

# IAEA Environment Laboratories Department of Nuclear Sciences and Applications

# A L M E R A (Analytical Laboratories for the Measurement of Environmental Radioactivity) Training Course on In-Situ Gamma Ray Spectrometry

## Ref: IAEA-TM-49984

## Prospectus

| Title:                       | ALMERA Training Course on In-Situ Gamma Ray Spectrometry   |  |  |  |
|------------------------------|--|--|--|--|
| Host Institute:              | Federal Office for Civil Protection (FOCP), Spiez Laboratory, Spiez,<br>Switzerland  |  |  |  |
| Dates:                       | 2–6 November 2015  |  |  |  |
| Deadline for<br>Nominations: | 16 July 2015   |  |  |  |
| Organizers:                  | The International Atomic Energy Agency (IAEA) and the Spiez Laboratory, Switzerland  |  |  |  |
| Host Country<br>Organizer:   | Ms Béatrice Balsiger<br>Federal Department of Defence,<br>Civil Protection and Sport (DDPS)<br>Federal Office for Civil Protection (FOCP)<br>Spiez Laboratory<br>3700 SPIEZ<br>SWITZERLAND<br>Email: <u>Beatrice.Balsiger@babs.admin.ch</u>  |  |  |  |
| Language:                    | English  |  |  |  |
| Purpose:                     | The purpose of the course is to provide theoretical and hands-on practical training in the area of in-situ gamma ray spectrometry; specifically, to provide instruction in the basic principles of this measurement technique and its applications through practical exercises. In addition, decontamination methods and measures to be taken when working in contaminated areas will be demonstrated to the participants in controlled experimental conditions. |  |  |  |

| Expected<br>Outputs:       | The course will enable the participants to learn about the theory and practice<br>of in-situ gamma ray spectrometry, one of the most frequently used tools to<br>determine the type and level of environmental contamination in the case of a<br>nuclear emergency situation. The course will result in dissemination of this<br>method and increased method standardization across ALMERA laboratories.   |
|----------------------------|--|
| Scope and<br>Nature:       | The course will take place over a one-week period, and include laboratory practical work and lectures. Laboratory safety instruction will be provided in preparation for laboratory work.  |
|                            | Course materials and, where applicable, IAEA documents, will be provided.  |
|                            | Over the week, participants will learn about the theory of in-situ gamma ray spectrometry, hardware and software requirements, and perform measurements in field conditions. The field exercise will take place under strict dosimetry and safety control.   |
| Background<br>Information: | The course is being organized in response to the interest expressed by many ALMERA laboratories in developing their rapid assessment capabilities so as to be able to support decision making processes in case of a nuclear emergency.  |
| Participation:             | The course is open to 24 participants from ALMERA network laboratories.<br>Priority will be given to those laboratories that have an in-situ gamma ray<br>spectrometry system or plan to extend their off-site monitoring tools, but do<br>not currently have enough expertise. Participants will be selected on a<br>competitive basis using their practice and qualifications in laboratory gamma<br>ray spectrometry as criteria.   |
|                            | The ALMERA network has laboratories in the following IAEA Member<br>States: Argentina, Australia, Austria, Belarus, Belgium, Bosnia and<br>Herzegovina, Brazil, Bulgaria, Canada, Chile, China, Costa Rica, Croatia,<br>Cuba, Cyprus, Czech Republic, Denmark, Egypt, Estonia, Ethiopia, Finland,<br>France, Germany, Greece, Hungary, Iceland, India, Indonesia, Islamic<br>Republic of Iran, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kazakhstan,<br>Kenya, Republic of Korea, Kuwait, Latvia, Lebanon, Lithuania,<br>Luxembourg, Madagascar, Malaysia, Malta, Mexico, Mongolia,<br>Montenegro, Morocco, Myanmar, Netherlands, New Zealand, Norway,<br>Pakistan, Panama, Peru, Philippines, Poland, Portugal, Qatar, Romania,<br>Russian Federation, Saudi Arabia, Serbia, Slovakia, Slovenia, South Africa,<br>Spain, Sri Lanka, Sweden, Switzerland, Syrian Arab Republic, Thailand, The<br>former Yugoslav Republic of Macedonia, Tunisia, Turkey, Ukraine, United<br>Arab Emirates, United Kingdom, United States of America, Uruguay,<br>Bolivarian Republic of Venezuela, Zambia. |
| <b>Participants</b> '      | Participants should be experienced in gamma ray spectrometry; a basic  |

Participants' Qualifications:

Participants should be experienced in gamma ray spectrometry; a basic knowledge of working with radioactive materials is recommended.

| Nomination<br>Procedure:                         | Nominations should be submitted to the IAEA using the attached Form<br>The completed form should be endorsed by relevant national authorities a<br>returned to the IAEA through the official channels, i.e. the designa<br>National Liaison Office for IAEA Matters.  |  |  |  |
|--|---|--|--|--|
|  | The completed nomination forms should be received by the IAEA not later than <b>16 July 2015</b> . Nominations received after this date or which have not been routed through the established official channels cannot be considered. Advance nominations to the Scientific Secretary of the course, Mr Sandor Tarjan (Email: <u>S.Tarjan@iaea.org</u> ) and to the Administrative Secretary for the course, Ms Karin Will (Email: <u>K.Will@iaea.org</u> ), are encouraged.  |  |  |  |
| Administrative<br>and Financial<br>Arrangements: | The organizers of the course do not accept liability for the payment of any cost<br>or compensation that may arise from damage to or loss of personal property,<br>or from illness, injury, disability or death of a participant while he/she is<br>travelling to and from or attending the course, and it is clearly understood that<br>each Government, in nominating participants, undertakes responsibility for<br>such coverage. Governments would be well advised to take out insurance<br>against these risks. A copy of the insurance policy will be requested for the<br>issuance of the visa. |  |  |  |



# **Participation Form**

## ALMERA (Analytical Laboratories for the Measurement of Environmental Radioactivity) Training Course on In-Situ Gamma Ray Spectrometry

### Spiez Laboratory, Spiez, Switzerland

### 2-6 November 2015

To be completed by the participant and sent to the competent official authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA), Vienna International Centre, PO Box 100, 1400 Vienna, Austria, either electronically by email to: <u>Official.Mail@iaea.org</u> or by fax to: +43 1 26007 (no hard copies needed). Kindly also send a copy to the Scientific Secretary of the course, Mr Sandor Tarjan (Email: <u>S.Tarjan@iaea.org</u>), as well as to the Administrative Secretary of the course, Ms Karin Will (Email: <u>K.Will@iaea.org</u>).

Participants who are members of an invited organization can submit this form to their organization for subsequent transmission to the IAEA.

| Family name:   |                         | Given name(s): | Mr/Ms |  |  |
|--|-------------------------|----------------|-------|--|--|
| Institution:   |                         |                |       |  |  |
| Full address:  |                         |                |       |  |  |
|  |                         |                |       |  |  |
| For urgent communications please                             | Tel.:                   |                |       |  |  |
| indicate:  | Fax:                    |                |       |  |  |
|  | Email:                  |                |       |  |  |
| Nationality:   | rnment or organization: |                |       |  |  |
|  |                         |                |       |  |  |
| Mailing address (if different from address indicated above): |                         |                |       |  |  |
|  |                         |                |       |  |  |
| Work carried out during the last three years:                |                         |                |       |  |  |
|  |                         |                |       |  |  |
|  |                         |                |       |  |  |

### Deadline for receipt by IAEA through official channels: 16 July 2015



# **Grant Application Form**

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| Family name:              | Given name(s): |              | Mr/Ms: |  |
|---------------------------|----------------|--------------|--------|--|
|                           |                |              |        |  |
| Mailing address:          |                | Tel.:        |        |  |
|                           |                | Fax:         |        |  |
|                           |                | Email:       |        |  |
| Date of birth (yy/mm/dd): |                | Nationality: |        |  |

#### 1. Education (post-secondary):

| Name and place of institution | Field of study | Diploma or Degree | Years atte<br>from | nded<br>to |
|-------------------------------|----------------|-------------------|--------------------|------------|
|                               |                |                   |                    |            |
|                               |                |                   |                    |            |
|                               |                |                   |                    |            |

### 2. Recent employment record (starting with your present post):

| Name and place of employer/<br>organization | Title of your position | Type of work | Years wor<br>from | rked<br>to |
|---|------------------------|--------------|-------------------|------------|
|   |                        |              |                   |            |
|   |                        |              |                   |            |
|   |                        |              |                   |            |

#### **3. Description of work performed over the last three years:**

### 4. Institute's/Member State's programme in field of course:

Date:

Signature of applicant: \_\_\_\_\_

Date:

Name, signature and stamp of responsible Government official: