JICA Knowledge Co-Creation Program (Long-Term Training)

General Information for ALL Applicants on

Human Resources Development in the Mining Sector

(KIZUNA Program)

("Human Resources Development in the Mining Sector (JFY2020)" and "Human Resources Development for Electricity and Energy Sector (JFY2020)")

国別研修

「資源分野の人材育成プログラム」(資源の絆プログラム)

This information pertains to one of the Japan International Cooperation Agency (JICA)'s Knowledge Co-Creation Program (Long-Term Training). This program will be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both governments.

1. Background

Mineral resources development is one of the most effective means for developing countries to develop their industries. The effect of mineral resources development has a great impact on the society and economy of the countries concerned. It often comes with infrastructure development and regional development. And it also contributes to developing human resources, such as engineers and technicians, in various fields related to the mineral industry.

The global demand for mineral is expected to increase in line with the long term prospects for world economic growth. Under these circumstances, developing countries with mineral potential are striving to promote mining industries. These countries are placing more importance on mining activities to support future economic development.

However, governments of developing countries need more capacity and knowledge to promote and regulate mining companies. In order for foreign mining companies to make decisions to participate in mineral businesses of developing countries, there are many aspects that need to be clarified, such as the existence of sound legal systems and their enforcement, basic geological information, infrastructure, political and/or social risk, and security risk.

In the meantime, developing countries endowed with mineral resources require a great amount of capacity and knowledge for their sustainable development, such as proper mineral resources management, establishing sound legal systems, and aspects of resource exploration such as closing mines, mine safety, mine pollution countermeasures, socio-economic measures surrounding mines, public finance system, and environmental measures.

2. Objectives

The objective of the Training Program for Human Resources Development in the Mining Sector is to develop capacity of governmental officials, educators and researchers who contribute to the mining development in developing countries. This program offers opportunities for such personnel to study at graduate courses for master's degree / doctorate degree in Japanese graduate schools as international students (hereafter referred to as participants) and experience internships at Japanese institutes and firms.

Beyond acquisition of skills and knowledge, this program also aims to have the participants understand and familiarize themselves with Japanese culture and systems. The expected outcome of the program is to develop a network of potential contributors to the mining development in the development countries.

3. Program Outline

- (1) Program Title: Human Resources Development in the Mining Sector (KIZUNA Program)
- (2) Language of the Program: English

(3) Contents of the Program

Orientation in Tokyo	Participants will have orientation at the beginning of the program mainly in Tokyo including briefing about the KIZUNA Program, courtesy call to related organizations, etc.
Research Student Program (6 months)	Research students are part-time students who utilize their time to prepare for the entrance examination of graduate course students. Research students are able to participate in lectures, receive instruction from the supervising professors and make use of university's facilities. The maximum period for being a research student is six months in principle. Participants are required to prepare for entrance examination of the respective graduate course. Note: 1. Participants who failed entrance examination will be required to return to their home countries. 2. Necessity of research student program will be considered based on interviews with professors of respective Japanese universities.
Graduate Course Program (2 or 3 years)	Master's degree course / Doctorate degree course Lecture and practice Research works for the thesis Field research in Japan and/or home country * Field research is to be planned in accordance with the research theme and upon consultation with the supervising professor.
Additional Special Program (Short-term Programs and Internship)	 JICA Short-term Program before graduation of university (Mining Policy and Management Course, Observation tours to sites, institutions and firms in Japan) Participants have Internship program in Japanese company, etc. during their stay in Japan. Basically it should be conducted before graduation of university, but it is also possible to have internship after graduation, with a maximum of 6 months.

4. Duration

	From:
	End of Sep. 2020
Master's Degree	То:
Course Participant	End of Sep. 2022 (minimum) - End of Sep. 2023 (maximum)
	 6 Months as a Research Student if necessary 2 years as a master's course student From 1 week up to 6 Months as an internship trainee.

	Internship might be arranged after the completion of graduate course in university. - Overall duration shall not exceed 3 years, in principle.
Doctorate Degree Course Participant	From: End of Sep., 2020 To: End of Sep., 2023 (minimum) – End of Sep., 2024 (maximum) - 6 Months as a Research Student if necessary - 3 years as a doctoral course student - From 1 week up to 6 Months as an internship trainee. Internship might be arranged after graduation of university. - Overall duration shall not exceed 4 years, in principle.

It is considerable that candidate apply Master's Degree Course and Doctorate Degree Course in succession, also 5-year Doctorate Course (basically only for educators/ researchers).

5. Target Countries

Mining: Indonesia, Philippines, Vietnam, Myanmar, Cambodia, Laos, Fiji, Papua New Guinea, Mongolia, Kazakhstan, Ecuador, Bolivia, Malawi, Angola, Botswana, Mozambique, Madagascar, Zambia, Tanzania, Zimbabwe, Namibia, South Africa, and Iran Geothermal: Indonesia, Philippines, Peru, Ecuador, Costa Rica, Kenya, Ethiopia, and Djibouti

6. Target Participants

This program is designed for the following two types of personnel.

Governmental Officials (Technocrats)	Technocrats who take part in policy making and administration related to mineral resources development in central/regional government, governmental research institutions or other related public organizations	
(Teelinocrats)	in the mining sector. Mainly for Master's degree.	
	Individuals who are responsible for education and research in the	
Educators/	mining sector in Higher Education and TVET (Technical and Vocational	
Researchers	Education and Training) institutions in target countries. Mainly for	
	Doctor's degree.	

Candidates are to be nominated by Japanese related Organizations and Universities to further the program's aim of development of the mining sector in each country.

7. Numbers of Participants

Around 20 participants from all the target countries.

8. Fields of Study at Japanese Universities

This program targets fields listed as below.

Economic Geology / Energy Geology / Sedimentology / Petrology

Applied Geophysics / Exploration Geophysics

Geochemistry

Reservoir Engineering

Resources Production and Safety Engineering
Engineering Rock Mechanics / Mining Machinery
Petroleum and Geothermal Engineering / Energy Resources Engineering
Mineral Processing and Recycling / Environmental Remediation

Please be sure to visit the website of listed university below to choose your respective courses, supervisor to apply.

<List of Universities>

- Graduate School of Engineering and Resource Science, Akita University http://www.eng.akita-u.ac.jp/eng/
- Department of Earth Resources Engineering, Graduate School of engineering, Kyusyu University, http://www.mine.kyushu-u.ac.jp/english/info_daigakuin.html
- Course of Sustainable Resources Engineering, School of Engineering, Hokkaido University http://www.eng.hokudai.ac.jp/edu/course/rescirc/index_e.html
- Department of resources and Environmental Engineering, School of Creative Science and Engineering, Waseda University
 - http://www.cse.sci.waseda.ac.jp/en/
- Department of Civil and Earth Resources Engineering Graduate School of Engineering, Kyoto University
 - http://www.ce.t.kyoto-u.ac.jp/en
- Graduate School of Environmental Studies, Tohoku University http://www.kankyo.tohoku.ac.jp/en/
- Department of Systems Innovation, Graduate School of Engineering, The University of Tokyo http://www.u-tokyo.ac.jp/en/academics/graduate_schools.html
- Graduate School of Life and Environmental Sciences, University of Tsukuba http://www.geol.tsukuba.ac.jp/index-e.html

9. Additional Programs for KIZUNA participants

Every participant need to participate JICA Short-term Program ("Mining Policy and Management" and "Observation Tours") and Internship Program at related institutions. Both program will be held during the vacation period or after graduation. All programs are carried out in English. Cost to attend the program will be born by JICA. Details of internship schedule will be considered through consultation with supervising professor (or JICA).

10. Application Qualifications and Requirements

Applicants shall satisfy the following requirements:

(1) Nationality	Citizens of the target countries
(2) Education	For Master's degree course:
	- At least 16 years of academic background or equivalent
	- A bachelor's degree
	For Doctorate degree course:
	- At least 18 years of academic background or equivalent

Japan International Cooperation Agency

	- A Master's degree
(3) Working Experience /Status	Applicants from government sectors / educators are required;
	 to have more than 6 months working experience at their current organizations, and to obtain permission for application and securing reinstatement from their current organizations.
(4) English Proficiency	 Adequate English proficiency, both in written and oral communication, in order to complete the master's/ doctoral degree. In case of IELTS, score over 5.5 is preferred. Applicants should submit any one of the score of TOEFL, IELTS or TOEIC. Some universities have their own requirement score for English skill. Minimum English proficiency requirement for Hokkaido University admission is as below. TOEFL iBT 79 TOEFL PBT 550 IELTS 6.0 TOEIC730 (Applicants whose native language is English, or who graduated or expected to graduate from a full time Bachelor's / Master's degree program of which the medium of instruction is English are exempted from submission of scores.) ※ Applicants who apply to Hokkaido university must submit official English score together with their application documents or separately not later than language 15, 2020
(5) Understanding of	January 15, 2020. - Applicants are required to have clear understanding of
the Program	the objectives of the Program, and have a strong will to contribute to the development of the mining sector in their home countries as well as to strengthen the linkage between their countries and Japan after returning home country.
(6) Others	 Applicants must; be both physically and mentally fit for the program, not be receiving nor applying for scholarship offered by other organizations, Applicants might be required to attend the activities on the weekends/ holidays in unavoidable circumstances (ex. official exam). Though the number of female participants has been limited



so far, female participants are encouraged to apply for the
program.

11. Procedures and Required Documents for Application

Each applicant is required to submit the following documents by the deadline set by JICA Office in the applicants' country.

Application Documents

- (1) Application Form (Annex 1) consists of;
 - Declaration of desired university placement: 1st and 2nd choice
 - Personal Information
 - · Research plan
 - Education Background
 - Work Experiences
 - Details of Current and Previous Employment
 - Career Plan after completion of KIZUNA program
 - · Research plan
 - Consent for joining this program from current employer /organization
- (2) Undergraduate degree graduation certificate/ Master's degree completion certificate
 - * Must contain all the grades earned in the university.
 - * Officially certified copies of the original.
 - * Written in English or accompanied with official translation in English.
- (3) Academic transcript
 - * Must contain all the grades earned in the university.
 - * Officially certified copies of the original.
 - * Written in English or accompanied with official translation in English.
- (4) A letter of recommendation (Annex 2) from home country's government.
- (5) A copy of valid Passport with photo (for checking nationality, name, sex, and date of birth. National ID and birth certificate are acceptable if you do not have valid Passport. Certified English translation must be attached if ID is not written in English)
- (6) Two (2) ID Photos (4 cm × 3 cm) pasted on application form (Original and copy) and another 6 same photos.
- (7) Score of English proficiency examination See "10. Application Qualifications and Requirements", "(4) English Proficiency".
- (8) Check List (Annex 3)
- (9) Health certificate to be submitted after the Selection

12. Application Period

Complete set of application documents must be submitted to JICA Office in your country not later than 13th Dec. 2019.

13. Selection Procedures

- * Any costs incurred during the selection procedures including travel expenses to selection venues will NOT BE COVERED by JICA.
- * The reasons for disqualification on each selection procedure will NOT BE DISCOLSED.

(1) Selection Procedures

[1st Step] Screening of the Application Documents by JICA

Period: Dec. 2019 - Feb. 2020

JICA will conduct it's own screening whether the applicants meet the program's purpose and qualification set by JICA. JICA will share the information of qualified applicants with Japanese university.

[2nd Step] Screening of the Application Documents by Universities

Period: Feb. 2020 – Mar. 2020

Japanese universities will examine the documents to match applicants with the courses / supervisors, and may select candidates for the 3rd selection.

[3rd Step] Interview by University and JICA

Period: Mar. 2020 - May 2020

Venue: JICA Office in your country through video conference

Applicants who passed 2nd Step will have interview through video conference with faculty member of the Japanese university and JICA Headquarters (Tokyo).

(2) Announcement of result of the selection

JICA will inform candidates with result of the selection by the end of May 2020.

(3) Others

JICA might offer the candidate universities that are not stipulated in the "Declaration of desired university placement" in the Application Form as the result of matching process.

14. Expenses to be borne by JICA

JICA will provide the following expenses for participants in the program.

- A round-trip airfare (actual cost paid to travel agencies)
- Fee for Official Entrance Examination Fee/ Admission/ Tuition Fee (actual cost paid to universities)
- Outfit allowance (general outfit and shipping) (fixed amount)
- Monthly Stipend: living costs and residence, etc. (fixed amount)



- Expenses for support programs during the study in Japan, including the costs of observation tours and internship (actual cost paid to universities, etc.)

(Notes)

- *Above amount of each item will be revised every year.
- *First payment such as monthly stipend after coming to Japan is expected to be in mid-October or late October.
- *Other costs should be covered by the participants' organizations or other individuals.
- *Participants are not allowed to work during their stay in Japan.
- *To invite family to Japan (spouse and children only), participants should be responsible for all expenses, necessary procedure by themselves. JICA does not provide any support or additional financial assistance except issuing necessary documents for the process. JICA strongly recommend participants invite their family AFTER 6 MONTHS upon arrival in Japan.

15. Annex

Annex 1. Application Form

Annex 2. Form of Recommendation Letter

Annex 3. Check List