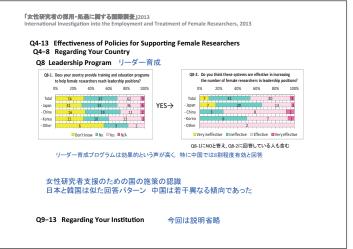


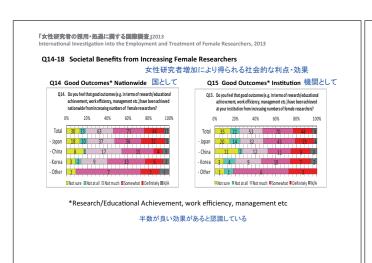


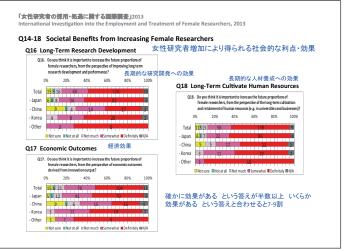


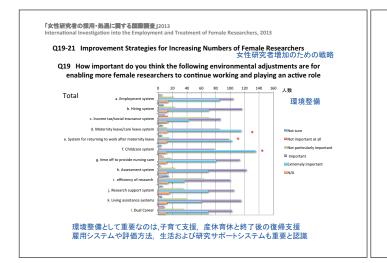


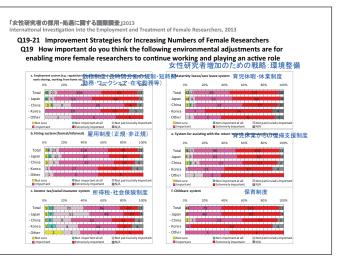


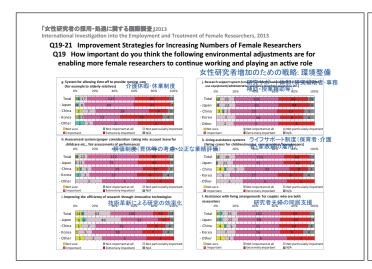


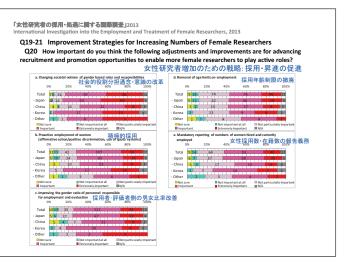


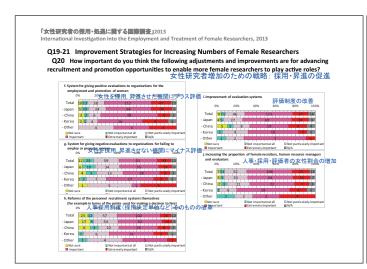


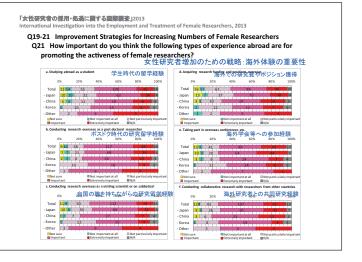


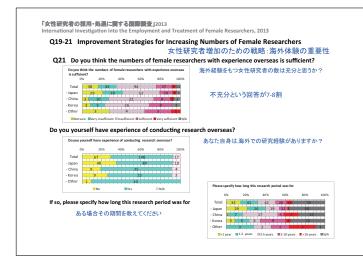


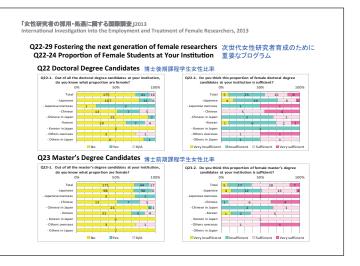


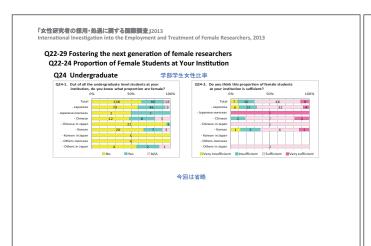


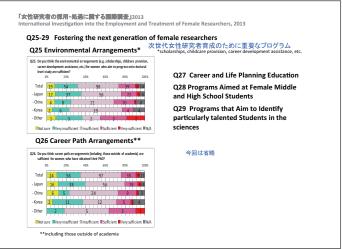


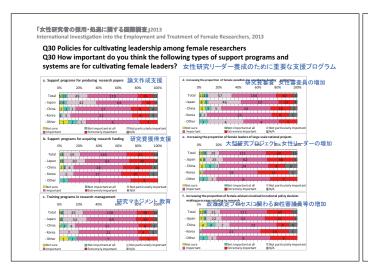


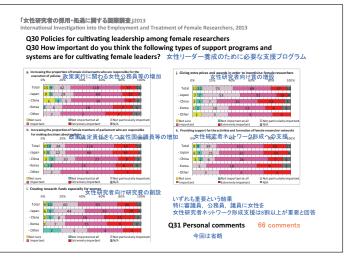














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公益社団法人 科学技術国際交流センター

International Investigation into the Employment and Treatment of Female Researchers, 2013

#### Conlusion

方針・施策は必要で、その効果は半数程度が認めた 数値目標については、半数が効果を認めた 積極的改善策については、半数が効果を認めた 環境整備の有効性については、中国は効果を認め、 韓国ではあまり効果がないとされた リーダー育成プログラムは効果的という声が高く、特に中国では8割程度有効と

女性研究者増加により得られる社会的な利点・効果 国として機関として効果あり 長期的な研究開発への効果 長期的な人材養成への効果 経済効果 確かに効果がある という答えが半数以上 いくらか効果がある という答えと合わせると7-9割

Supported by the Watanabe Memorial Foundation for the Advancement of Technology (2012-2013)

公共社団は人 科学技術復興交流センター International Investigation into the Employment and Treatment of Female Researchers, 2013

政策決定プロセスに関わる女性審議員等の増加

#### Conlusion

女性研究者増加のための戦略 環境整備として重要なのは、子育て支援、産体育体と終了後の復帰支援 雇用システムや評価方法、生活および研究サポートシステムも重要と認識 女性研究者増加のための戦略:採用・昇進の促進 女性を採用、昇進させた機関にブラス評価 人事採用制度(採用決定単位など)そのものの改革 採用者・評価者側の男女比率改善 人事・採用・評価者の女性割合の増加 女性研究者増加のための戦略:海外体験の重要性 女性研究リーダー養成のために重要な支援プログラム

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The 5th Japan-China-Korea Women Leaders Forum For Science & Technology
Tsukuba satellite meeting on Nov. 13th at NIMS

International Survey for Recruitment and Promotion of Women Researchers in East Asia

Nihon University Chairman of the Board of Trustees Grant CareerWay Project\* International Symposium
Co-hosted by INWES-J & supported by MEXT

Reports of International Survey for Recruitment and Promotion of Women Researchers in East Asia

Chikako YOSHIDA-NORO, PhD

Professor, College of Industrial Technology, Nihon University





調査結果の詳細は、JISTECホームページで公開するとともに、11月11-13日に開催する日中韓女性科学技術指導者フォーラムの3日目 13日つくばNIMSでの会議において発表し、パネルディスカッションを行います。どうぞみなさまお誘い合わせの上、お越し下さい。まもなく日本大学理事長特別研究「キャリアウェイ」プロジェクトのホームページ上で参加自込みを受けなけます。

一根鞋扭住人 新技術林舞道迎記令会

まもはくロネハチ埋手取付が明示・マック アウェイ」プロジェクトのホームページ上で 参加申込みを受け付けます。 連絡会ホームページにも、お知らせを掲載 していただきましたので、ご参照ください。 International Survey for Recruitment and Promotion of Women Researchers in East Asia, Teukuba Satellite meeting Nov. 13, 2013, NIMS, Tsukuba, Ibaraki, Japan

Maximizing the Potential of Science in East Asia: promoting equal Participation for Women Scientists through leadership development

# Issues Presentation

Hisako Ohtsubo, Ph.D Nihon University, Japan

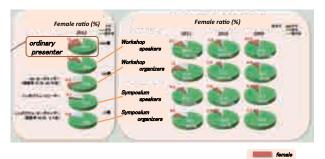
# Bias and Barriers around Us

- 1. Visibility of Female Researchers
- 2. Unconsciousness bias to be leaders

By EPMEWSE\* and Seven Scientific Societies (MBSJ, JSPP, GSJ, BSJ, JNS, JSDB and JSHS)

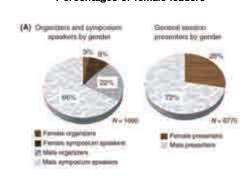
\*EPMEWSE was established in 2002 to promote gender equality in science and engineering, consisting of 67 professional STEM societies in Japan.

## Visibility Survey data of Molecular Biology Society of Japan (2009~2012)



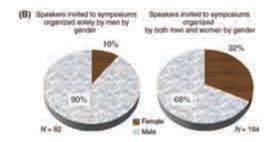
http://www.mbsj.jp/gender\_eq/doc/ws2012/MBSJ2012\_zokusei\_chousa.pdf

# Percentages of female leaders



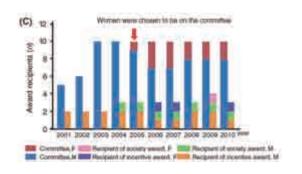
Data were taken from annual meetings of MBSJ, JSPP, BSJ, GSJ and JSDS (FY2010).

# Gender of organizers and a percentage of female speakers at annual meetings.

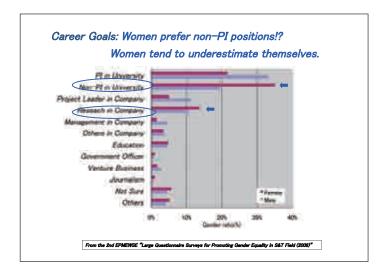


Data were taken from BSJ (FY2008, 2009 and 2010).

# Gender bias in the review process.



Data were taken from JSPP (FY 2001-2010).



Tsukuba Satellite Meeting, the 5<sup>th</sup> Japan-China-Korea Women Leaders Forum for Science & Technology, November 13<sup>th</sup>, 2013

# Effective Support to Empower Female Researchers and Leadership



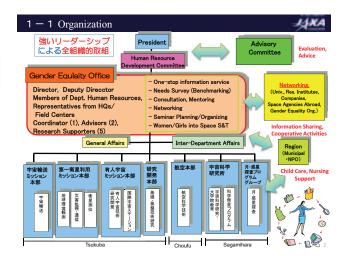


Sattellite, Explorer Observation

24 hour operation of Kibou, Space Lab., ISS



Noriko Shiomitsu, Director, Gender Equality Office, Japan Aerospace Exploration Agency



# 1-2 . Needs of Female Researchers



- Interview Survey for all the female researchers
- -Differenvarces among HQs and Field Centers (number, ratio, demography, working condition, awareness and supportiveness, regional environment)
- necessary to support with consideration of various cases
   -Work-life-balance and Change in Awareness are much needed.
- Team-oriented support is more needed than individual-oriented support.

Sagamihara	Many young researchers are not-permanent-positioned post-doctoral (60%). Less than 25% of Female researchers (education) have children. Number of male researchers exceeds that of the female. They usually work long. It is hard to have work-life-balance.	
Tsukuba	•Largest number of female researchers among field centers. Most advanced in child caring environment. (Hoshinoko Nursery inside the center was made open in April, 2012.) •Rocket launch/satellite operations require long-duration shift works. Work-life-balance with child care and elderly nursery is hard. Personal (private) cost burden is large.	
Choufu	•Few female researchers. Little awareness in child caring among co-workers (mainly male).  *Waiting list is long for public nurseries. Not good environment for child caring.	
Tokyo	•Few researchers. •Many female workers are engaged in child caring. Many supporting systems, but personal (private) cost burden is large.	

### 1-3-1 Activities



# 過去に実績のある取組を効果的に実施

## ■ 具体的な取組

- A. 安心して出産・子育て・介護を行える環境の整備
- B. 働き方の見直しによるワーク・ライフ・バランスの実現
- C. 女性研究者の研究開発力・組織マネジメント力の向上と能力 発揮
- D. 採用・登用を拡大、意識啓発
- E. 女性ロールモデルの見える化と女子学生・院生との交流機会 の拡大
- F. 内外連携の推進や総合協力ネットワークの形成
- ■実施期間終了後の取組
- ・トップマネージメント主導による支援期間中に実施した取組の 継続と改善。
- ・自己資金の着実な確保と実施。

# 1-3-2女性研究者の採用・上位職階での登用増加の具体的な取組 🌙 🛂



数値目標の設定と達成のための取組

平成25年3月時点の女性研究者の在職比率:8.7%、採用比率:13.5%

数値目標	達成のための方策	
採用・登用の目標		
女性研究者の在職比率を12%以上	採用率・離職率の改善	
女性研究者の採用者比率を18%以上	「同等の能力では、女性優先」の方針。 支援環境・制度の広報。公募方法の工夫。	
女性の <b>教授相当者の採用(現状はゼロ)</b>	募集/審査方法の工夫。	
子育て・介護による離職率をゼロ	支援体制・情報の整備	
研究開発力の向上		
競争的研究 <b>資金獲得額を2倍以上</b>	<u>研修体系</u> の強化。 <u>メンター制度</u> 、 <u>セミナー</u> 等	
論文投稿等の件数を1.5倍以上		

その他、<u>意識啓発</u>、女性職員の<u>人事制度理解の向上</u>、<u>人事プロセスへの参画促進</u>など。

