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**2019 RCA/KAERI Introductory Training Course on**

**Radiation Technology and its Applications**

**PROSPECTUS**

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| **Title :** | 2019 RCA/KAERI Introductory Training Course on Radiation Technology and its Applications |
| **Place :** | Korea Atomic Energy Research Institute (KAERI), Daejeon, Republic of Korea |
| **Date :** | 28 October - 8 November 2019 |
| **Deadline for** **Nominations :** | **21 August 2019** |
| **Organizers :**  | RCA Regional Office (RCARO) in cooperation with Korea Atomic Energy Research Institute (KAERI) |
| **Course Organizers :**  | **Mr JinKyu LIM**Head, Administration of RCA Regional OfficeTel: +82 42 868 4905E-mail: jklim@rcaro.org **Ms Hyun-Pa SONG**Nuclear Training & Education CenterKorea Atomic Energy Research InstituteTel: +82 42 868 2691E-mail: hpsong@kaeri.re.kr  |
| **Language:** | The language of instruction will be English |
| **Participation:** | This training course is open to 15-20 participants from RCA Government Parties.Each Government Party will be able to nominate up to one or two candidates. |
| **Target Countries:** | Bangladesh, Cambodia, China, Fiji, India, Indonesia, Laos, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Palau, Sri Lanka, Thailand, Vietnam |
| **Purpose of the** **Course :** | The purpose of the training course is to introduce the technical and practical knowledge on radiation technology and its applications |
| **Scope :** | The training course will include lectures by recognized experts from related institutes in Korea in the areas of radiation policy & safety, research reactor technology, and radiation applications in agriculture, food, human health, industry and medicine. The training course will also be a benchmarking opportunity, providing a forum for the participants to discuss their national practices and to exchange their experience related to the subjects covered. Participants are requested to prepare and submit **their country report** individually or as a group via e-mail (hpsong@kaeri.re.kr) **until October 7, 2019**. |
| **Participants’ qualifications and experience :** | Participants should be technical or managerial professionals directly involved in the field of radiation application technology in government authorities, R&D institutes, and regulatory bodies with **maximum of 5 years** relevant experience in the field. Bachelor’s degree or equivalent experience is required.Participants should have sufficient proficiency in English to follow lectures without difficulty. |
| **Application Procedure :** | Completed application forms should be endorsed and approved by the National RCA Representatives and be received at the below address **no later than 21 August 2019.****Ms Jinhwa KIM**Project Officer RCA Regional Office111, Daedeok-Daero 989 Beon-Gil, Yuseong-gu, Daejeon, 34057Republic of KoreaTel: +82 42 868 8224Fax: 82 42 864 1626E-mail: evolution@rcaro.org **Nominations received after this date or applications which have not been endorsed by the National RCA Representatives cannot be considered.** |
| **Administrative and Financial****Arrangements:** | During the training course, RCARO will provide the participants with a stipend sufficient to cover the cost of their accommodation, food and minor incidental expenses. RCARO will also provide the participants with a round-trip air ticket, economy class, from their home countries to Incheon, Korea and return. Participants will be provided with standard travel insurance. However, the organizers of the training course do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the training course and it is clearly understood that each Government, in nominating participants, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.  |

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| **1** | **Introduction** |
|  | 1.1 | Introduction to RCARO |
|  | 1.2 | Status of Radiation Industries in Korea |
| **2** | **Radiation Policy & Safety**  |
|  | 2.1 | Nuclear Radiation Application Policy in Korea |
|  | 2.2 | International and National Framework for Radiation Protection and Safety |
|  | 2.3 | Regulatory Control |
|  | 2.4 | Radiation Protection in Radiation Installations |
| **3** | **Research Reactor Technology** |
|  | 3.1 | Overview of Research reactor ‘HANARO’ |
|  | 3.2 | Introduction to new Research Reactor Project in Korea |
|  | 3.3 | Radioisotope Production and application  |
|  | 3.4 | Neutron Instrument Development |
|  | 3.5 | Neutron Beam Application |
|  | 3.6 | Use of Neutron Irradiation Technology |
| **4** | **Radiation Technology and its Applications** |
|  | 4.1 | Non-Destructive Testing |
|  | 4.2 | Linear Accelerators |
|  | 4.3 | Medical Applications of Radiation: from Radiation Oncologist’s Perspective |
|  | 4.4 | Research Activities of National Radiation Emergency Medical Center |
|  | 4.5 | Radiation Biotechnology |
|  | 4.6 | Radiation Technology Application for Agriculture |
|  | 4.7 | Food Irradiation |
|  | 4.8 | Drug Evaluation and its Application |
|  | 4.9 | Cyclotron and its Application |
|  | 4.10 | Radiation Application for Environmental Conservation |
|  | 4.11 | Radiation Processing for Polymeric Materials and its Industrial Applications |
|  | 4.12 | Electron Beam Application |
| **5** | **Other Activities (Technical Tour, Culture Tour, and Country Reports)** |
|  | KAERI (HANARO, RI production Fac., Cyclotron center, nano-ptl’s fab, Co-60, RI-biomics center, Radiation Breeding center)KIRAMS (Cyberknife, PET center), Jeonju Hanok Village, Changdeokgung Palace, SAMSUNG digital city |