

# Practical training for Petroleum Quality Management System

September 25 (Sun.) – October 15 (Sat.), 2016  
Seongnam, Republic of Korea



Korea International Cooperation Agency



Korea Petroleum Quality & Distribution Authority

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## KOICA & CIAT

### **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.

## **Part I**

## **PROGRAM OVERVIEW**

- 1. Title: Practical training for Petroleum Quality Management system**
- 2. Duration: September 25 (Sun.) – October 15 (Sat.), 2016**
- 3. Objectives**
  - A. To review the advanced fuel quality management system and policies in Korea
  - B. To support efficient and systematic policies on fuel quality management in participants' home country
  - C. To strengthen global networking through mutual technical cooperation in the field of petroleum and energy
- 4. Number of Participants: 20 participants from 11 countries**

Angola (2), Colombia (1), Costa Rica (2), East Timor (2), Ghana (2), Mauritius (2), Mongolia (2), Peru (2), Serbia (2), Tanzania (2), Thailand (1)
- 5. Language of Instruction:** English (written materials), Korean (via interpretation)
- 6. Venue:** Seongnam, Republic of Korea
- 7. Implementing Agency: Korea Petroleum Quality & Distribution Authority (K-Petro)**

(<http://www.kpetro.or.kr>)
- 8. Accommodations: KOICA International Cooperation Center (ICC)**

(<http://training.koica.go.kr>)

## 9. Qualifications of Applicants:

Mandatory	<ul style="list-style-type: none"> <li>a) Be a government employee in petroleum or energy division for more than three years</li> <li>b) Be an employee in related organizations such as refinery and petroleum public institution for more than three years</li> <li>c) Be a university/college graduate or have an equivalent educational background;</li> <li>d) Have sufficient command of both spoken and written English;</li> </ul>
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Participating Organizations (No. of Participants)			
Country	Organizations	Country	Organizations
1. Ghana	Government departments related to fuel quality/ distribution management or related public institution (2)	7. East Timor	Government departments related to fuel quality/ distribution management or related public institution (2)
2. Mongolia		8. Tanzania	
3. Serbia		9. Thailand	DOEB (1)
4. Angola		10. Peru	Osinermin (2)
5. Costa Rica		11. Colombia	MINMINAS (1)
6. Mauritius			

- DOEB : Ministry of Energy, Department of Energy Business in Thailand
- Osinermin : Supervisory Agency for Energy and Mines in Peru
- MINMINAS : Ministry of Mines and Energy in Colombia

## 10. Closing Date for Application: August 8, 2016

<b>Part II</b>	<b>PROGRAM CONTENTS</b>
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## 1. PROGRAM MODULE

Module	Main Lectures & Discussions	Study Visit
<b>Module 1.</b> Understanding of Petroleum Quality Fundamentals	<ul style="list-style-type: none"> <li>▷ Petroleum industry status and outlook</li> <li>▷ Refinery process and quality management</li> <li>▷ Understanding of typical properties of petroleum and testing items</li> <li>▷ Alternative fuels status and policies, R&amp;D status</li> <li>▷ Lubricant basis and market trend</li> </ul>	
<b>Module 2.</b> Practical Training for Petroleum Quality Management	<p>[Lectures]</p> <ul style="list-style-type: none"> <li>▷ Petroleum quality/distribution control and policies</li> <li>▷ Petroleum quality management system and unusual issues</li> <li>▷ Advanced petroleum management system</li> <li>▷ Testing and analysis by petroleum products</li> <li>▷ Procedure of petroleum quality/distribution inspection</li> <li>▷ Testing procedure of fuels and analysis of illegal fuels</li> <li>▷ Operation status of special inspection</li> <li>▷ Testing/analysis procedure for LPG fuel quality</li> </ul> <p>[Field exercise]</p> <ul style="list-style-type: none"> <li>▷ Petroleum/LPG fuel inspection</li> <li>▷ Special inspection</li> <li>▷ Petroleum testing and analysis</li> <li>▷ Vehicular fuel performance evaluation and analysis</li> </ul>	

Module	Main Lectures & Discussions	Study Visit
<b>Module 3.</b> Understanding of Petroleum Infrastructure and Field Trip	<ul style="list-style-type: none"> <li>▷ Understanding of Korean oil pipeline operation (Daehan Oil Pipeline Corporation)</li> <li>▷ Korean gas status and LNG trend (Korea Gas Corporation)</li> <li>▷ Understanding of SK Energy and vision (2016) (SK Energy)</li> <li>▷ Establishment of petroleum monitoring system and its utilization (K-Petro R&amp;D Center)</li> <li>▷ Understanding of emission regulation and facilities for the evaluation of automobile (K-Petro R&amp;D Center)</li> </ul>	<ul style="list-style-type: none"> <li>- Daehan Oil Pipeline Corporation</li> <li>- Korea Gas Corporation</li> <li>- SK Energy</li> <li>- K-Petro R&amp;D Center</li> </ul>
<b>Module 4.</b> Special Lectures on Petroleum and Energy	<ul style="list-style-type: none"> <li>▷ Understanding of E&amp;P Industry</li> <li>▷ Overview of DME fuel and its outlook</li> <li>▷ Global energy supply and its outlook</li> <li>▷ Special lectures on energy</li> <li>▷ Understanding of petroleum and automobile</li> </ul>	
<b>Module 5.</b> Workshop	<ul style="list-style-type: none"> <li>▷ Making up groups with lecturers</li> <li>▷ Discussion about establishing an action plan for petroleum quality management system based on local situation</li> </ul>	
<b>Cultural Experience and Field Trips</b>	<ul style="list-style-type: none"> <li>▷ Seoul City Tour, Korean Folk Village, Bulguksa Temple</li> <li>▷ Hyundai Motor Company, Hyundai Heavy Industries</li> </ul>	

## **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 K-Petro (Korea Petroleum Quality & Distribution Authority) Program Manager via e-mail at [future@kpetro.or.kr](mailto:future@kpetro.or.kr) **no later than August 26, 2016.**

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 30-minute presentation on their country report individually or as a group. For more effective presentations, a projector or multimedia TV will be available (PowerPoint presentations are preferred).

## **2. TOPICS TO BE COVERED IN THE COUNTRY REPORT**

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. Status of petro-fuel and alternative fuel in the home country**

- Quality specification of petro-fuel and alternative fuel and environment standard
- Distribution status of petro-fuel and alternative fuel in the market
- Industrial facilities of petro-fuel and alternative fuel  
(Such as production/distribution infrastructures)
- Amount of production/import/consumption of petro-fuel and alternative fuel  
(The balance of demand and supply)



**B. Status of the quality management system of petro-fuel and alternative fuel**

- A mandated institution to control petro-fuel and alternative fuel quality and its legal system
- Quality inspection of petro-fuel and alternative fuel and penalties
- Cooperation with related institutions to control petro-fuel and alternative fuel quality
- Tax structure imposed to commercial petroleum products
- Unusual cases and issues in the market

*\* The country report should include a specific national energy master plan.*

## **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. Identify various problems related to petro-fuel and alternative fuel in each country
- B. Devise a relevant strategy to solve problems
- C. Consider the effects and advantages of current problems

## **1. IMPLEMENTING AGENCY**

**Korea Petroleum Quality & Distribution Authority (K-Petro)**

**(<http://www.kpetro.or.kr/>)**

### **A. Purpose of the establishment**

K-Petro was established in order to develop the petroleum industry and contribute to public welfare by conducting quality/distribution control, R&D, testing/analysis and other business deemed necessary by Acts regarding petroleum and alternative fuel.

*(Basis of establishment) Petroleum and Petroleum Substitute Fuel Business Act, Article 25-2.*

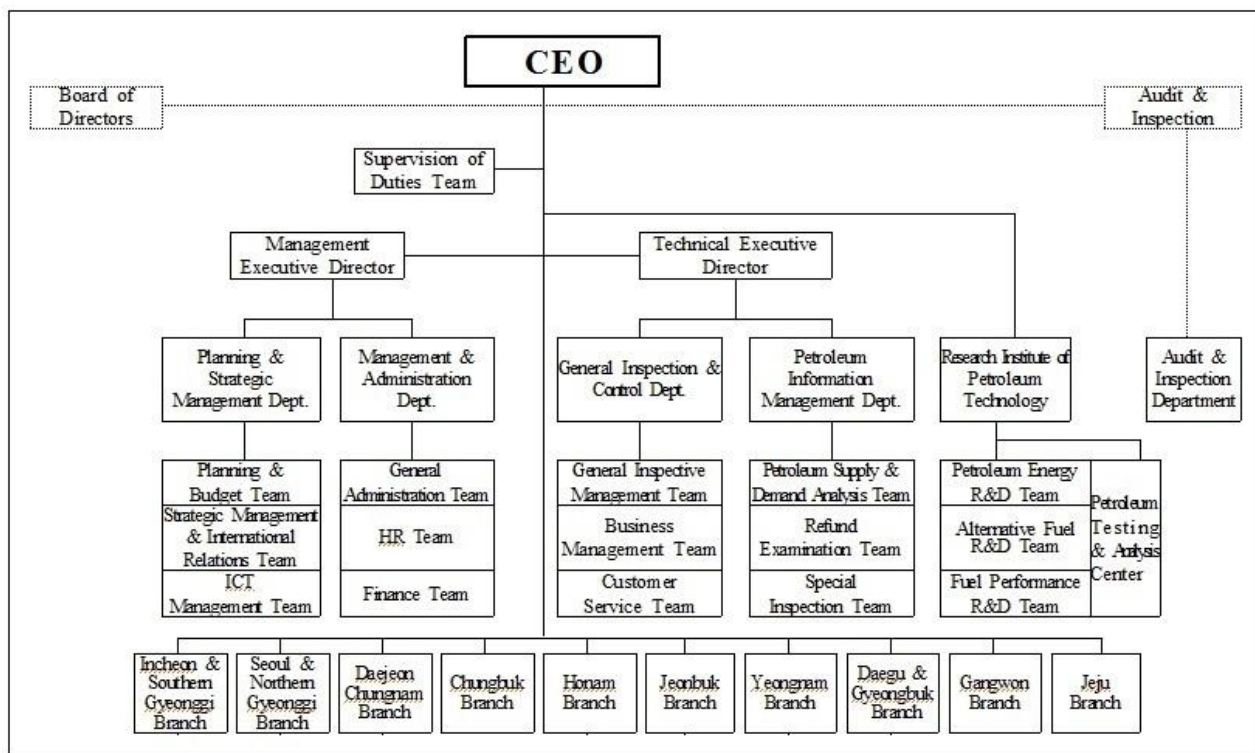
### **B. K-Petro's history**

- **Nov., 1983** Registered business establishment
- **Jun., 1995** Acquired KOLAS Accreditation as an authorized inspection agency
  - \* *KOLAS: Korea Laboratory Accreditation Scheme*
- **Aug., 2002** Began LPG quality inspections
- **May, 2005** Acquired KOLAS Accreditation as a national authorized inspection agency (Petroleum Products, LPG)
- **Jan., 2006** Designated as a petroleum alternative fuel performance evaluation agency
- **Jul., 2006** Designated as an automobile additive inspection agency
- **Jun., 2007** Acquired KOLAS accreditation as an international accredited testing agency (Research Center)
- **Jul., 2007** Designated as an automobile energy consumption efficiency measurement and testing agency
- **Oct., 2007** Designated as a certified construction machinery emissions testing agency
- **Nov., 2008** Designated as a standard development cooperative agency
- **May, 2009** Established K-Petro and produced petroleum distribution management
- **Jan., 2010** Designated as a catalyst inspection agency
- **Sep., 2010** Designated as a tribology training agency
- **Oct., 2010** Designated as a soil contamination inspection agency
- **Jul., 2012** Designated as a "soil-related expert agency (Soil environment assessment)"
- **Jul., 2014** Produced weekly reports on the supply and demand of petroleum products

### C. Main Work

- Quality inspection, testing, analysis and valuation of petroleum and alternative fuel
- Observation, inspection and publicity to establish the distribution order in the field of petroleum and alternative fuel
- Performance assessments and R&D of petroleum and alternative fuel
- Collection and provision of technical information and international cooperation
- Investigation and study to make the quality standard
- Tasks commissioned under other Acts including LPG quality inspections
- Other business deemed necessary by the Minister of MOTIE regarding the quality/distribution control of petroleum products and alternative fuel

### D. Organization



## 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. Jin-A HAN**
  - Phone: +82-31-740-0473
  - Fax: +82-31-740-0673
  - E-mail: [jhan@koica.go.kr](mailto:jhan@koica.go.kr)
  - Websites: <http://www.koica.go.kr>  
<http://training.koica.go.kr>  
<http://www.facebook.com/koica.icc>
  
- **Program Coordinator: Ms. Su Jin YIM**
- Phone: +82-31-8017-2683
- Fax: +82-31-8017-2680
- E-mail: [sujinyim@global-inepa.org](mailto:sujinyim@global-inepa.org)
  
- **Korea Petroleum Quality & Distribution Authority (K-Petro)**
  - **Program Manager: Mr. Jongwon CHOI**
  - Phone: +82-31-789-0253, (Mobile) +82-10-6473-2897
  - Fax: +82-31-789-0359
  - E-mail: [future@kpetro.or.kr](mailto:future@kpetro.or.kr)
  - Website: <http://www.kpetro.or.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](https://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](https://twitter.com/koica.icc)**

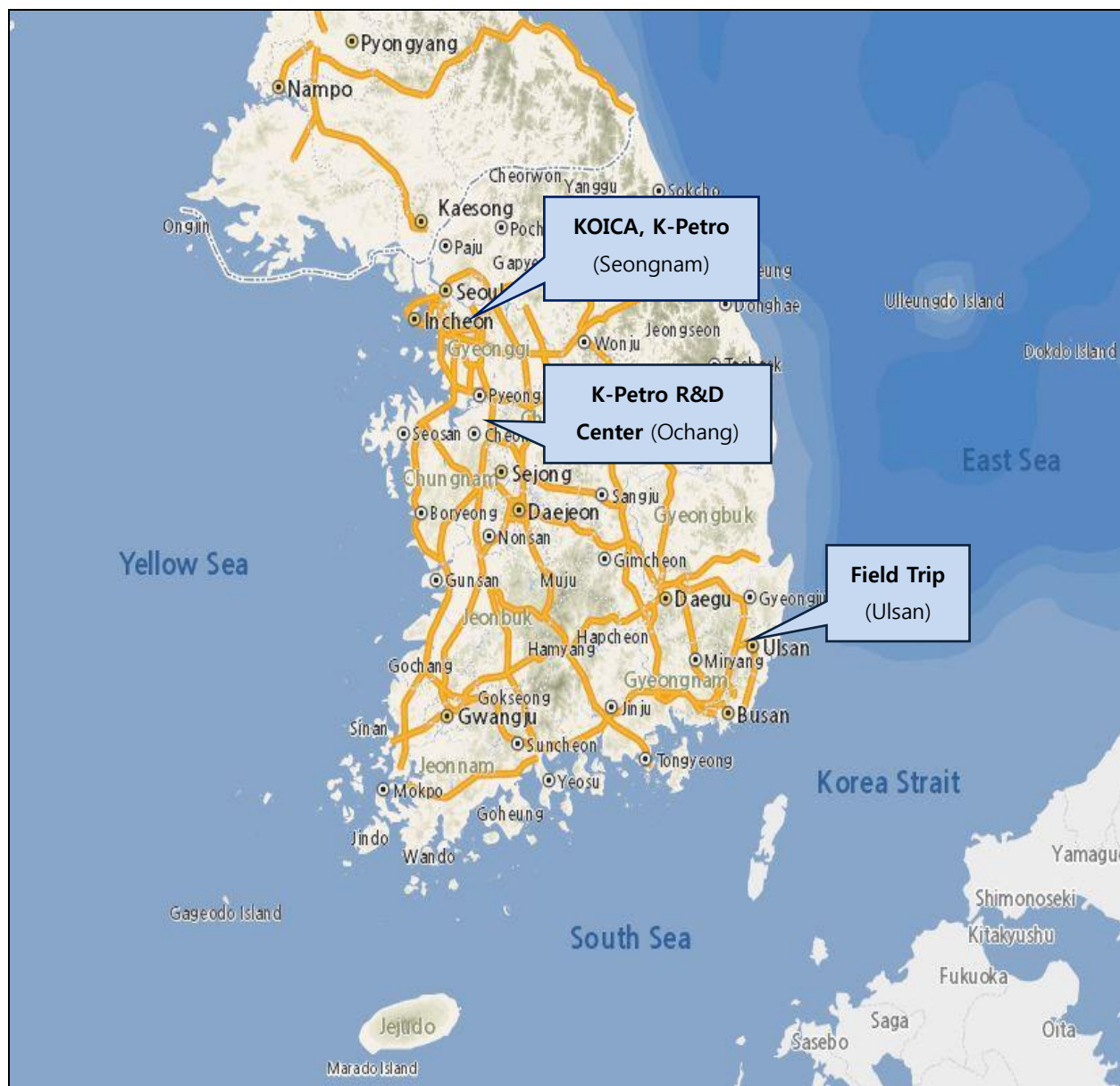
Do you have a Twitter account? It seems everyone does these days. If you have a Twitter account, be sure to follow us @koica\_icc





### 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**



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**

- 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 1<sup>st</sup> 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.

- **KOICA Counter at CALT airport**



Location : Lounge on the 1st floor of  
CALT airport  
Mobile : 82-(0)10-9925-5901

- 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 1<sup>st</sup> 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 1<sup>st</sup> 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."