Mineral Resources Exploration and GIS/Remote Sensing

May 17 (Sun.) - June 6 (Sat.), 2015
Seongnam & Daejeon, Korea

Korea International Cooperation Agency
Korea Institute of Geoscience and Mineral Resources
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KOICA

The Korea International Cooperation Agency (KOICA) is a development aid agency of the Republic of Korea which was established in 1991. KOICA’s mission is to reduce poverty, promote living standards and help realize sustainable, equitable and inclusive development in developing countries. To accomplish its mission, KOICA has been actively involved in enhancing developing countries’ socio-economic infrastructure and institutions, empowering and providing the people of the developing world with opportunities for better lives and improving their well-being.

CIAT (Capacity Improvement & Advancement for Tomorrow) Programs

Human Resource Development (HRD) has been one of the most important factors in Korea’s escape from the vicious cycle of poverty and underdevelopment which had existed for many decades. With scarce natural resources, HRD played a vital role in Korea’s development; thus, Korea has emerged as an exemplary showcase of national development powered by HRD. From its own experience Korea came to fully recognize the significance of HRD. With extensive experience and know-how in HRD, Korea contributes greatly to the international community by sharing its unique development experience with other countries.

The CIAT Program provides opportunities to participants to gain first-hand knowledge of Korea’s development experience. The programs are designed to enable the participants to apply what they have learned for the development of their home countries. Since 1991, KOICA has offered about 3,700 courses to more than 58,000 participants from 172 countries. There are a wide range of topics in the Program, including public administration, economic development, science and technology, agriculture and health, etc. In order to meet the changing needs of partner countries, KOICA always strives to renovate and improve its HRD programs.
1. **Title:** Mineral Resources Exploration and GIS/Remote Sensing

2. **Duration:** May 17 (Sun.) - June 6 (Sat.), 2015

3. **Objectives**
   a) To transfer professional knowledge of ore genesis as well as the modeling and exploration of mineral resources;
   b) To transfer the advanced technology of GIS and Remote Sensing;
   c) To establish an international network of professionals and officials related to mineral resources

4. **Number of Participants**
   20 participants from 11 countries:
   Algeria (2), Colombia (2), Dominican Republic (2), Fiji (2), Guinea (1), Kyrgyzstan (2), Nigeria (2), Pakistan (2), Peru (1), Sudan (2), Turkmenistan (2),

5. **Language of Instruction:** English

6. **Venue:** Seongnam & Daejeon, Republic of Korea

7. **Implementing Agency:** Korea Institute of Geoscience and Mineral Resources (KIGAM) (http://www.kigam.re.kr)

8. **Accommodations:** KOICA ICC

9. **Qualifications of Applicants:**

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<th>Mandatory</th>
<th>a) Be nominated by his/her government;</th>
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<td>b) Be in good health both physically and mentally, to undergo the course;</td>
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<td>c) Have not participated in the same KOICA fellowship program in the past 3 years - unless otherwise specified;</td>
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<td>d) Show a high level of participation and commitment throughout the course and promote capacity building in his/her organization after the completion of the program;</td>
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<td>e) Have been working in the field of Mineral Exploration and</td>
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GIS/Remote Sensing

f) Have a bachelor’s degree or higher.

| Preferable | a) Be a government employee in a managerial position  
b) Sufficient Proficiency in spoken English  
c) Working knowledge of computers and PowerPoint software |

10. Closing Date for Application: April 28, 2015
# PROGRAM CONTENTS

## 1. PROGRAM MODULE

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<th>Module</th>
<th>Main Lectures &amp; Discussions</th>
<th>Study Visit</th>
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| **Module 1. GIS & Remote Sensing** | - Introduction and Application of GIS  
- Introduction to GIS S/W  
- Spatial Data Processing  
- Geological Application of GIS  
- Introduction and Application of Remote Sensing  
- Introduction and Acquisition of Remotely Sensed Images  
- Introduction to Remote Sensing S/W  
- Introduction to Hyperspectral Remote Sensing  
- Introduction to SAR Remote Sensing | - Korea Aerospace Research Institute (http://www.kari.re.kr) |
- Introduction to Ore Deposit  
- Applied Geophysics for Mineral Exploration  
- Mineral Processing and its Application for Mineral Exploration  
- Mineral Potential Mapping using Geochemical Data and Remotely Sensed Images  
| **Module 3. Case Study and Action Plan** | - Case Study Presentation & Discussion (Individual Presentation by participants)  
- Workshops for Preparing Action Plan | |
| **Cultural Experience and Field Trips** | - Home Visit Program  
- Seoul City Tour (www.visitseoul.net)  
- Samsung Innovation Museum  
- Jeonju Hanok Village (http://tour.jeonju.go.kr)  
- Jeongseon Tour: Cheonpo Gold Mine, Taebaek Coal Museum, Arari Folk Village (http://www.ariaritour.com) | |
1. GUIDELINES FOR THE PREPARATION OF THE COUNTRY REPORT

Program participants are requested to prepare and submit their country report individually or as a group to the KIGAM (Korea Institute of Geoscience and Mineral Resources) Training Manager via e-mail at leesaro@kigam.re.kr until May 27, 2015.

Note. The KOICA's Fellowship Program includes a 'Country Report' session where participants have an opportunity to analyze each country's current status and circumstances in the program subject and share it with other participants and Korean experts. It aims to provide appropriate solutions and insights to the identified problems and issues of their countries.

The Country Report should be in MS PowerPoint or Word format. The length of the report should not exceed twenty A4-sized pages. The report should be written in English and double-spaced.

All participants are required to give a 15-minute presentation on their country report individually or as a group. For more effective presentations, a projector, slide projector, overhead projector, and multimedia TV will be available (PowerPoint presentations are preferred).

2. TOPICS TO BE COVERED IN THE COUNTRY REPORT

On 29th May, all participants will make an individual or group presentation titled "Country Report" following the guidelines below:

Based on what you have presented and discussed throughout the courses, you are requested to present an action plan on the last day of the workshop.

A. Brief introduction of the organization represented by the participant

B. Status of mineral resources technology in the home country

Governmental policy and legal framework regarding mineral resources

Governmental organization on mineral resources, GIS and RS

Recent Status & Projects related to mineral resources, GIS and RS

International Projects related to mineral resources, GIS and RS
C. Government interventions in mineral resources
   Introduction of the project
   Development targets
   Major features/achievements
   Future programs and direction

D. Strategies of ethics and anti-corruption reform in recipient governments
1. GUIDELINES FOR PREPARATION OF THE ACTION PLAN

All participants are requested to prepare a presentation on their action plan individually or as a group at the end of the course. The action plan is to identify each country’s current problems and propose appropriate solutions in order to solve these problems.

The participants are encouraged to make the most of their weekends and leisure time to further their knowledge acquired from the program and better prepare their presentation for the action plan.

2. TOPICS TO BE COVERED IN THE ACTION PLAN

a) Bring up various problems in related to each country’s current situation of Mineral Resources Exploration and GIS/Remote Sensing

b) Find out the best way of solving problems and make proposals.

c) Think about how it will affect the current problems and what advantages it will bring in the future.

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1. IMPLEMENTING AGENCY

Korea Institute Geoscience and Mineral Resources (http://www.kigam.re.kr)

For more than 80 years since its establishment as a geological survey of Korea for geological mapping and mineral resources exploration, KIGAM has grown into a comprehensive geo-science research institute covering diverse fields to meet the various social needs.

They include not only the basic studies such as geological mapping and mineral exploration, but also the applied ones such as mineral utilization, groundwater evaluation and contamination improvement to prepare against the water shortage in future geological disasters to minimize the loss of life and property. KIGAM also studies mining research, underground space utilization, oil and gas exploration, marine geology, geological engineering and recycling of industrial wastes. In addition, as a part of our activities for the public understanding of geo-science, we have opened the geological museum, which is the first of its field in Korea.

KIGAM will develop new technology and diversify its research fields on the basis of its previous research to cope with the rapidly changing life and industrial circumstances to aim for its theme of the 21st century: “Environmental friendliness, Sustainable development and Global system.”
2. REGULATIONS

- Participants should participate in the program to the best of their abilities
- Participants should refrain from engaging in political activity or any form of employment for profit or gain
- Participants must return to their home country upon completion of the program and resume work in their country
- Participants should not extend the length of the program or stay for personal convenience
- Participants are not permitted to change the flight schedule arranged by KOICA for personal convenience
- Participants should not be accompanied by any member of their family
- Participants are to assume responsibility for any personal expenses incurred regardless of implementation of the course
- Participants are required to strictly observe the course schedule and abide by the rules and regulations stipulated by the Korean government in respect to the program
- Participants should cooperate in preventing any sexual harassment and attend a short training session regarding ‘Sexual Harassment Prevention’ on the first day of KOICA orientation.
3. CONTACT INFORMATION

• Korea International Cooperation Agency (KOICA)
  • Program Manager: Ms. Su Kyoung Kim
  • Phone: +82-31-740-0412
  • Fax: +82-31-740-0684
  • E-mail: suepia@koica.go.kr
  • Websites: http://www.koica.go.kr
  http://training.koica.go.kr
  http://www.facebook.com/koica.icc

• Program Coordinator: Ms. Kun Woo(Connie) PARK (INEPA)
  • Phone: +82-31-777-2608
  • Fax: +82-31-777-2680
  • E-mail: parkkw@global-inepa.org

• Korea Institute Geoscience and Mineral Resources
  • Training Manager: Dr. Saro Lee
  • Phone: +82-42-868-3057
  • Fax: +82-42-868-3413
  • E-mail: leesaro@kigam.re.kr
  • Home page: http://www.kigam.re.kr
Appendix 1.

**Brand Name of the KOICA Fellowship Program**

KOICA has launched a brand-new name for the KOICA Fellowship Program in order to more effectively raise awareness about the program among the public and its partner countries.

In English, CIAT stands for Capacity Improvement and Advancement for Tomorrow and in Korean it means “seed (씨앗)” with hopes to contributing in the capacity development of individual fellows as well as the organizations and countries to which they belong.
Appendix 2.

facebook.com/koica.icc

The Fellows’ Facebook is a place for fellows to ask questions and write comments on KOICA fellowship programs. So, if you have questions regarding our program, please feel free to join our Facebook community.

twitter.com/koica.icc

Do you have a Twitter account? It seems everyone does these days. If you have a Twitter account, be sure to follow us @koica_icc
Appendix 3.

Map of Korea
Appendix 4

HOW TO GET TO THE KOICA ICC

• Route: Incheon International Airport → Korea City Airport, Logis & Terminal (CALT) → KOICA International Cooperation Center (ICC)

• Arrival at Incheon International Airport (http://www.airport.kr)

Flow:

► Fill out Arrival Card (or Immigration Card), Customs Declaration Form, Quarantine Questionnaire (on board)
► Quarantine including animals and plants (on 2nd Floor)
► Present your Arrival Card, Passport and other necessary document to Passport Control
► Claim baggage on 1st Floor
► Customs Clearance
► Pass an Arrival Gate
► Go to the KOICA Counter, which is located between Exit 1~2
KOICA Counter at Incheon airport

- After passing through Customs Declaration, please go to the KOICA Counter (located between exit 1-2) at Incheon Airport. At the KOICA Counter, you can get detailed information about how to get to KOICA International Cooperation Center (ICC) and purchase limousine bus ticket for City Airport, Logis & Travel (CALT).

- All the KOICA staff at the Incheon Airport wears nametags or has signs for indication. If you cannot meet the KOICA staff at the counter, please purchase a limousine bus ticket from the bus ticket counter (located on the 1st Floor), and go to CALT Bus Stop No. 4A (or 10B). Please find the bus number 6103 and present your ticket to the bus driver. From Incheon Airport to CALT, the approximate time for travel will be between 70 to 90 minutes. When you arrive at CALT, you will find another KOICA staff who will help you reach the KOICA ICC. KOICA will reimburse the limousine bus fare when you arrive at KOICA ICC. Also, please be aware that there may be illegal taxis at the airport. Even if they approach you first, please do not take illegal taxis and check to see if they are KOICA staff.

Location: Next to Exit 1 on the 1st floor (No.9-10)
Tel.: 82-32-743-5904
Mobile: 82-(0)10-9925-5901
Contact: Ms. Jin-Young YOON
• KOICA Counter at CALT airport

- If the limousine bus is not available due to your early or late arrival from 22:00 to 05:30.
- Please contact the KOICA ICC reception desk
  (Tel. 031-777-2600 / English announcement service is available 24 hours daily)
- The staff at the KOICA ICC reception desk will let you know how to use a taxi. The taxi fare from the airport to KOICA ICC is normally 90,000 Won.

※ KOICA won't reimburse the taxi fare if you use a taxi during the hours of 05:30 ~ 22:00.

• From Incheon International Airport to the KOICA ICC through CALT

- Take a City Air limousine bus at bus stop No.4A on the 1st Floor. Buses run every 10~15 minutes between the hours of 5:30 and 22:00.

- Meet the KOICA staff at the lounge on the 1st Floor of CALT upon arrival.

- Take a car arranged by the KOICA staff to the KOICA ICC (Expected time: 20 minutes)
"Please remember to read the Fellows' Guidebook. It is available from the Korean Embassy or KOICA Overseas Office in your country and provides valuable information regarding KOICA programs, allowances, expenses, regulations, preparations for departure and etc."