# Hitachi Scholarship Research Support Program for 2019



## **Application Guidelines**

The Hitachi Global Foundation (hereinafter referred to as "the Foundation") aims to contribute to achieve the Sustainable Development Goals (SDGs) \* by solving social issues through the promotion of Science and Technology.

The Foundation carries out the Hitachi Scholarship Research Support Program (hereinafter referred to as "the program"), that offers research support grants (hereinafter referred to as "the grants") to the faculty members of eligible universities in Southeast Asia who wish to conduct collaborative researches that contribute to solving social issues at universities or research institutions in Japan.

\* "The Sustainable Development Goals (SDGs)" are a collection of 17 global goals be achieved by 2030, adopted by the United Nations in 2015 within the "2030 Agenda for sustainable development". SDGs are not just a blueprint but a comprehensive action plan for governments, businesses and communities to work together to create a better world. UN: https://www.un.org/sustainabledevelopment/sustainable-development-goals/

#### 1. Applicant Eligibility

Applicants must satisfy all the following criteria:

- (1) PhD holder
- (2) Faculty member of the eligible universities shown in Appendix.1
- (3) Under the age of 46 as of October 31, 2018

#### 2. Research Areas

The program targets basic and applied researches in science and technology that contribute to achieve the Sustainable Development Goals (SDGs) by solving social issues in the following three areas. The details of each area and SDGs are shown in Appendix.2

- (1) Energy, Environment
- (2) Urban Development, Transportation
- (3) Healthcare

#### 3. Research Duration

Applicants must propose the research duration after consultation with host scientists, considering the following conditions.

- (1) Duration: 6 12 months (182 days as minimum, 365 days as maximum)
- (2) Starting date: The day of fellows' arrival in Japan, which must be no later than 31 March 2020. The result of the selection will be announced in middle of March 2019. In order to decide the starting date, applicants must consider enough time to obtain visa and other necessary preparations that usually takes a few months.
- (3) Ending date: The day of fellows' departure from Japan.

(4) Condition: Fellows must reside in Japan continuously over the duration of their fellowships. The duration of the fellowship may not be divided into multiple stays.

#### 4. Contents of the Grants

Contents of the grants are the followings.

- Maintenance allowance: 6,000 yen per day The number of days will be counted from the day of fellows' arrival in Japan to the day of fellows' departure from Japan, based on the fellows' boarding pass, as 23:59 is the end of the day.
- (2) Travel allowance: From 80,000yen to 150,000 yen The rates will be applied based on the locations of countries where fellows' home universities locate, and Japanese prefectures where host universities or institutions locate, as shown in Appendix.3.

#### 5. Selection Process and Schedule

The selection process and schedule is the following. The international office of each eligible university is where applicants must contact to acquire information in the first place. Through the call for applications to the notification of result, any important information will be directly sent to each international office.

Early July	< Call for Applications >	
End of October	< Application Deadline >	
November – December	Screen application documents	
January – February	Conduct interviews with applicants	
January – February	Conduct hearings from host scientists	
Early March	Hold a selection committee	
Middle of March	< Notification of Result >	

#### 6. Application

#### 6-1. Call for applications

The Foundation will send the information to each eligible university by e-mail. Each eligible university will distribute the information to the potential applicants within the university.

#### 6-2. Application documents to be submitted

Applicants must submit the following documents in English.

 Application Form: Type-written (Hand-writing is not accepted). Attached photograph of the applicant taken within 6 months. Submit in the form of original Microsoft Word Format

(Please do not convert the file into any other formats).

- (2) Certificate of PhD: In English, otherwise the translation in English must be attached. Submit in PDF-scanned version (Photo-copy version is not accepted).
- (3) Letter of Recommendation: Must be filled and signed by the head or dean of the faculty where the applicant belong to. Submit in PDF format.
- (4) Letter of Acceptance: Must be filled and signed by host scientist. Submit in PDF format.
- (5) Papers published by the applicant: As reference for the selection committee to use in evaluating the application. Submit no more than three papers.

#### 6-3. Selection Criteria of Application Documents

Application documents will be evaluated based on the following criteria.

- (1) Importance of the social issue
- (2) Originality and innovativeness of the research
- (3) Clarity of research objectives and validity of research methods
- (4) Feasibility of research plan
- (5) Appropriateness of research duration in Japan
- (6) Others

#### 6-4. Submission Methods and Deadline

Application documents must be endorsed by the president office of the applicant's university and be submitted to the following e-mail address through the said office **by October 31, 2018**. Neither personal nor direct application from applicants to the Foundation is accepted.

#### E-mail address: hitachizaidan@hdq.hitachi.co.jp

Application must be submitted with all the required documents. Any applications missing required documents will be automatically rejected. The Foundation reserves the right to request any other additional documents or information.

#### 7. Screen application documents

Application documents will be divided into three research areas: (1) Energy and Environment, (2) Urban Development and Transportation, (3) Healthcare, and screened by professors or experts of each area.

#### 8. Interviews with applicants

The foundation will conduct interviews with applicants by Skype or Telephone during January to February 2019. The interview schedule will be informed to applicants though the international offices of each eligible university in January 2019.

#### 9. Hearings from host scientists

The foundation will conduct hearing from host scientists by visiting or Telephone during January to February 2019. The foundation will confirm with host scientists about the appropriateness of research duration in Japan, considering applicants' research plans. As a result, taking account of host scientist opinions, approved research durations may shorten or lengthen compared with proposed ones by applicants.

#### **10. Selection committee**

The Selection committee consisted of professors, experts and the delegate of the Foundation will be held in early March 2019.

#### 11. Notification of Result

The result will be sent to each eligible university by e-mail in the middle of March 2019. Each eligible university will inform the result to applicants.

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#### 12. Preparation for Entry to Japan

Fellows must contact host scientists to fix the research schedule and start preparation for entry to Japan.

#### 12-1. Fix schedule

Fellows must consult with host scientist to fix the research schedule. Fellows must consider enough time to obtain visa and other necessary preparations for both applicants and host scientists and agree between them.

#### 12-2. Obtain visa

Fellows must contact the Japanese Embassy or Consulate General in their countries to confirm the procedure for a valid entry visa, including the documents required to obtain the visa. The foundation is not in a position to answer inquiries or make an arrangement regarding visa applications.

#### 12-3. Flight ticket

Fellows are responsible for arranging their flights. They must send a copy of e-ticket to the Foundation by e-mail. The foundation will calculate the number of the days and fix the amount of maintenance allowance.

#### 12-4. Insurance

Fellows are responsible for arranging their travel insurances by themselves. Non-Japanese residents with residence cards who will stay more than 3 months must join National Health Insurance (NHI). They can apply for NHI at the designated counter of the municipal office.

#### 12-5. Accommodation

Fellows are responsible for finding their accommodation in Japan. As some universities and institutions have their own accommodations, it is recommended to inquire host scientists about those availabilities.

#### 13. Visit to The Foundation

Fellows are requested to drop by The Foundation in Tokyo before going to the place of host universities or research institution to talk about their research and to receive the grant.

#### 14. Receive Grant

Fellows will receive the amount of first three months' maintenance allowance and travel allowance by cash at the office of The Foundation. The rest of amount will be sent to the address of fellows' universities or institutions or accommodations in Japan by money order divided into several times (approx. every three months).

#### 15. Liaison

Fellows should keep close contact with the Foundation and keep them informed of any change of their address or other pertinent matters.

#### 16. Compliance with the Laws and Regulations

Fellows must abide by the laws and regulations of Japan.

#### 17. Suspension or Termination of the Fellowship

Fellows must stay in Japan during the research period and devote themselves full-time to their intended research.

Fellows shall not be employed in Japan with or without remuneration during the period of research unless such employment has been specifically approved by The Foundation. The Foundation may withdraw the fellowship and terminate payments if it judges that the foregoing terms and conditions are not observed in good faith.

#### 18. Reporting Responsibility

Fellows must submit their research reports to The Foundation within one month after leaving Japan, using the designated format. In principle, the report will be posted on the Foundation website. In addition, if necessary, fellows will be asked to give a presentation of the result of their research.

When the research is presented for publication or dissemination, The Foundation's support should be acknowledged in an appropriate way. A copy of such publication or offprint is requested to be sent to the Foundation.

#### 19. Effectiveness of the Guide

This Guide shall be applicable to the fellows selected for the year 2019.

#### < Contact Details >

The Hitachi Global Foundation Tel: +81-3-5221-6679 E-mail: <u>hitachizaidan@hdq.hitachi.co.jp</u>

## Appendix 1: Eligible Universities (alphabetical order)

#### Indonesia

Bandung Institute of Technology Gadjah Mada University Institut Teknologi Sepuluh Nopember University of Indonesia

#### Malaysia

University of Malaya University of Technology Malaysia

#### Singapore

The National University of Singapore

## Thailand

Chiang Mai University Chulalongkorn University Khon Kaen University King Mongkut's Institute of Technology Ladkrabang King Mongkut's University of Technology Thonburi

## **The Philippines**

University of the Philippines (Diliman, Los Banos)

#### Vietnam

Hanoi University of Science and Technology Ho Chi Minh City University of Technology

## **Appendix 2: Research Areas**

The program targets basic and applied researches in science and technology that contribute to achieve the Sustainable Development Goals (SDGs) by solving social issues in the following three areas. Applicants must choose one research area. The following table shows examples of keywords and research topics in each area.

Research Areas	Keyword	Research Topics		
Energy,	Connection with	Ecosystem services and biodiversity, etc.		
Environment	society, Social system			
	Energy systems,	Solar batteries, artificial photosynthesis, fuel cells, thermoelectric		
	Energy network	conversion, electrical storage devices, power semiconductor devices,		
		green catalysts, etc.		
		Distributed power, renewable energy and fusion systems, energy		
		network technology, etc.		
		High efficiency energy services, supply and demand management		
		systems that utilize consumer resources, etc.		
	Production and	Green technology (zero emissions, environmental impact planning),		
	consumption	recycling technology for developing countries (small-scale bio-gas		
	*	equipment), etc.		
	ICT	Links between the environment and ICT platforms (AI, Internet of		
		Things, big data, robotics)		
		Social impact of ICT advancements, risk management		
	Observation and	Environmental monitoring on a global scale (remote monitoring		
	measurement	surveys), etc.		
Urban	Connection with	Disaster prevention, disaster reduction (urbanization and damage		
Development,	society,	minimization in large-scale disasters, disaster surveillance satellites,		
Transportation	Social system	etc.)		
		Compact cities, area management, sustainable living, etc.		
	Social Infrastructure	National, urban and regional planning (land use, infrastructure		
		development, etc.)		
		Transportation engineering, urban engineering, civil engineering, hydro		
		engineering, infrastructure, etc.		
		Safe water supply systems, drainage and other water treatment systems,		
		membranes, ingredients, etc.		
		Service management, transportation supply management, etc.		
	Next generation	Next-generation urban transportation systems (autonomous cruising		
	mobility technology	systems, mobility services, etc.)		
		Security and safety, social impact and risk management		
	ICT	HMI (voice recognition, image recognition, etc.)		
		Developing technologies for using GNSS and GIS for cities and		
		transportation, etc.		
Healthcare	Connection with	Ethical, legal, and social issues accompanying regenerative medical		
	society, Social system	science; medical care enhancement, etc.		
		Regulatory science, individualized treatments (order-made treatment),		
		medical examinations, heath management, etc.		
	Next generation basic	Organism imaging, trans-omics (integrated omics analysis),		
	technology	microbiomes, big data in the field of life sciences, etc.		
	Nanotechnology,	Medical biomaterials, nanomedicine delivery systems, nano measuring,		
	materials	diagnostic devices, nano imaging, etc.		
	Regenerative	Materials for regenerative medicine, etc. Medical equipment, medical imaging, medical robots, assistive products, etc. Life, health and medical informatics, practical use of ICT platforms in medical treatment (AL Internet of Things him data reheation)		
	medicine			
	Medical engineering			
	ICT			
	ICT			
		medical treatment (AI, Internet of Things, big data robotics)		

## ■ Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs) are a collection of 17 global goals set by the United Nations in 2015. Applicants must choose one or more goals that they can contribute though their research.



1	End poverty in all its forms everywhere			
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture			
3	Ensure healthy lives and promote well-being for all at all ages			
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all			
5	Achieve gender equality and empower all women and girls			
6	Ensure availability and sustainable management of water and sanitation for all			
7	Ensure access to affordable, reliable, sustainable and modern <b>energy</b> for all			
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and			
	decent work for all			
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation			
10	Reduce inequality within and among countries			
11	Make cities and human settlements inclusive, safe, resilient and sustainable			
12	Ensure sustainable consumption and production patterns			
13	Take urgent action to combat <b>climate change</b> and its impacts			
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development			
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests,			
	combat desertification, and halt and reverse land degradation and halt biodiversity loss			
16	Promote <b>peaceful</b> and inclusive societies for sustainable development, provide access to <b>justice</b> for all and			
	build effective, accountable and inclusive institutions at all levels			
17	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable			
	Development			

## **Appendix 3: Travel Allowance**

The different rates will be applied to different fellows based on the locations of countries where fellows' home universities locate, and Japanese prefectures where host universities or institutions locate as shown in the following table.

Host	Ibaraki,	Aomori, Iwate, Miyagi, Akita,	Hokkaido, Shimane, Hiroshima,
Location	Tochigi,	Yamagata, Fukushima, Niigata,	Yamaguchi, Tokushima,
	Gumma,	Toyama, Ishikawa, Fukui, Yamanashi,	Kagawa, Ehime, Kochi,
Home	Saitama,	Nagano, Gifu, Shizuoka, Aichi, Mie,	Fukuoka, Saga, Nagasaki,
Location	Chiba, Tokyo,	Shiga, Kyoto, Osaka, Hyogo, Nara,	Kumamoto, Oita, Miyazaki,
	Kanagawa	Wakayama, Tottori, Okayama	Kagoshima, Okinawa
Philippines	80,000 yen	110,000 yen	130,000 yen
Vietnam			
Thailand			
Malaysia	100,000 yen	130,000 yen	150,000 yen
Singapore			
Indonesia			

## Handling of personal information

Personal information that The Foundation received from applicants will only be used in the purpose of operating this program (selection of applicants, notification of result, administrative tasks, etc.) The Foundation absolutely will not disclose this information to third parties, and will not use it for any purposes other than conducting the program.