



# **Doctoral Degree Programmes in Nuclear Science and Technology**

**Hosted by**

The People's Republic of China

**through the**

Harbin Engineering University

**01 September 2020 – 15 July 2024**

**Ref. No.:** FS-INT2021-2002119

## **Information Sheet**

### **Purpose**

The purpose of the four-year Doctoral degree programme of Nuclear Science and Technology are to provide prospective future personnel of nuclear power programmes in the Member States with technical knowledge and skills required for a safe, secure and sustainable nuclear power programme.

## **Working Language**

The working language of the event will be English.

## **Deadline for Nominations**

Nominations received after **15 April 2020** will not be considered.

## **Project Background**

All Member States considering or planning to introduce or expand nuclear power are requesting Agency assistance in developing a safe, secure and sustainable nuclear power programme. Nuclear power requires a national infrastructure that provides governmental, legal, regulatory, managerial, technological, human resource, industrial and stakeholder support for the nuclear power programme throughout its life cycle. The demonstration of compliance with international legal instruments, internationally accepted nuclear safety standards, nuclear security guidelines and safeguards requirements is essential in establishing a responsible nuclear power programme. The Member States is to require more specialized, advanced support from the Agency than was provided under previous projects (INT2013 and INT2018). This interregional project INT2021 (for years 2020-2023) was designed and approved using an evolutionary approach following lessons learned from two previous four-year interregional projects in this field of activity with adaptations to match Member State needs, including human resources development.

The China Atomic Energy Authority (CAEA) and the Ministry of Education of China jointly initiate the program of Atomic Energy Scholarship of China (AES Programme in short) for the purpose of providing financial support to outstanding students, technicians and administrators from emerging nuclear power countries. Harbin Engineering University is entrusted to be responsible for this training program. The AES Programme will be guided by the demands of the international community, in order to cultivate applied talents for the target of nuclear power, relying on the international nuclear discipline's personnel training platform, using Diversity and Double Supervisor personnel training mode. Harbin Engineering University is the first program to have passed the Nuclear Engineering Education Accreditation in China.

## **Expected Outputs**

An increased number of qualified nuclear engineers with solid knowledge and expertise in the fundamental aspects related to developing, operating and regulating a safe and secure nuclear power programme.

## **Scope and Nature**

During this doctoral degree programme, professors/lectures and or experts will present relevant lectures, guidance and theoretical and practical knowledge and skill. The program will include lectures, practical examples, interactive exercises and technical visit.

Harbin Engineering University (HEU) is an educational institute established to cultivate the next generation of professionals in planning, design, construction, operation and management of nuclear power plants (NPPs).

## **Invitees**

The event is open to a maximum of 15 candidates from the following target countries that need assistance to enhance the number of staff involved in launching or expanding nuclear power programmes: Algeria, Argentina, Armenia, Bangladesh, Belarus, Bolivia, Brazil, Bulgaria, Chile, Czech Republic, Egypt, Ghana, Hungary, Indonesia, Iran, Jordan, Kazakhstan, Kenya, Lithuania, Malaysia, Mexico, Morocco, Niger, Nigeria, Pakistan, Philippines, Poland, Romania, Saudi Arabia, Senegal, Slovakia, South Africa, Sri Lanka, Sudan, Thailand, Tunisia, Turkey, UAE, Uganda, Uzbekistan, Viet Nam and Zambia.

## Participants' Qualifications and Experience

The Doctoral degree programme in Nuclear Science and Technology are for junior or senior professionals in the target countries involved in the development of new or expanding nuclear power programmes. Ideally, these individuals should represent the nuclear energy programme implementing organization, owner/operator organization, regulatory body or relevant technical support organization. Applicants should include a description of their current and future role in the nuclear power programme, as well as how this education will support the overall objectives of the programme. Applicants need to be supported by their institution and meet the following criteria:

- Doctoral degree programme requires the applicant to hold both bachelor's degree and master's degree or its equivalent in sciences and/or engineering from a recognized university (both bachelor's degree and master's degree holder of other areas with working experiences in policy making for national energy supply or nuclear energy applications could also apply).
- Preferably one (1) year practical working experience.
- Possess a proficiency in English (spoken, written and reading) or Chinese enabling them to read and express themselves in this language without difficulty.

## 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. Search for the relevant technical cooperation event (**EVT2002119**) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

3. Application procedure for Herbin Engineering University:

To apply to AES Programme of China, applicants should have earned a bachelor's/master's degree or its equivalent in sciences and/or engineering. This, however, does not discourage bachelor's degree/master's degree holders in other field areas with working experiences in policy making for national energy supply or nuclear energy applications.

**Application to HEU and additional information on eligibility and guidelines on the application process can be found on the website: <http://studyheu.hrbeu.edu.cn>**

**NOTE: All the applicants need to fill two Online Application Systems:**

1. <http://studyinchina.csc.edu.cn>

(To choose Type B, HEU Agency Number : 10217)

2. <http://issp.hrbeu.edu.cn>

**Applications must be submitted directly and independently by the candidate through the above-mentioned website.**

IAEA will give priority consideration to those candidates who fully meet or exceed the application requirements.

**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](mailto:InTouchPlus.Contact-Point@iaea.org).

Should online application submission not be possible, candidates may download the nomination form for the meeting 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 Governments will be informed in due course of the names of the selected candidates and will, at that time, be given full details on the procedures to be followed with regard to administrative and financial matters. Participants selected by the IAEA for the stipend from countries eligible to receive technical assistance will also be provided with a round-trip economy class air ticket from their home countries to Harbin, People's Republic of China and insurance coverage. Please note that selected participants will not be eligible to apply for funded temporary assignment at HEU during the duration of the Doctoral Degree Programme. It is noted that AES Programme will provide these IAEA selected candidates with funding to cover tuition fees, accommodation for single participants, and monthly living expense. Shipment of accumulated doctoral degree programme materials to the participants' home countries is not the responsibility of the IAEA nor HEU. Final admission to the doctoral degree programme will be decided by HEU according to its academic admission criteria.

The organizers of the doctoral degree programme 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 traveling to and from or attending the doctoral degree programme, 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.

## **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.

## **Security in the Field**

In order to comply with UN system-wide security measures, it is required that all training course participants complete the online security awareness training BSAFE (which replaces BSITF and ASITF), prior to traveling to locations where UN security phases are in effect. The aim of these course is to educate participants on how best to avoid or minimize potential dangers and threats, and to demonstrate what individuals can do if they find themselves in insecure situations. The course is available online (<https://training.dss.un.org/course/category/6>).

Once an individual has completed the training, he/she must go back to the main training page to receive the certificate. If the button to get the certificate is not immediately visible, please refresh the page. BSAFE is maintained by UNDSS; in case of problems with the system, please contact UNDSS through the "Contact Us" page on the training website (<https://dss.un.org/dssweb/contactus.aspx>).

This certificate is compulsory for any IAEA-supported activity and should be submitted, along with the Nomination Form, through the competent authority in your country (NLO). Copies of the certificate should be kept by the candidate for his/her records as the BSAFE certificate does not expire.

## **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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