



Japan International Cooperation Agency

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

### **General Information for ALL Applicants on the Human Resources Development in the Mining Sector ( KIZUNA Program )**

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**

Generally, mineral resources development is one of the most effective means for the developing countries to develop their industries. The effect of mineral resources development is not confined to the mining sector, but also it has a great impact to the society and economy of the country concerned. It often comes with the infrastructure development and regional development. And it also contributes to the human resource development of engineers and technicians in various fields.

In recent years, the global demand for mineral resources has been decreasing due to slowdown of economic growth in China, but the demand is expected to increase by economic growth of world economy in the long term. Under these circumstances, the developing countries with a mineral potential have desired to promote mining industries, and the mining activities will become higher position in supporting the future economic development.

However, governments of developing countries need more relevant knowledge for promoting and regulating mining companies. In order to get the foreign mining companies to participate in the business in the developing countries, there are many aspects to be addressed, such as points like as lack of legal systems, the enforcement systems, basic geological information, infrastructure, political or social risk, and security risk. In the meantime, the developing countries endowed by the mineral resources require a great amount of knowledge for the sustainable development such as proper mineral resources management, sound legal system, and aspects of resource exploration, 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 nurture governmental officials, educators and researchers who contribute to the mining development in the 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 intends to have the participants to understand and get familiar with the contexts of Japanese culture and systems. The expected outcome of the program is 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

<b>Research Students Program</b>	<p>Research students are part-time students who utilize their time to prepare for the entrance examination to be a graduate course student. Research students are able to participate in lectures, receive instruction from professors and make use of university's facilities.</p> <p>The period for being a research student is limited to 6 months. Participants are requested to study for six months, then to take examinations to get into the graduate course. Unsuccessful participants will be required to return to their home countries.</p>
<b>Graduate Course Program</b>	<p>Master's degree course / Doctorate degree course</p> <ul style="list-style-type: none"> <li>- Lecture and Practical Subject</li> <li>- Research works for the thesis</li> <li>- Field Research in Japan and/or Home Country</li> </ul> <p>* It will be planned in accordance with the research theme and the consultation with the supervising professor.</p>
<b>Additional Special Program</b>	<ul style="list-style-type: none"> <li>- JICA Short-term Program (Mining Policy and Management Course, Observation tours to sites, institutions and firms in Japan)</li> <li>- Internship program</li> </ul>

## 4. Duration

<b>Master's Degree Course Participant</b>	<p>Sep, 2017 – Sep, 2019 (March, 2020)</p> <ul style="list-style-type: none"> <li>- 6 Months as a Research Student if necessary</li> <li>- 2 years as a master's course student</li> <li>- From 2 weeks up to 6 Months as an internship trainee</li> </ul>
<b>Doctorate Degree Course Participant</b>	<p>Sep, 2016 – Sep, 2020 (Mar, 2021)</p> <ul style="list-style-type: none"> <li>- 6 Months as a Research Student if necessary</li> <li>- 3 years as a doctoral course student</li> <li>- From 2 weeks up to 12 Months as an internship trainee</li> </ul>

It is considerable that candidate apply Master's Degree Course and Doctorate Degree Course in succession, also 5-year Doctorate Course.

## 5. Target Countries

Mining: Angola, Botswana, Cambodia, Indonesia, Laos, Madagascar, Malawi, Mozambique, Myanmar, Papua New Guinea, Philippine, Tanzania, and Zambia

Geothermal: Djibouti, El Salvador, Ethiopia, Indonesia, Kenya, Papua New Guinea, Peru and Tanzania

## 6. Target Participants

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

<b>Governmental Officials(Technocrats)</b>	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 in the mining sector.
<b>Educators/ Researchers</b>	Individuals who are responsible for education and research in the mining sector in Higher Education and TVET (Technical and Vocational Education and Training) institutions in target countries

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

Allocated numbers of participants in each target country will be designed with respect to each country's situation.

## 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 University>

- 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](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](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.env.waseda.ac.jp/english/outline/index.html>
- 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](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 Special Program for Kizuna participants

Every participant is to participate in JICA Short-term Program (Mining Policy and Management, observation tours) and internship program at related institutions and firms in Japan during the vacation period and after graduation. All programs are carried out in English. Basically, the participant is rewarded or compensated financially. These programs are not fixed, and the matching for internship program will be conducted for every participant respectively based on the consultation with JICA and supervising professors. Implementing schedules of each internship program will be decided in the course of the graduate school program.

## 10. Application Qualifications and Requirements

Applicants shall satisfy the following requirements:

<b>(1) Nationality</b>	- Citizens of the target countries
<b>(2) Education</b>	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 A Master's degree
<b>(3) Working Experience /Status</b>	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..
<b>(4) English Proficiency</b>	- Adequate English proficiency, both in written and oral communication, in order to complete the master's/ doctoral degree. An IELTS score of over 5.5 is preferred.
<b>(5) Understanding of the Program</b>	- Applicants are required to have clear understanding of 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
<b>(6) Others</b>	Applicants must: - both physically and mentally fit for the program, - not receiving or planning to receive a scholarship offered by other foreign organizations, attend the activities on the weekends in unavoidable

	<p>circumstances(ex. official exam)</p> <p>※Pregnant applicants are not recommended to apply due to the potential risk of health and life issues of mother and fetus.</p>
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## 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.

<b>Application Documents</b>	<p>(1) Application Form (Annex 1) consists of:</p> <ul style="list-style-type: none"> <li>• Declaration of desired university placement: 1<sup>st</sup> and 2<sup>nd</sup> choice</li> <li>• Personal Information</li> <li>• Research plan</li> <li>• Education Background</li> <li>• Work Experiences</li> <li>• Details of Current and Previous Employment</li> <li>• Career Plan after Graduation</li> <li>• Research plan</li> <li>• Consent for joining this program from current employer /organization</li> </ul> <p>(2) Undergraduate degree graduation certificate/Master's degree completion certificate</p> <ul style="list-style-type: none"> <li>* Must contain all the grades earned in the university.</li> <li>* Officially certified copies of the original</li> <li>* Written in English or accompanied with official translation</li> </ul> <p>(3) Academic transcript</p> <ul style="list-style-type: none"> <li>* Must contain all the grades earned in the university.</li> <li>* Officially certified copies of the original.</li> <li>* <u>Written in English or accompanied with official translation.</u></li> </ul> <p>(4) A letter of recommendation from home country's government, Japanese company, Embassy of Japan, Japanese university, if you have</p> <ul style="list-style-type: none"> <li>*Additional recommendation letter may require through selection procedure**</li> </ul> <p>(5) A copy of Passport with photo (for checking nationality, name, sex, and date of birth. National ID and birth certificate are acceptable if you do not have Passport. <u>Certified English translation must be attached</u> if ID is not written in English)</p> <p>(4) 2 ID Photos (4 cm × 3 cm ) pasted on application form (Original and copy) and another 6 same photos .</p> <p>(5) Check List(Annex 3)</p> <p>(6) Health certificate to be submitted after the Selection</p>
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## **12. Application Period**

Aug 2016 to Nov 30<sup>th</sup> 2016

## **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 DISCLOSED.

### **(1) Selection Procedures**

#### **[1<sup>st</sup> Step] Screening of the Application Documents by JICA**

Period: Dec 2016 - Jan 2017

JICA will conduct the screening whether the applicants meet the program's aim and match the target fields. JICA will share the information of qualified applicants on this step with the Japanese universities.

#### **[2<sup>nd</sup> Step] Screening of the Application Documents by Universities**

Period: Feb 2017 – Mar 2017

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

#### **[3<sup>rd</sup> Step] Interview by Universities and JICA**

Period: Mar 2017 – May 2017

Venue: JICA Office through video conference

Applicants who passed 2<sup>nd</sup> Step will be interviewed through video conference by faculty member of the Japanese university and JICA Headquarters.

### **(2) Approval of the Successful Candidates**

Successful candidates passing the Selection will be officially approved as participants of the program by the end of May 2016. An official application form for the JICA training of each approved participant will be filled out and officially submitted to JICA for formal procedures.

## **13. Country Report of the Successful Candidates**

Successful candidates are requested to prepare a country report on the following items and make a presentation on the report when they arrive at Japan.

The report should be typewritten in English on A4 size paper (21 cm x 29.5 cm) by MS word/Power Point data within 10 pages. It is assumed that participants should bring economic and social statistics or development plans of their country in addition to the country report, when they come to Japan. You may utilize the information for conducting your own research at the graduate school.



The time allocation of the presentation is limited 15 minutes for each participant. The participants are requested to highlight major problems and points in the presentation.

<Contents of the Country Report>

1. Background information

- (1) Name of participant and country
- (2) Overview of organization which participants belong to.

2. Overview of your country

- (1) Economic conditions
  - a) The role of mining industry in the overall economy of your country
- (2) Mineral resources statistics
  - a) Mineral resources reserves and the amount of production, domestic consumption and export
  - b) The development of major resources (place, type of minerals, the amount of production, etc.)
  - c) The capacity of mineral processing and smelting
- (3) Mineral resources policy
- (4) Cooperation from foreign countries in the mining sector
- (5) Challenges and issues in the mining sector

3. Your career and activities in the mining sector

- (1) Academic background
- (2) Recent issues and activities on your job in your belonging organization

4. Your research plan and expectation in Japan

## **14. General Rules and Conditions of Participants**

### **(1) Expenses to be borne by JICA**

JICA will provide the following expenses for participant of the program which is equivalent to similar JICA schemes.

- Tuition at Japanese university master's degree programs
- Allowances for living expenses, outfit, shipping etc. See the box below for more details.
- A round-trip airfare
- Expenses for support programs during the study in Japan, including the costs of observation tours

Other costs should be covered by the participants' organizations or other individuals.

\*Participants are not allowed to work while 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 inviting family AFTER 6 MONTHS upon arrival in Japan.

\*Revised in April 2012

Allowance Item	Amount of payment	Frequency
Tuition	Actual cost	Each semester
Living allowance*1	¥144,000 ~ ¥147,000	Every 2 months
Air fee	Actual cost	2 times (arrival and return)
Outfit allowance (general outfit and shipping )	¥106,000	1 time (month of first arrival)
Preparation allowance	¥54,000	1time
Moving allowance (lump-sum payment for rental contract)	¥190,000 (maximum) (West Japan ¥210,000)	1time
Books*2	¥30,000 / year	Every 2 months( by dividing the amount to the daily basis)
Interior research *2	¥50,000 /year	Every 2 months( by dividing the amount to the daily basis)

\*1: Living allowance may be deducted if the participant receives financial or in-kind support by a company/ an organization.

\*2: Total amounts per year of allowances of Books and Interior research are divided equally and paid every month with Living Allowance.

## (2) Inviting your family

1. You need deep consideration and adequate preparation in advance. To keep both your academic and private life smooth and comfortable with your family in Japan,
2. You should be responsible for all expenses and should take all necessary procedures regarding inviting your family to Japan.
3. JICA does not provide any support or additional financial assistance other than issuing certain documents necessary for the invitation procedure.

## 15. Annex

Annex 1. Application Form

Annex 2. Form of Recommendation Letter