

**Theme: Photometry and Radiometry (PR)**

**Dates: March 26 (Mon) - April 5 (Thu), 2018**

**Organized by: Global Metrology Academy (GMA), KRIS**

**Workshop Overview**

[GMA-GT-2018-01-PR]

Applications: by January 25, 2018

The Global Metrology Academy of KRIS offers workshops to meet the needs of metrology HRD of the customers both at home and from abroad who are responsible for metrology and related functions of the national quality infrastructure of the economy. The workshop [GMA-GT-2018-01-PR] is the first one scheduled to be offered in 2018. Its theme is photometry and radiometry [PR], to be presented in three (3) modules addressing photometry and radiometry standards, and color measurement.

With its main target audience of **basic/intermediate level** of metrologists, the PR workshop will deliver the concepts of the traceability and measurement standards along with the key subjects of PR that participants need to obtain for their future career as leaders in their local and global metrology communities.

As an effort to yield as much practical benefits as possible for participants, every session of the PR workshop is strategically designed that technical lectures are effectively combined with hands-on laboratory exercises to follow. By the end of the workshop, participants might have better understanding of basic knowledge, skills, and information as up to dated on the key elements of metrology in photometry, radiometry, and colorimetry. It will enable them to offer better measurement services for their customers. In addition, participants will be given a two-day session of metrology in general (MiG) to learn selected fundamental subjects of metrology, such as uncertainty in measurement, the CIPM MRA requirements covering key comparison (KC), calibration and measurement capabilities (CMC), traceability, revised SI, and QMS.

**Outline of Workshop Program [*\* Subject to modifications*]**

Modules	Subjects	Chief Lecturers
<b>Orientation</b>	<b>Introduction and brief tour</b> (* to be offered for participants who will arrive by Friday of the week before opening.)	GMA
<b>MiG (Days 1-2)</b>	<b>Metrology in General</b> - FOUR (4) lectures addressing the fundamental subjects of metrology in general	Dr. Jongseon PARK (jspark@kriss.re.kr)
<b>PR</b>	<b>Photometry and Radiometry</b> - Seven (7) intensive laboratory sessions with technical lectures and exercises combined	Dr. Seugn Kwan KIM (skfiber@kriss.re.kr)
<b>PR-01-02 (Day 3-4)</b>	<b>Photometry and Radiometry</b>	Dr. Seung Kwan Kim (sk@kriss.re.kr) Dr. Dong-Hoon Lee (dh.lee@kriss.re.kr)
<b>PLR (Day 5)</b>	<b>Presentation of Lab Reports</b>	<b>Participants, GMA</b>
<b>PR-03-04-05 (Day 8-9-10)</b>	<b>Photometry and Radiometry</b>	Dr. Dong-Joo Shin (djshin@kriss.re.kr) Dr. Seongchong Park (spark@kriss.re.kr) Dr. Seung Kwan Kim (sk@kriss.re.kr) Dr. Jisoo Hwang (jhwang@kriss.re.kr)
<b>PR (Day 11)</b>	<b>Performance test, Individual lab visits, Wrap-up &amp; Closing</b>	<b>Center for Optical Metrology (&amp; GMA)</b>

Knowledge and skills to be obtained

At the end of the workshop, participants will become familiar with fundamental knowledge and skills on the key subjects of measurement standards, traceability, calibration and uncertainty in the fields of photometry, radiometry, and colorimetry along with the key measuring instruments. Intensive laboratory sessions (ILS) are effectively combined with lectures and hands-on exercises in ways that allow participants to obtain basic skills required for offering quality services for customers. A two-day session of metrology in general (MiG) will offer participants broad perspectives that will help them grow up to take the leading role in advancing the nation-wide measurement system up to the international level.

Who should attend!

**Metrologists who are working on R&D and measurement services in the fields of photometry and radiometry**

Applications

**Applications to be accepted: by January 10, 2018**

**Contact Point: Application and Inquiry**

For applications and further information about participation in the course, please contact:  
Sangwook SEO, Senior Coordinator, Global Metrology Academy (GMA), KRIS  
[swseo@kriss.re.kr](mailto:swseo@kriss.re.kr)

**Workshop Program Overview: Modules, Lectures, Hands-on Exercises**

*\* subject to modifications*

Mar 23 (Fri)	Arrival at Daejeon, check-in at the Hotel Graytone in Daejeon	recommended date of arrival at Daejeon, Korea
Mar 24 (Sat)	<b>Orientation Session</b>	<b>10:00-12:00 (provisional)</b>
Mar 25 (Sun)	Free	
<b>MiG</b>	<b>Metrology in General: fundamentals of metrology and quality</b>	<b>Mar 26 (Mon) - 27 (Tue)</b>
	Three (3) lectures and exercises (uncertainty evaluation)	Lecturers
DAY 1 (Mon) Mar 26	MiG-01 CIPM MRA: KC-CMC-Traceability in Measurement	Dr. Chu-Shik KANG, KRIS
	MiG-02 Fundamental Constants and SI	Dr. Ho Seong LEE, KRIS
DAY 2 (Tue) Mar 27	MiG-03 QMS Talk	Dr. Jongseon PARK, KRIS
	MiG-04 Uncertainty in Measurement (including exercises)	Dr. Chu-Shik KANG, KRIS
<b>PR</b>	<b>Metrology in Photometry and Radiometry</b>	<b>Mar 28(Wed) - 29(Thu), Apr 02(Mon) - 04(Wed)</b>
	Intensive Laboratory Session (ILS) with lectures and exercises	<b>(L) Lecture, (H) Hands-on exercises</b>
<b>PR</b>	<b>Photometry and Radiometry I</b>	<b>Mar 28 (Wed)</b>
DAY 3 (Wed) Mar 28	(PR-L-1) Standards and Traceability in Photometry and Radiometry (1.5 h)	Dr. Seung Kwan Kim (sk@kriss.re.kr)
	(PR-L-2) Photometric Measurement Theory (1.5 h)	Dr. Dong-Hoon Lee (dh.lee@kriss.re.kr)
	(PR-H-1) <b>Hands-on Exercises: Photometry I (3.0 h) - luminous intensity, illuminance</b>	Mr. Bong Hak Kim (bhkim@kriss.re.kr) Mr. Jae-Geun Yoo (jkyoo@kriss.re.kr)
<b>PR</b>	<b>Photometry and Radiometry II</b>	<b>Mar 29 (Thu)</b>
DAY 4 (Thu) Mar 29	(PR-L-3) Optical Detector Theory (1.5 h)	Dr. Dong-Hoon Lee (dh.lee@kriss.re.kr)
	(PR-L-4) Radiometric Measurement Theory (1.5 h)	Dr. Dong-Hoon Lee (dh.lee@kriss.re.kr)
	(PR-H-2) <b>Hands-on Exercises: Photometry II (3.0 h) - luminous flux, luminance, spectral responsivity</b>	Mr. Bong Hak Kim (bhkim@kriss.re.kr) Mr. Jae-Geun Yoo (jkyoo@kriss.re.kr)
DAY 5 (Fri) Mar 30	<b>Presentation of Lab Reports</b>	<b>Mar 30 (Fri)</b>
DAY 6-7 (Sat-Sun) Mar 31-Apr 01	Free	
<b>PR</b>	<b>Photometry and Radiometry III</b>	<b>Apr 02 (Mon)</b>
DAY 8 (Mon) Apr 02	(PR-L-5) Uncertainty Evaluation in Photometry and Radiometry (1.5 h)	Dr. Dong-Joo Shin (djshin@kriss.re.kr)
	(PR-L-6) LED Measurement Theory (1.5 h)	Dr. Seongchong Park (spark@kriss.re.kr)
	(PR-H-3) <b>Hands-on Exercises: LED photometry (3.0 h)</b>	Dr. Seongchong Park (spark@kriss.re.kr) Mr. Jae-Geun Yoo (jkyoo@kriss.re.kr)
<b>PR</b>	<b>Photometry and Radiometry IV</b>	<b>Apr 03 (Tue)</b>
DAY 9(Tue) Apr 03	(PR-L-7) Fiber Optic Radiometry (1.5h)	Dr. Seung Kwan Kim (sk@kriss.re.kr)
	(PR-L-8) UV Radiometry (1.5h)	Dr. Dong-Joo Shin (djshin@kriss.re.kr)
	(PR-H-4) <b>Hands-on Exercises: Colorimetry I (3.0 h) - source color and spectroradiometry</b>	Dr. Seongchong Park (spark@kriss.re.kr) Mr. Jae-Geun Yoo (jkyoo@kriss.re.kr)
<b>PR</b>	<b>Photometry and Radiometry V</b>	<b>Apr 04 (Wed)</b>
DAY 10 (Wed) Apr 04	(PR-L-9) Introduction to Color Measurement (1.5 h)	Dr. Jisoo Hwang (jhwang@kriss.re.kr)
	(PR-L-10) Color Measurement Theory (1.5 h)	Dr. Jisoo Hwang (jhwang@kriss.re.kr)
	(PR-H-5) <b>Hands-on Exercises: Colorimetry II (3.0 h) - material color and spectrophotometry</b>	Dr. Jisoo Hwang (jhwang@kriss.re.kr) Mr. Ki-Lyong Jeong (kilyong@kriss.re.kr)
<b>PR</b>	<b>Performance Evaluation Test, Individual Lab Visits, Closing</b>	<b>Apr 05 (Thu)</b>
DAY 11 (Thu) Apr 05	[Performance Evaluation Test]	GMA
	[Individual Visits to Laboratories]	Cener for Optical Metrology
	[Development/Presentation of Action Plans]	Participants, GMA
	Closing Session (Evaluation of the workshop, Certificate awarding)	GMA
Apr 05-06 (Wed-Thu)	<b>Departure: Apr 05(Thu) - 06 (Fri)</b>	<b>* Depending on the flight itinerary</b>

**Daily Program (Provisional)**

Language of the course: **English**

<b>Mar 23 (Fri)</b>	<b>Arrival at Daejeon, check-in at the Hotel Graytone in Daejeon</b>	recommended date of arrival at Daejeon, Korea
<b>Mar 24 (Sat)</b>	<b>Orientation Session</b>	<b>10:00-12:00 (provisional)</b>
<b>Mar 25 (Sun)</b>	Free	
<b>Mar 26 (Mon)</b>	<b>Opening &amp; Metrology in General (MiG)</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
08:30-09:00	From Hotel to KRIS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:00-09:45	Greetings and Introduction to KRIS and the GMA Course	
10:00-10:30	Opening session	
10:30-12:30	<b>MiG-01 CIPM MRA: KC-CMC-Traceability in Measurement</b>	Dr. Chu-Shik KANG, KRIS
12:30-14:00	Lunch	<b>KRIS cafeteria (2nd floor)</b>
14:00-16:00	<b>MiG-02 Revised SI and Fundamental Constants</b>	Dr. Ho Seong LEE, KRIS
16:00-16:30	From KRIS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
<b>Mar 27 (Tue)</b>	<b>Metrology in General (MiG)</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
08:30-09:00	From Hotel to KRIS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-10:30	<b>MiG-03: QMS Talk</b>	Dr. Jongseon PARK, KRIS
11:00-12:30	<b>MiG-04: Uncertainty in Measurement</b>	Dr. Chu-Shik KANG, KRIS
12:30-14:00	Lunch	<b>KRIS cafeteria (floor 2)</b>
14:00-16:30	<b>MiG-04: Uncertainty in Measurement (including exercises)</b>	Dr. Chu-Shik KANG, KRIS
16:30-17:00	From KRIS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
<b>PR</b>	<b>Photometry and Radiometry I</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
<b>Mar 28 (Wed)</b>	Lectures (L), Hands-on Exercises (H)	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRIS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>(PR-L-1) Standards and Traceability in Photometry and Radiometry (1.5 h)</b>	Dr. Seung Kwan Kim (sk@kriss.re.kr)
11:00-12:30	<b>(PR-L-2) Photometric Measurement Theory (1.5 h)</b>	Dr. Dong-Hoon Lee (dh.lee@kriss.re.kr)
12:00-14:00	Lunch	<b>KRIS cafeteria (2nd floor)</b>
14:00-17:00	<b>[PR-H-1] Hands-on Exercises: Photometry I - luminous intensity, illuminance</b>	Mr. Bong Hak Kim (bhkim@kriss.re.kr) Mr. Jae-Geun Yoo (jkyoo@kriss.re.kr)
17:00-17:30	From KRIS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
<b>PR</b>	<b>Photometry and Radiometry II</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
<b>Mar 29 (Thu)</b>	Lectures (L), Hands-on Exercises (H)	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRIS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>(PR-L-3) Optical Detector Theory (1.5 h)</b>	Dr. Dong-Hoon Lee (dh.lee@kriss.re.kr)
11:00-12:30	<b>(PR-L-4) Radiometric Measurement Theory (1.5 h)</b>	Dr. Dong-Hoon Lee (dh.lee@kriss.re.kr)
12:30-14:00	Lunch	<b>KRIS cafeteria (2nd floor)</b>
14:00-17:00	<b>[PR-01-H-2] Hands-on Exercises: Photometry II -luminous flux, luminance, spectral responsivity</b>	Mr. Bong Hak Kim (bhkim@kriss.re.kr) Mr. Jae-Geun Yoo (jkyoo@kriss.re.kr)
17:00-17:30	From KRIS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
<b>Mar 30 (Fri)</b>	<b>Presentation of Lab Reports</b>	<b>GMA</b>
09:00-09:30	From Hotel to KRIS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
10:00-12:00	Presentation(1): six(6) participants of Lab Reports (* 20 minutes each, including Q&A)	
12:00-13:30	Lunch	<b>KRIS cafeteria (2nd floor)</b>
13:30-14:30	Presentation(2): three (3) participants of Lab Reports (* 20 minutes each, including Q&A)	
14:30-15:00	Tea break	
15:00-15:30	Presentation of UST (* to be confirmed)	
15:30-16:00	From KRIS to Hotel (* ride offered by the Hotel Graytone)	Participants
<b>Mar 31 (Sat)</b>	<b>FREE</b>	
<b>Apr 01 (Sun)</b>	<b>FREE</b>	

PR	Photometry and Radiometry III	Tech. Service Bldg (Seminar RM #1, 1st floor)
<b>Apr 02 (Mon)</b>	<b>Lectures (L), Hands-on Exercises (H)</b>	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>(PR-L-5) Uncertainty Evaluation in Photometry and Radiometry (1.5 h)</b>	Dr. Dong-Joo Shin (djshin@kriss.re.kr)
11:00-12:30	<b>(PR-L-6) LED Measurement Theory (1.5 h)</b>	Dr. Seongchong Park (spark@kriss.re.kr)
12:30-14:00	Lunch	KRISS cafeteria (2nd floor)
14:00-17:00	<b>[PR-H-3] Hands-on Exercises: LED photometry</b>	Dr. Seongchong Park (spark@kriss.re.kr) Mr. Jae-Geun Yoo (jkyoo@kriss.re.kr)
17:00-17:30	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
PR	Photometry and Radiometry IV	Tech. Service Bldg (Seminar RM #1, 1st floor)
<b>Apr 03 (Tue)</b>	<b>Lectures (L), Hands-on Exercises (H)</b>	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>(PR-L-7) Fiber Optic Radiometry (1.5h)</b>	Dr. Seung Kwan Kim (sk@kriss.re.kr)
11:00-12:30	<b>(PR-L-8) UV Radiometry (1.5h)</b>	Dr. Dong-Joo Shin (djshin@kriss.re.kr)
12:30-14:00	Lunch	KRISS cafeteria (2nd floor)
14:00-17:00	<b>[PR-H-4] Hands-on Exercises: Colorimetry I - source color and spectroradiometry</b>	Dr. Seongchong Park (spark@kriss.re.kr) Mr. Jae-Geun Yoo (jkyoo@kriss.re.kr)
17:00-17:30	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
PR	Photometry and Radiometry V	Tech. Service Bldg (Seminar RM #1, 1st floor)
<b>Apr 04 (Wed)</b>	<b>Lectures (L), Hands-on Exercises (H)</b>	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>(PR-L-9) Introduction to Color Measurement (1.5 h)</b>	Dr. Jisoo Hwang (jhwang@kriss.re.kr)
11:00-12:30	<b>(PR-L-10) Color Measurement Theory (1.5 h)</b>	Dr. Jisoo Hwang (jhwang@kriss.re.kr)
12:30-14:00	Lunch	KRISS cafeteria (2nd floor)
14:00-17:00	<b>[PR-H-5] Hands-on Exercises: Colorimetry II - material color and spectrophotometry</b>	Dr. Jisoo Hwang (jhwang@kriss.re.kr) Mr. Ki-Lyong Jeong (kilyong@kriss.re.kr)
17:00-17:30	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
PR	Performance Evaluation Test, Individual Lab Visits, Closing	Tech. Service Bldg (Seminar RM #1, 1st floor)
<b>Apr 05 (Thu)</b>	<b>Lectures (L), Hands-on Exercises (H)</b>	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>[Performance Evaluation Test]</b>	
11:00-12:30	<b>[Individual Visits to Laboratories of further interest]</b> - Q&A on matters of further interest to participants, including their Action Plans	participants will be divided into different groups by the subject of individual interest.
12:30-13:30	Lunch	KRISS cafeteria (2nd floor)
13:30-15:00	<b>Elaboration/Presentations of Action plans</b>	Participants, GMA
15:00-16:00	<b>Evaluation of the course (written &amp; oral)</b>	
16:00-16:30	<b>Closing session (certificate awarding)</b>	
16:30-17:00	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
<b>Apr 05-06 (Thu-Fri)</b>	<b>Departure (Apr 05-06)</b>	<b>* depending the flight itinerary of participants</b>

\* Participants are supposed to take the airport limousine bus bound for Incheon airport.

\* Ride to the bus stop near the Hotel Graytone will be provided by the Hotel Graytone in cooperation with GMA, KRISS.

※ Dress code: Smart casual

**Qualification**

1. The applicant should be duly nominated by the employer, whose official seal and signature should be put on the application/nomination form.
2. The applicant should be an employee of the national metrology institute (NMI) or measurement service laboratory at the time of application.
3. The applicant should be engaged in R&D and services in the subjects of workshop;
4. The applicant should be a university/college graduate or have equivalent professional career and knowledge on themes of the workshop.
5. For the sake of effectiveness, the applicant is required to have a good command of **English**.
6. The applicant should be healthy both physically and mentally enough to go through the whole programs of the workshop.

**Requirements: applications are accepted by January 25, 2018, along with the following requirements.**

1. **An official nomination** by the employer with the official seal and the signature of the top management of the employer;
2. A copy of the **curriculum vitae** of the applicant, describing the academic background and professional experience in detail;
3. A copy of **passport** as valid for more than six (6) months as of the expected date of arrival at Korea;
4. **Laboratory report and Action Plan:** Participants are supposed to submit their laboratory reports and draft action plans according to the template to be provided later on; and
5. Plan of sharing the results of his/her study in the GMA workshop for their institution and the nation.

**Number of participants: each GMA workshop will be operated with around 10 participants.**

### Financial Arrangements

- Participants and their employers are responsible for paying all expenses of the tuition fees, airline tickets, accommodations and meals, etc. required for the participants' travel to and stay in Korea.
- Lunches for nine (9) working days are offered free to ALL participants.
- Subject to the availability of fund, additional financial assistance might be discussed for a limited number of people from developing countries.

<b>1. Tuition fees</b>	<p>① <b>Amount: US\$750/US\$1,500 per person</b></p> <ul style="list-style-type: none"> <li>☞ Two different categories of the tuition fees are applicable according to the economic performance of the applicant's country.</li> <li>☞ <b>Please contact the coordinator, BEFORE making applications, to get confirmed of the tuition fee category applicable for you.</b></li> </ul>
<b>2. Banking information</b>	<p>② Applicants are supposed to remit the tuition fees by bank transfer to the official bank account of KRISS.</p> <ul style="list-style-type: none"> <li>☞ <b>Payment should be made by February 25, 2018 which will make the application complete.</b></li> <li>☞ Please make sure that all the handling and banking charges raised both to the remitter and beneficiary should be paid by the remitter, so that the <b>net amount of tuition fees (US\$750 or US\$1,500) could be received by KRISS</b>.</li> </ul> <p>③ Official bank account of KRISS</p> <ul style="list-style-type: none"> <li>- Bank name: Kook-Min Bank (Branch: Yuseong Branch) - Swift code: CZNBKRSE</li> <li>- Account number: <b>461-01-0184-494</b></li> <li>- Account holder's name: Korea Research Institute of Standards and Science (KRISS)</li> <li>- Bank address: 1F, #468-3, Bongmyeong-dong, Yuseong-gu, Daejeon, Republic of Korea</li> <li>☞ <b>invoices will not be issued separately if otherwise requested. (* Receipts might be issued upon the participant's arrival at KRISS.)</b></li> <li>☞ <b>The statement of bank transfer should be sent to KRISS either by Email (swseo@kriss.re.kr) or FAX (+82-42-868-5565) with attention to the GMA course coordinator.</b></li> </ul>
<b>2. Living expenses</b>	<p>④ Participants are responsible for paying living expenses in Korea including accommodations and meals.</p> <p>⑤ For selected participants from the developing world, KRISS might provide free accommodations, subject to its financial availability.</p> <ul style="list-style-type: none"> <li>☞ Lunch for nine (9) working days will be offered free to ALL participants.</li> </ul> <p>⑥ Please note that expenses for all other meals shall be paid by the participants.</p> <ul style="list-style-type: none"> <li>☞ Participants are advised to bring some pocket money of their own for incidental expenses.</li> </ul> <p>⑦ It is likely that participants will stay at the Hotel Graytone, Dunsan in Daejeon. (<a href="http://www.graytone.co.kr/">http://www.graytone.co.kr/</a>)</p> <ul style="list-style-type: none"> <li>☞ The room rate (around US\$55 per night per room) includes breakfast, tax, and service charge.</li> </ul>
<b>3. Airline tickets</b>	<p>⑧ Participants and their employers are responsible for purchasing the airline tickets for the participants.</p>
<b>4. Local Transportation</b>	<p>⑨ The KRISS travel agent will pick up the participants upon their arrival at the Incheon (ICN) international airport of Seoul.</p> <ul style="list-style-type: none"> <li>☞ Participants are requested to advise the workshop coordinator of their flight itinerary to and from Korea <b>AS SOON AS Possible</b>.</li> </ul> <p>⑩ The KRISS travel agent will help the participants to take the airport limousine bus bound for Daejeon.</p> <ul style="list-style-type: none"> <li>☞ The bus tickets (around US\$23 one way) are to be bought by the participants.</li> <li>☞ Upon your arrival at the bus stop in Daejeon ("Government Complex-Daejeon"), the staff of the Hotel Graytone will be meeting you to take you to the hotel.</li> </ul>

**Every applicant and participant should commit to read, strictly abide by, and respect the following rules and regulations as specified below that GMA endorses in implementing the GMA courses:**

1. Participants shall conduct themselves at all times in a manner compatible with their status as participants in the subject GMA course;
2. Participants shall attend, to the best of their abilities, all sessions of the GMA group and/or individual courses they are participating in;
3. Participants shall refrain from engaging in political activity or any form of employment for profit or gain;
4. Participants shall return to their home country upon completion of the subject course of GMA and resume work in their country;
5. Participants shall not extend the length of stay in Korea for personal convenience;
6. Participants whose flights are supported by GMA and other donor organizations are not permitted to change their flights for their personal convenience;
7. Participants shall not be accompanied by any member of their family;
8. Participants shall assume responsibility for any personal expenses incurred regardless of implementation of the course; and
9. Participants are required to strictly observe the course schedule and abide by the **rules and regulations stipulated by the KRISS and their sponsors, and by the laws of the Republic of Korea.**
10. Any form of harassment or insult, including but not limited to misconduct arising out of racial/ethnic, gender or class discrimination, whether it be physical or verbal, will not be tolerated and will be dealt with in accordance with the laws of the Republic of Korea and the rules and regulations of KRISS.
11. Especially, **sexual harassment**, defined as a form of behavior characterized by sexually connotative words, acts or gestures that could undermine individual dignity and by which the victim takes offense, is regarded as a serious misconduct and will be dealt with accordingly.
12. Offenders who fail to comply with the above **Rules and Regulations** laws shall be subject to punishment in accordance with the laws of the Republic of Korea and the regulations of KRISS, **which include sending an official letter of complaint to the offender's employer and government and instant deportation with ban of the offender's participation in the future GMA programs.**



**Applications and Inquiry!**

For any further information about participation in the subject course and GMA programs, please contact:

<b>Sangwook SEO</b> Senior Coordinator, Global Metrology Academy (GMA), KRISS	<a href="mailto:swseo@kriss.re.kr">swseo@kriss.re.kr</a> TEL + 82-42-868-5440 Fax + 82-42-868-5565
<b>Ms. Jinyoung LEE</b> Coordinator, Global Metrology Academy (GMA), KRISS	<a href="mailto:jyoung0425@kriss.re.kr">jyoung0425@kriss.re.kr</a> TEL + 82-42-868-5531 Fax + 82-42-868-5565

**Theme: Metrology in Gas Analysis [GA]**

**Dates: June 18 (Mon) - 27 (Wed), 2018**

**Organized by:** Global Metrology Academy (GMA), KRISS

**Workshop Overview**

[GMA-GT-2018-02-GA]

Applications: by March 25, 2018

The Global Metrology Academy of KRISS offers workshops to meet the needs of metrology HRD of the customers both at home and from abroad who are responsible for metrology and related functions of national quality infrastructure of the nation. The workshop [GMA-GT-2018-02-GA] is the second one scheduled to be offered in 2018. Its main theme is metrology in gas analysis (GA), to be presented in four (4) modules consisting of purity assessment, gravimetric preparation, verification/certifications of PRMs/CRMs, and testing/calibration in gas analysis.

With its main target audience of basic/Intermediate level of metrologists, the GA workshop will deliver the concepts of the traceability and measurement standards along with other key subjects of GA that participants need to obtain for their future career as leaders in their local and global metrology communities.

As an effort to yield as much practical benefits as possible for participants, every session of the GA workshop is strategically designed that technical lectures are effectively combined with hands-on laboratory exercises to follow. By the end of the workshop, participants might have better understanding of basic knowledge, skills, and information as up to dated on the key elements of metrology in GA. It will enable them to offer better measurement services for their customers. In addition, participants will be given a two-day session of metrology in general (MiG) to learn selected fundamental subjects of metrology, such as uncertainty in measurement, the CIPM MRA requirements covering key comparison (KC), calibration and measurement capabilities (CMC), traceability, revised SI, and QMS.

**Outline of Workshop Program [\* subject to modification!]**

Modules	Subjects	Chief Lecturers
<b>Orientation</b>	<b>Introduction and brief tour</b> (* to be offered for participants who will arrive by Friday of the week before opening.)	GMA
<b>MiG (Days 1-2)</b>	<b>Metrology in General</b> - Five (5) lectures addressing the fundamental subjects of metrology in general	Dr. Jongseon PARK (jspark@kriss.re.kr)
<b>GA</b>	<b>Metrology in Gas Analysis</b> - Four (4) intensive laboratory sessions with technical lectures and exercises combined	Dr. Sangil Lee (slee@kriss.re.kr)
<b>GA-01 (Day 3)</b>	<b>Purity Assessment in Gas Metrology</b>	Dr. Jeong Sik (limjeongsik@kriss.re.kr)
<b>GA-02 (Day 4)</b>	<b>Gravimetric Preparation of Primary Reference Gas Mixtures (PRMs)</b>	Dr. Sangil Lee (slee@kriss.re.kr)
<b>PLR (Day 5)</b>	<b>Presentation of Lab Reports</b>	<b>Participants, GMA</b>
<b>GA-03 (Day 8)</b>	<b>Verification of PRMs and Certification of CRMs</b>	Dr. Jin Seog Kim (jkim@kriss.re.kr)
<b>GA-04 (Day 9)</b>	<b>Testing and Calibration in Gas Metrology</b>	Dr. Jin Sang Jung (jsjung@kriss.re.kr)
<b>GA (Day 10)</b>	<b>Performance test, Individual lab visits, Wrap-up &amp; Closing</b>	<b>Center for Gas Analysis (GMA)</b>

Knowledge and skills to be obtained

Who should attend!

Applications

At the end of the workshop, participants will become familiar with fundamental knowledge and skills on the key subjects of measurement standards, traceability, calibration and uncertainty in the fields of gas analysis and calibration along with the key measuring instruments. Intensive laboratory sessions (ILS) are effectively combined with lectures and hands-on exercises in ways that allow participants to obtain basic skills required for offering quality services for customers. A two-day session of metrology in general (MiG) will offer participants broad perspectives that will help them grow up to take the leading role in advancing the nation-wide measurement system up to the international level.

**Metrologists who are working on R&D and measurement services in the fields of gas analysis**

**Applications to be accepted: by March 25, 2018**

**Contact Point: Application and Inquiry**

For applications and further information about participation in the course, please contact:  
Sangwook SEO, Senior Coordinator, Global Metrology Academy (GMA), KRISS  
[swseo@kriss.re.kr](mailto:swseo@kriss.re.kr)



**Workshop Program Overview: Modules, Lectures, Hands-on Exercises** \* subject to modifications

June 15 (Fri)	Arrival at Daejeon, check-in at the Hotel Graytone in Daejeon	recommended date of arrival at Daejeon, Korea
June 16 (Sat)	Orientation Session	10:00-12:00 (provisional)
June 17 (Sun)	Free	
<b>MiG</b>	<b>Metrology in General: fundamentals of metrology and quality</b>	<b>June 18 (Mon) - 19 (Tue)</b>
	Ficve (5) lectures and exercises (uncertainty evaluation)	Lecturers
DAY 1 (Mon) June 18	MiG-01 KC-CMC-Traceability in Measurement	Dr. Chu-Shik KANG, KRISs
	MiG-02 CCQM GAWG Activities	Dr. Jin Seog Kim (jkim@kriss.re.kr)
	MiG-03 Revised SI with Fundamental Constants	Dr. Ho Seong LEE, KRISs
DAY 2 (Tue) June 19	MiG-04 QMS Talk	Dr. Jongseon PARK, KRISs
	MiG-05 Uncertainty in Measurement (including exercises)	Dr. Chu-Shik KANG, KRISs
<b>GA</b>	<b>Metrology in Gas Analysis</b>	<b>Jun 20(Wed) - 21(Thu), Jun 25(Mon) - 27(Wed)</b>
	Intensive Laboratory Session (ILS) with lectures and exercises	<b>(L) Lecture, (H) Hands-on exercises</b>
<b>GA-01</b>	<b>Purity Assessment in Gas Metrology</b>	<b>June 20 (Wed)</b>
DAY 3 (Wed) June 20	(GA-01-L-1) Purity Analysis (1.5 h)	Dr. Jeong Sik Lim (lim.jeongsik@kriss.re.kr)
	(GA-01-L-2) Purity Calculation (1.5 h)	Dr. Namgoo Kang (nkang@kriss.re.kr)
	[GA-01-H-1] Hands-on Exercises: - purity analysis and calculation (3.0 h)	Dr. Jeong Sik Lim (lim.jeongsik@kriss.re.kr)
<b>GA-02</b>	<b>Gravimetric Preparation of Primary Reference Gas Mixtures (PRMs)</b>	<b>June 21 (Thu)</b>
DAY 4 (Thu) June 21	(GA-02-L-1) Static Gravimetric Preparation (1.5 h)	Dr. Sangil Lee (slee@kriss.re.kr)
	(GA-02-L-2) Dynamic Gravimetric Preparation (1.5 h)	Dr. Dal Ho Kim (dhkim@kriss.re.kr)
	[GA-02-H-1] Hands-on Exercises: - gravimetric preparation and calculation (3.0 h)	Dr. Sangil Lee (slee@kriss.re.kr)
DAY 5 (Fri) June 22	Presentation of Lab Reports	<b>June 22 (Fri)</b>
DAY 6-7 (Sat-Sun) Jun 23-24	Free	
<b>GA-03</b>	<b>Verification of PRMs and Certification of CRMs</b>	<b>June 25 (Mon)</b>
DAY 8 (Mon) June 25	(GA-03-L-1) Verification with GCs (1.5 h)	Dr. Jin Seog Kim (jkim@kriss.re.kr)
	(GA-03-L-2) Verification with Spectroscopies (1.5 h)	Dr. Jeongsoon Lee (leejs@kriss.re.kr)
	[GA-03-H-1] Hands-on Exercises: - experiments with GC/Spectroscopy (3.0h h)	Dr. Jin Seog Kim (jkim@kriss.re.kr)
<b>GA-04</b>	<b>Testing and Calibration in Gas Metrology</b>	<b>June 26 (Tue)</b>
DAY 9 (Tue) June 26	(GA-04-L-1) Calibration of Gas Detectors (1.5 h)	Dr. Jin Sang Jung (jsjung@kriss.re.kr)
	(GA-04-L-2) Testing Gas Sensors (1.5 h)	Dr. Sang Hyub Oh (shoh@kriss.re.kr)
	[GA-04-H-1] Hands-on Exercises: - experiments with gas detectors (3.0 h)	Dr. Jin Sang Jung (jsjung@kriss.re.kr)
<b>GA</b>	<b>Performance Evaluation Test, Individual Lab Visits, Closing</b>	<b>June 27 (Wed)</b>
DAY 10 (Wed) June 27	[Performance Evaluation Test]	GMA
	[Individual Visits to Laboratories]	Cener for Gas Analysis
	[Development/Presntation of Action Plans]	Participants, GMA
	Closing Session (Evaluation of the workshop, Certicate awarding)	UST
June 27-28 (Wed-Thu)	Departure: June 27(Wed) - 28 (Thu)	* Depending on the flight itinerary



**Daily Program (Provisional)**

Language of the course: **English**

June 15 (Fri)	<b>Arrival at Daejeon, check-in at the Hotel Graytone</b>	
June 16 (Sat)	<b>Orientation Session</b>	<b>10:00-12:00</b>
June 17 (Sun)	Free	
June 18 (Mon)	<b>Opening &amp; Metrology in General (MiG)</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:00-09:45	Greetings and Introduction to KRISS and the GMA Course	
10:00-10:30	Opening session	
10:30-12:30	<b>MiG-01 CIPM MRA: KC-CMC-Traceability in Measurement</b>	Dr. Chu-Shik KANG, KRISS
12:30-14:00	Lunch	KRISS cafeteria (2nd floor)
14:00-15:00	<b>MiG-02 CCQM GAWG Activities</b>	Dr. Jin Seog Kim (jkim@kriss.re.kr)
15:00-17:00	<b>MiG-03 Revised SI with Fundamental Constants</b>	Dr. Ho Seong LEE, KRISS
17:00-17:30	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
June 19 (Tue)	<b>Metrology in General (MiG)</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-10:30	<b>MiG-04 QMS Talk</b>	Dr. Jongseon PARK, KRISS
11:00-12:30	<b>MiG-05 Uncertainty in Measurement</b>	Dr. Chu-Shik KANG, KRISS
12:30-14:00	Lunch	KRISS cafeteria (floor 2)
14:00-16:30	<b>MiG-05 Uncertainty in Measurement (including exercises)</b>	Dr. Chu-Shik KANG, KRISS
16:30-17:00	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
<b>GA-01</b>	<b>Purity Assessment in Gas Metrology</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
June 20 (Wed)	Lectures (L), Hands-on Exercises (H)	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>(GA-01-L-1) Purity Analysis</b>	Dr. Jeong Sik Lim (lim.jeongsik@kriss.re.kr)
11:00-12:30	<b>(GA-01-L-2) Purity Calculation</b>	Dr. Namgoo Kang (nkang@kriss.re.kr)
12:30-14:00	Lunch	KRISS cafeteria (2nd floor)
14:00-17:00	<b>[GA-01-H-1] Hands-on Exercises: purity analysis and calculation</b>	Dr. Jeong Sik Lim (lim.jeongsik@kriss.re.kr)
17:00-17:30	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
<b>GA-02</b>	<b>Gravimetric Preparation of Primary Reference Gas Mixtures (PRMs)</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
June 21 (Thu)	Lectures (L), Hands-on Exercises (H)	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>(GA-02-L-1) Static Gravimetric Preparation</b>	Dr. Sangil Lee (slee@kriss.re.kr)
11:00-12:30	<b>(GA-02-L-2) Dynamic Gravimetric Preparation</b>	Dr. Dal Ho Kim (dhkim@kriss.re.kr)
12:30-14:00	Lunch	KRISS cafeteria (2nd floor)
14:00-17:00	<b>[GA-02-H-1] Hands-on Exercises: gravimetric preparation and calculation</b>	Dr. Sangil Lee (slee@kriss.re.kr)
17:00-17:30	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
June 22 (Fri)	<b>Presentation of Lab Reports</b>	<b>GMA</b>
09:00-09:30	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
10:00-12:00	Presentation(1): six(6) participants of Lab Reports (* 20 minutes each, including Q&A)	
12:00-13:30	Lunch	KRISS cafeteria (2nd floor)
13:30-14:30	Presentation(2): three (3) participants of Lab Reports (* 20 minutes each, including Q&A)	
14:30-15:00	Tea break	
15:00-15:30	Presentation of UST (* to be confirmed)	
15:30-16:00	From KRISS to Hotel (* ride offered by the Hotel Graytone)	Participants
June 23 (Sat) June 24 (Sun)	<b>FREE</b>	

<b>GA-03</b>	<b>Verification of PRMs and Certification of CRMs</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
<b>June 25 (Mon)</b>	<b>Lectures (L), Hands-on Exercises (H)</b>	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>(GA-03-L-1) Verification with GCs</b>	Dr. Jin Seog Kim (jkim@kriss.re.kr)
11:00-12:30	<b>(GA-03-L-2) Verification with Spectroscopies</b>	Dr. Jeongsoon Lee (leejs@kriss.re.kr)
12:30-14:00	Lunch	<b>KRISS cafeteria (2nd floor)</b>
14:00-17:00	<b>[GA-03-H-1] Hands-on Exercises: experiments with GC/Spectroscopy</b>	Dr. Jin Seog Kim (jkim@kriss.re.kr)
17:00-17:30	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
<b>GA-04</b>	<b>Testing and Calibration in Gas Metrology</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
<b>June 26 (Tue)</b>	<b>Lectures (L), Hands-on Exercises (H)</b>	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>(GA-04-L-1) Calibration of Gas Detectors</b>	Dr. Jin Sang Jung (jsjung@kriss.re.kr)
11:00-12:30	<b>(GA-04-L-2) Testing Gas Sensors</b>	Dr. Sang Hyub Oh (shoh@kriss.re.kr)
12:30-14:00	Lunch	<b>KRISS cafeteria (2nd floor)</b>
14:00-17:00	<b>[GA-04-H-1] Hands-on Exercises: experiments with gas detectors</b>	Dr. Jin Sang Jung (jsjung@kriss.re.kr)
17:00-17:30	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
<b>GA</b>	<b>Performance Evaluation Test, Individual Lab Visits, Closing</b>	<b>Tech. Service Bldg (Seminar RM #1, 1st floor)</b>
<b>June 27 (Wed)</b>	<b>Lectures (L), Hands-on Exercises (H)</b>	<b>Hands-on session: Laboratories in charge</b>
08:30-09:00	From Hotel to KRISS (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
09:30-11:00	<b>[Performance Evaluation Test]</b>	
11:00-12:30	<b>[Individual Visits to Laboratories of further interest]</b> - Q&A on matters of further interest to participants, including their Action Plans	participants will be divided into different groups by the subject of individual interest.
12:30-13:30	Lunch	<b>KRISS cafeteria (2nd floor)</b>
13:30-15:00	<b>Elaboration/Presentations of Action plans</b>	Participants, GMA
15:00-16:00	<b>Evaluation of the course (written &amp; oral)</b>	
16:00-16:30	<b>Closing session (certificate awarding)</b>	
16:30-17:00	From KRISS to Hotel (* ride offered by the Hotel Graytone)	GMA (Sangwook Seo)
<b>June 27 - 28 (Wed-Thu)</b>	<b>Departure (June 27-28)</b>	<b>* depending the flight itinerary of participants</b>
<p>* Participants are supposed to take the airport limousine bus bound for Incheon airport. * Ride to the bus stop near the Hotel Graytone will be provided by the Hotel Graytone in cooperation with GMA, KRISS.</p>		
<p>※ <b>Dress code: Smart casual</b></p>		

**Qualification**

1. The applicant should be duly nominated by the employer, whose official seal and signature should be put on the application/nomination form.
2. The applicant should be an employee of the national metrology institute (NMI) or measurement service laboratory at the time of application.
3. The applicant should be engaged in R&D and services in the subjects of workshop;
4. The applicant should be a university/college graduate or have equivalent professional career and knowledge on themes of the workshop.
5. For the sake of effectiveness, the applicant is required to have a good command of **English**.
6. The applicant should be healthy both physically and mentally enough to go through the whole programs of the workshop.

**Requirements: applications are accepted by March 25, 2018, along with the following requirements.**

1. **An official nomination** by the employer with the official seal and the signature of the top management of the employer;
2. A copy of the **curriculum vitae** of the applicant, describing the academic background and professional experience in detail;
3. A copy of **passport** as valid for more than six (6) months as of the expected date of arrival at Korea;
4. **Laboratory report and Action Plan:** Participants are supposed to submit their laboratory reports and draft action plans according to the template to be provided later on; and
5. Plan of sharing the results of his/her study in the GMA workshop for their institution and the nation.

**Number of participants: each GMA workshop will be operated with around 10 participants.**

**Financial Arrangements**

- Participants and their employers are responsible for paying all expenses of the tuition fees, airline tickets, accommodations and meals, etc. required for the participants' travel to and stay in Korea.
- Lunches for eight (8) working days are offered free to ALL participants.
- Subject to the availability of fund, additional financial assistance might be discussed for a limited number of people from developing countries.

<b>1. Tuition fees</b>	<p>① <b>Amount: US\$750/US\$1,500 per person</b></p> <ul style="list-style-type: none"> <li>☞ Two different categories of the tuition fees are applicable according to the economic performance of the applicant's country.</li> <li>☞ <b>Please contact the coordinator, BEFORE making applications, to get confirmed of the tuition fee category applicable for you.</b></li> </ul>
<b>2. Banking information</b>	<p>② Applicants are supposed to remit the tuition fees by bank transfer to the official bank account of KRISS.</p> <ul style="list-style-type: none"> <li>☞ <b>Payment should be made by April 30, 2018 which will make the application complete.</b></li> <li>☞ Please make sure that all the handling and banking charges raised both to the remitter and beneficiary should be paid by the remitter, so that the <b>net amount of tuition fees (US\$500 or US\$1,000) could be received by KRISS</b>.</li> </ul>
	<p>③ Official bank account of KRISS</p> <ul style="list-style-type: none"> <li>- Bank name: Kook-Min Bank (Branch: Yuseong Branch) - Swift code: CZNBKRSE</li> <li>- Account number: <b>461-01-0184-494</b></li> <li>- Account holder's name: Korea Research Institute of Standards and Science (KRISS)</li> <li>- Bank address: 1F, #468-3, Bongmyeong-dong, Yuseong-gu, Daejeon, Republic of Korea</li> </ul> <ul style="list-style-type: none"> <li>☞ <b>invoices will not be issued separately if otherwise requested. (* Receipts might be issued upon the participant's arrival at KRISS.)</b></li> <li>☞ <b>The statement of bank transfer should be sent to KRISS either by Email (swseo@kriss.re.kr) or FAX (+82-42-868-5565) with attention to the GMA course coordinator.</b></li> </ul>
<b>2. Living expenses</b>	<p>④ Participants are responsible for paying living expenses in Korea including accommodations and meals.</p>
	<p>⑤ For selected participants from the developing world, KRISS might provide free accommodations, subject to its financial availability.</p> <ul style="list-style-type: none"> <li>☞ Lunch for eight (8) working days will be offered free to ALL participants.</li> </ul>
	<p>⑥ Please note that expenses for all other meals shall be paid by the participants.</p> <ul style="list-style-type: none"> <li>☞ Participants are advised to bring some pocket money of their own for incidental expenses.</li> </ul>
<b>3. Airline tickets</b>	<p>⑦ It is likely that participants will stay at the Hotel Graytone, Dunsan in Daejeon. (<a href="http://www.graytone.co.kr/">http://www.graytone.co.kr/</a>)</p> <ul style="list-style-type: none"> <li>☞ The room rate (around US\$55 per night per room) includes breakfast, tax, and service charge.</li> </ul>
	<p>⑧ Participants and their employers are responsible for purchasing the airline tickets for the participants.</p>
<b>4. Local Transportation</b>	<p>⑨ The KRISS travel agent will pick up the participants upon their arrival at the Incheon (ICN) international airport of Seoul.</p> <ul style="list-style-type: none"> <li>☞ Participants are requested to advise the workshop coordinator of their flight itinerary to and from Korea <b>AS SOON AS Possible.</b></li> </ul>
	<p>⑩ The KRISS travel agent will help the participants to take the airport limousine bus bound for Daejeon.</p> <ul style="list-style-type: none"> <li>☞ The bus tickets (around US\$23 one way) are to be bought by the participants.</li> <li>☞ Upon your arrival at the bus stop in Daejeon ("Government Complex-Daejeon"), the staff of the Hotel Graytone will be meeting you to take you to the hotel.</li> </ul>

**Every applicant and participant should commit to read, strictly abide by, and respect the following rules and regulations as specified below that GMA endorses in implementing the GMA courses:**

1. Participants shall conduct themselves at all times in a manner compatible with their status as participants in the subject GMA course;
2. Participants shall attend, to the best of their abilities, all sessions of the GMA group and/or individual courses they are participating in;
3. Participants shall refrain from engaging in political activity or any form of employment for profit or gain;
4. Participants shall return to their home country upon completion of the subject course of GMA and resume work in their country;
5. Participants shall not extend the length of stay in Korea for personal convenience;
6. Participants whose flights are supported by GMA and other donor organizations are not permitted to change their flights for their personal convenience;
7. Participants shall not be accompanied by any member of their family;
8. Participants shall assume responsibility for any personal expenses incurred regardless of implementation of the course; and
9. Participants are required to strictly observe the course schedule and abide by the **rules and regulations stipulated by the KRISS and their sponsors, and by the laws of the Republic of Korea.**
10. Any form of harassment or insult, including but not limited to misconduct arising out of racial/ethnic, gender or class discrimination, whether it be physical or verbal, will not be tolerated and will be dealt with in accordance with the laws of the Republic of Korea and the rules and regulations of KRISS.
11. Especially, **sexual harassment**, defined as a form of behavior characterized by sexually connotative words, acts or gestures that could undermine individual dignity and by which the victim takes offense, is regarded as a serious misconduct and will be dealt with accordingly.
12. Offenders who fail to comply with the above **Rules and Regulations** laws shall be subject to punishment in accordance with the laws of the Republic of Korea and the regulations of KRISS, **which include sending an official letter of complaint to the offender's employer and government and instant deportation with ban of the offender's participation in the future GMA programs.**



**Applications and Inquiry!**

For any further information about participation in the subject course and GMA programs, please contact:

<b>Sangwook SEO</b> Senior Coordinator, Global Metrology Academy (GMA), KRISS	<a href="mailto:swseo@kriss.re.kr">swseo@kriss.re.kr</a> TEL + 82-42-868-5440 Fax + 82-42-868-5565
<b>Ms. Jinyoung LEE</b> Coordinator, Global Metrology Academy (GMA), KRISS	<a href="mailto:jyoung0425@kriss.re.kr">jyoung0425@kriss.re.kr</a> TEL + 82-42-868-5531 Fax + 82-42-868-5565