

INYAS Flagship Event for Post-PhD Opportunities

# Post-doctoral Research in Japan

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JICA FRIENDSHIP 2.0

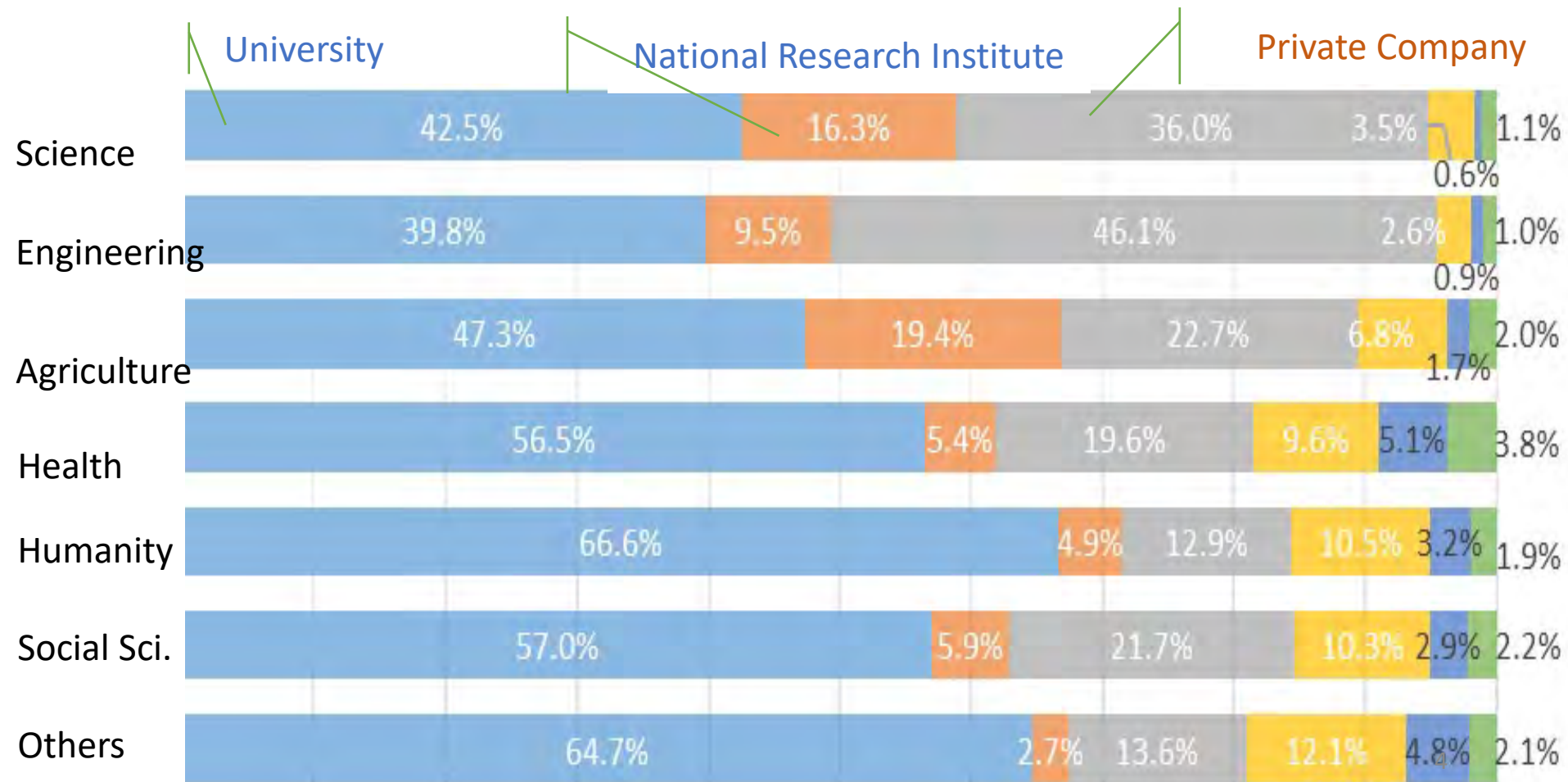
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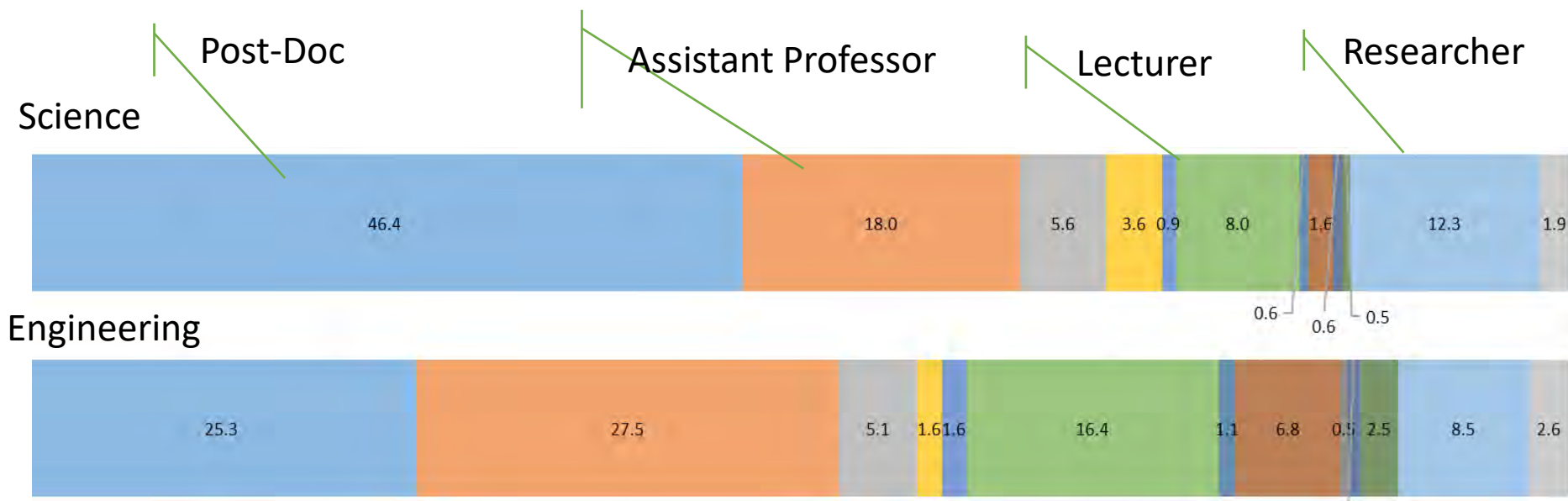
# 1. Post-doctoral Career in Japan

# Situation of 1.5-year Old Post-doctors

Profession of post-doctors who have completed doctoral programs in 2018 (70% Japanese, 1 % Indian) as of 2020:



Position of those who are working in the academic sector (university/national Institute):



Almost 40 % receive annual income between USD 35,000 and 55,000.

## 2. International Post-doctoral Research Opportunities in Japan

- JSPS Fellowship
- Positions at Universities and National Research Institutes (RIKEN, AIST, NIMS)
- Employment at Companies

# JSPS International Fellowship

[https://www.jsps.go.jp/english/e-inv\\_researchers/index.html](https://www.jsps.go.jp/english/e-inv_researchers/index.html)

(JSPS: Japan Society for Promotion of Science)

- **“Postdoctoral Fellowships for Research in Japan”** for young researchers (within 6 years of degree acquirement)  
Standard Program (12 to 24 months duration)  
To provide opportunities for postdoctoral researchers from other countries to conduct, under the guidance of their hosts, cooperative research with leading research groups in universities and other Japanese institutions.
- **“Invitational Fellowships for Research in Japan”** for mid-career and senior researchers (professor level)

# Positions at Universities

- Academic positions at universities (official recruitment by universities; responsible for education and research)

e.g. Job Information of the University of Tokyo

<https://www.u-tokyo.ac.jp/en/about/jobs.html>

Open Positions (Faculty and Research Positions)

- Pos-doc positions under research projects (recruitment by project leaders; contribution to the project goal)

e.g. Open Jobs of Kyoto University

<https://www.kyoto-u.ac.jp/en/jobs/open>

e.g. Program-Specific Researcher (Postdoctoral Fellow) in Radar Ecology, Biosphere Informatics Lab, Graduate School of Informatics



# Positions at RIKEN

<https://www.riken.jp/en/>

- Program for Junior Scientists

<https://www.riken.jp/en/careers/programs/index.html>

- Special Postdoctoral Researchers Program: three-year (excluding maternity and/or childcare leave period) fixed-term contract positions
- RIKEN Hakubi Fellows Program: junior PI positions

- Job Openings

<https://www.riken.jp/en/careers/openings/index.html>

e.g. RIKEN Center for Quantum Computing Semiconductor Quantum Information Device Research Team-Seeking a Research Scientist or Postdoctoral Researcher

# Positions at AIST

[https://www.aist.go.jp/index\\_en.html](https://www.aist.go.jp/index_en.html)

(AIST: The National Institute of Advanced Science and Technology)

- Job Opportunities

[https://www.aist.go.jp/aist\\_e/humanres/index.html](https://www.aist.go.jp/aist_e/humanres/index.html)

AIST welcomes applications for research scientist positions from worldwide

- AIST Postdoctoral Researcher (by Department)

e.g. Department of Energy and Environment

[https://unit.aist.go.jp/riecen/recruit/index\\_en.html](https://unit.aist.go.jp/riecen/recruit/index_en.html)

Researcher with a Ph.D. degree and enough capability for pursuing research independently

ENEENV-13: Research and Development on Secondary Batteries

ENEENV-14: Research and Development on elemental technologies for Fuel Cells and Water Electrolyzers

# Positions at NIMS

<https://www.nims.go.jp/eng/index.html>

(NIMS: National Institute for Material Science)

- Recruit Information

<https://www.nims.go.jp/eng/employment/index.html>

- Permanent Employee (Researcher/Engineer)

- e.g. Researcher in Material Science (NIMS)

- Researcher in Nanophotonics Materials (NIMS Research Center for Functional Materials)

- Fixed Term Employee

- NIMS Postdoctoral Researcher/Engineer)

- Postdoctoral Researcher

- (e.g. NIMS Center for Advanced Measurement and Characterization)

- Special Open Call (Case by case)

- e.g. Leaders Promoting World-Top-Class Research in Materials Science, A few positions are available

# Employment at Private Companies

- JREC-IN by JST (Japan Science and Technology Agency)

<https://jrecin.jst.go.jp/seek/SeekTop?fn=2&ln=1>

**Career support portal site** for all researchers and research staff who are pioneering innovation

- Other Sites for Job Search

e.g. Career Cross (search by “Research and Development)

<https://www.careercross.com/en/job-search/category-3113>

e.g. Dai Job.com

[https://www.daijob.com/en/jobs/search\\_result?job\\_types\[\]=1806&jt\[\]=1806](https://www.daijob.com/en/jobs/search_result?job_types[]=1806&jt[]=1806)

# 3. Important Points for Obtaining Positions

# JSPS Fellowship (Standard Program)

<https://www.jsps.go.jp/english/e-fellow/application-22.html>

- “Applicant” is the host researcher.
- Application must be submitted to JSPS through the host institution.

Therefore

- **Communication with the host researcher** is most critical for successful application.
- **Quality of research outputs** must be very high in order to proceed to the next step.

# Universities and National Institutes

- Some professors (PIs) have **large research grants** and will be able to prepare a position for postdoctoral researchers.
- **Direct contacts with active PIs** may help you access an excellent postdoctoral position.

Once you get the position:

- The host professor/PI expects you to make **a significant contribution to her/his research project.**
- **Collaboration among researchers and graduate students** is also essential in Japanese universities.



## 4. Some Cases of JICA FRIENDSHIP Scholar

- (i) Pos-doc at a national research institute in Japan  
---> IIT faculty member
- (ii) Pos-doc at a university in Japan  
---> Private company in Japan
- (iii) Researcher for a private company in Japan  
---> continue the job
- (iv) Researcher for a private company in Japan  
---> Entrepreneur in India (IITH-based)



# The Project for **F**uture **R**esearchers at IITH to **E**nhance **N**etwork **D**evelopment with **S**cholarship of Japan (FRIENDSHIP)



- Phase 1 (2012-2020) provided IITH graduates with 133 scholarships for postgraduate studies at Japanese universities.
- Phases 2 (2021-2027) will dispatch 30 IITH master holders to Japanese universities for doctoral degrees.

Establishing **a sustainable academic and industrial research network** between India and Japan at IITH

# Variation of Career Path

- (i) Pos-doc at a national research institute in Japan  
---> IIT faculty member

Dr. M.K. Pal

- 2012 M.Tech (Department of Civil Engineering) Indian Institute of Technology Hyderabad (IITH)
- 2015 Ph.D. (Graduate School of Engineering, The University of Tokyo)
- 2016 Postdoctoral researcher at National Research Institute for Earth Science and Disaster Resilience (NIED)
- 2021 Assistant Professor (Department of Civil Eng. IIT(BHU), Varanasi)

(Collaboration with NIED researchers)

(ii) Pos-doc at a university in Japan  
---> Private company in Japan

Dr. Tanima Biswas

2012 M.S (Department of Chemistry) Indian Institute of Technology Hyderabad (IITH)

2016 Ph.D. (Graduate school of Advanced Science and Engineering, Waseda University)

2017 Postdoctoral researcher at Kumamoto University (Pharmaceutical Sciences)

2021 Kameda Seika (R&D Specialist->Strategic Planner, also in charge of **new global business set-up**)

(iii) Researcher for a private company in Japan

Dr. Mohit Joshi

2012 M.Tech (Materials Science & Engineering) IIT  
Hyderabad

2017 Ph.D. (Materials Science & Engineering, Graduate  
School of Engineering, Kyoto University)

2017 **Research engineer**, NSK Ltd. (**Japan**)

(India: <https://www.nsk.com/in/#>)

(iv) Researcher for a private company in Japan  
---> Entrepreneur in India (IITH-based)

Dr. R Sai Chandra Teja

2012 M-Tech IIT Hyderabad- Microelectronics & VLSI

2015 Graduation from the doctoral program, Osaka University

2016 Researcher (Center for Semiconductor Research and Development, Toshiba Corporation-rebranded KIOXIA, Institute of Memory Technology Research Center)

2020 Ph.D. (Department of Electrical, Electronics and Information Engineering, Graduate School of Engineering, Osaka University- Semiconductor Integrated circuits lab)

2020 Founder of CKM VIGIL Pvt Ltd (inside IITH)- Artificial Intelligence, Machine learning, Deep learning, Video Analytics

2021 Founder of Green PMU Semi Pvt Ltd (incubated at FabCI IITH)- Semiconductor Energy Harvesting IC- Product

Postdoctoral careers are diversified.

Enjoy!



Thank you for listening.