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Agence Internationale de l'énergie atomique
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National Liaison Officers /

National Coordinators

In reply please refer to: TN-INT2023-2301207
Dial directly to extension: (+43 1) 2600-26540

2023-05-09

Subject: Interregional Training Course on the IAEA Reactor Technology Assessment for Small Modular Reactors (SMRs), Copenhagen, Denmark, from 28 to 31 August 2023

Dear National Liaison Officer / National Coordinator,

I am pleased to inform you that the International Atomic Energy Agency (IAEA) is organizing the above event under the IAEA technical cooperation project INT2023, "Supporting Member States' Capacity Building on Small Modular Reactors and Micro-reactors and their Technology and Applications as a Contribution of Nuclear Power to the Mitigation of Climate Change".

The purpose of the event is to train the participants on reactor technology assessment presented and applied to various designs of SMR emerging technologies.

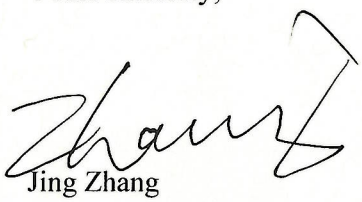
The attached Information Sheet provides further details, including technical and administrative aspects of the event. Selection of participants will be in accordance with IAEA procedures. Member States are strongly encouraged to identify women participants.

The IAEA will provide non-local participants with a round-trip air ticket based on the most direct and economical route between the airport nearest the participant's residence and Copenhagen or a travel allowance to purchase an air ticket. Travel details will be agreed with the participants upon receipt of their official nomination. Participants will also receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses for the duration of the event in line with IAEA rules and procedures.

We would appreciate receiving your country's nominations by **9 June 2023** through the IAEA's InTouch+ platform (https://Intouchplus.iaea.org). Should this not be possible, applicants may download the Nomination Form for the course from the IAEA's webpage. Completed forms must be endorsed by the relevant government authority and may be sent to the IAEA, preferably by email to Official Mail - IAEA Mail address Official.Mail@iaea.org, with copy to Mr Jing Zhang J.Zhang@iaea.org. Please be advised that late nominations or replacements of participants after the closing date for nominations will not be accepted.

We look forward to receiving your early response.

Yours sincerely,



Jing Zhang
Programme Management Officer
Division for Europe
Department of Technical Cooperation

Enclosure: Information Sheet

IAEA
International Atomic Energy Agency
Atoms for Peace and Development

Interregional Training Course on the IAEA Reactor Technology Assessment for Small Modular Reactors (SMRs)

Hosted by

The Government of Denmark

through the

Seaborg Technologies

Copenhagen, Denmark

28 to 31 August 2023

Ref. No.: TN-INT2023-2301207

Information Sheet

Purpose

The purpose of the event is to train the participants on reactor technology assessment presented and applied to various designs of SMR emerging technologies.

Working Language

The working language of the event will be **English.**

Deadline for Nominations

Nominations received after **9 June 2023** will not be considered.

Project Background

To meet the growing demand for energy and to mitigate global climate challenge, the interest in Small Modular Reactors (SMRs) and Micro-Reactors (MRs) is growing, especially with regions inaccessible to large electricity grids and regions with smaller electricity grids that need technology options deployed incrementally to closely match increasing energy demand. SMRs and MRs are also viable options for users that need beyond electricity supply, e.g., district heating, desalination, industrial process heat, as well as hydrogen. The purpose of the project is to provide broad support to Member States in the development and deployment of SMRs and MRs. The project provides a broad range of forum to enable effective capacity building through training and technology transfer activities on all aspects of SMR development. The project also covers the emerging MRs, the deployment of SMRs for electric and non-electric applications, and the coupling of such nuclear systems with renewables in integrated energy systems. The aim of the project is to enable national stakeholders to gain enhanced understanding on key characteristics of SMR and MR technologies and their applications, and to formulate, in line with international safety standards, countries' specific legal and regulatory frameworks, and generic user requirements and criteria for SMR technologies.

There are currently over 80 SMR designs proposed worldwide, with different design approaches, technologies, and safety features. Each design has its own advantages and disadvantages, and the choice of which SMR design to pursue depends on various factors such as the intended application, local regulations, and market demand. A major challenge — especially for embarking Member States — is the process of reactor technology assessment (RTA) for near term deployment. An RTA includes the entire selection process for the most suitable reactor technology to meet the objectives of a Member State's nuclear power programme. Documenting and justifying this RTA decision making requires detailed knowledge of reactor technology and best practices. It is necessary to improve the knowledge and to strengthen the capacity building in developing countries in assessing the best SMR technology option/s.

This Training Course will address the main considerations of the complexity involved in the selection of the most suitable reactor technology and the obligations associated with and responsibilities of an unbiased assessment in the example of SMRs.

Scope and Nature

During this four-day training course, the selected participants will receive lectures from international experts, as well as conduct the full Reactor Technology Assessment (RTA) exercise working with the IAEA RTA IT Toolkit, develop summary report, present the summary results, and participate in interactive discussions. A lab visit may also be a possible option in the agenda.

Participants will be required to bring a laptop for the RTA exercise'

By the end of this Training Course, the participants are expected to be familiar with the following aspects of the RTA for SMRs:

a) IAEA Nuclear Reactor Technology Assessment for Near Term Deployment based on the Nuclear Energy Series, No. NR-T-1.10 (Rev. 1), 2022;
b) IAEA eLearning module on Nuclear Reactor Technology Assessment for Near Term Deployment;

c) IAEA Reactor Technology Assessment IT Toolkit;
d) IAEA Agency wide Platform on SMRs and their applications, 2022 SMR booklet;
e) Design specifics for some of the SMR technologies and status of their deployment.

In addition, the Training Course will provide opportunities for participants to network and continue sharing information and good practices as well as other potential follow-up tasks and coordinated activities, as appropriate.

Expected Outputs

The expected output of the Interregional Training Course is to strengthen capacity in the following areas:

i. IAEA Nuclear Reactor Technology Assessment for Near Term Deployment: methodology, concept, and application;
ii. Main key considerations when developing a national policy and strategy for national nuclear power programme in selecting the SMR options;
iii. Design specifics for some of the SMR technologies and status of their deployment

Participation

The Interregional Training Course is open to up to 40 participants from the following Member States participating in the TC project INT2023:

Algeria, Argentina, Belarus, Bolivia, Brazil, Bulgaria, China, Croatia, Czech Republic, Egypt, Estonia, Ethiopia, Ghana, Greece, Guatemala, Hungary, Indonesia, Islamic Republic of Iran, Jamaica, Jordan, Kenya, Kuwait, Kyrgyzstan, Latvia, Libya, Malaysia, Mexico, Morocco, Nigeria, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Rwanda, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, Sri Lanka, Sudan, Thailand, Tunisia, Türkiye, United Republic of Tanzania, Zambia

Participants' Qualifications and Experience

Participants should be knowledgeable about their country's national strategy and specific plans for nuclear power programme status, development and planning and have initial understanding of the reactor technology assessment as decision making methodology and willing to share their experience and lessons learned in assessing the national nuclear power programmes of relevance to this course scope and expected outcomes.

Accepted participants should visit the IAEA eLearning module on Nuclear Reactor Technology Assessment for Near Term Deployment, and become familiar with the content of the IAEA Nuclear Reactor Technology Assessment for Near Term Deployment based on the Nuclear Energy Series, No. NR-T-1.10 (Rev. 1), 2022. In addition, the accepted participants should check the access to IAEA Reactor Technology Assessment IT Toolkit that requires the NUCLEUS account.

Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the InTouch+ home page (https://intouchplus.iaea.org) using the candidate's existing Nucleus username and password. If the candidate is not a registered Nucleus user, she/he must create a Nucleus account (https://websso.iaea.org/IM/UserRegistrationPage.aspx) before proceeding with the event application process below.

2. On the InTouch + platform, the candidate must:
    a. Finalize or update her/his personal details, provide sufficient information to establish the required qualifications regarding education, language skills and work experience ('Profile' tab) and upload relevant supporting documents;
    b. Download and complete the Designation of Beneficiary and Emergency Contact Form, and upload to InTouch+ ('Profile' tab under the personal section) specifying the document name. If already provided, kindly discard this step; and
    c. Search for the relevant technical cooperation event (EVT2301207) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

NOTE: Completed applications need to be approved by the relevant national authority, i.e. the National Liaison Office, and submitted to the IAEA through the established official channels by the provided designation deadline.

For additional support on how to apply for an event, please refer to the InTouch+ Help page. Any issues or queries related to InTouch+ can be addressed to InTouchPlus.Contact-Point@iaea.org.

Should online application submission not be possible, candidates may download the nomination form for the training course from the IAEA website.

NOTE: A medical certificate signed by a registered medical practitioner dated not more than four months prior to starting date of the event must be submitted by candidates when applying for a) events with a duration exceeding one month, and/or b) all candidates over the age of 65 regardless of the event duration.

Administrative and Financial Arrangements

Nominating authorities will be informed in due course of the names of the candidates who have been selected, and will at that time be informed of the procedure to be followed with regard to administrative and financial matters.

Selected participants will receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses. They will also receive either a round-trip air ticket based on the most direct and economical route between the airport nearest their residence and the airport nearest the duty station through the IAEA's travel agency AX Travel Management, or a travel allowance, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

Disclaimer of Liability

The organizers of the event 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 course, and it is clearly understood that each Government, in approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

Note for female participants

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of female workers by requiring, inter alia, that a female worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

IAEA Contacts

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