

## *Next Generation Nuclear Systems: “The Force Awakens”*

*held in conjunction with the*

### **International Conference on Fast Reactors and Related Fuel Cycles: Next Generation Nuclear Systems for Sustainable Development**

**FR17**

*26–29 June 2017, Yekaterinburg, Russian Federation*

The United Nations 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs), adopted by world leaders in 2015, aim at transforming the world by eradicating poverty and moving toward sustainable development. Achieving these goals will require reliable and sustainable sources of energy. Three of the SDGs, in particular, address this need:

- Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 13: Take urgent action to combat climate change and its impacts

Innovative nuclear energy systems can play an important role in this regard.



To help contribute to building the future envisioned in the 2030 Agenda for Sustainable Development, the IAEA is organizing a Young Generation Event (YGE) at the International Conference on Fast Reactors and Related Fuel Cycles: Next Generation Nuclear Systems for Sustainable Development (FR17), to be held 26–29 June 2017 in Yekaterinburg, Russian Federation. Like the previous YGEs, held in conjunction with the Fast Reactors and Related Fuel Cycles conferences in Kyoto, Japan, in 2009 (FR09), and in Paris, France, in 2013 (FR13), the event provides young academics and professionals an opportunity to present their work in, and their vision of, the nuclear energy technology field.

The 2017 YGE event is divided into two parts:

#### **‘Young Innovator’ challenge**

The ‘Young Innovator’ challenge calls on participants to submit a research proposal related to one or more of the conference’s eight thematic tracks.

The submitted research proposal should be innovative, original work — or an idea for future work — related to fast reactor/innovative nuclear technology, with the overall objective being to contribute to one or more of the three SDGs mentioned above.

- A total of **five research proposals will be selected** for presentation as part of a special panel at FR17. One of the five winners will be selected as the **Keynote Speaker**.
- The IAEA will discuss the winning research proposal at a future meeting of the Technical Working Group on Fast Reactors (TWG-FR) to explore possible **study of the topic**, as a way of fostering innovation in the field of fast reactors.

- All winners will receive a **certificate signed by the Director General of the IAEA** recognizing their efforts to develop innovative energy solutions for the future. The winners will receive financial support to attend the conference.
- The winners will have an opportunity to visit the **BN-800 reactor, the world's largest operational fast reactor**.

### **‘Young Global Leader’ challenge**

In the ‘Young Global Leader’ challenge, participants will be required to prepare a speech and associated presentation on the theme of ‘Next Generation Nuclear Systems for Sustainable Development’, either written or, preferably, recorded.

Submissions should be original work addressing the theme of the conference while keeping in mind the SDGs related to reliable and sustainable energy sources (SDGs 7,9 and 13).

- **One winner** will be named the ‘**Young Global Leader**’ and will present his/her ideas during the YGE Special Panel at FR17. The winner will receive financial support to attend the conference.
- The winner will receive a **certificate signed by the Director General of the IAEA recognizing his/her leadership efforts to promote the next generation of nuclear systems**.
- The winner will also have the opportunity to visit the **BN-800 reactor, the world's largest operational fast reactor**.

### **Selection procedure:**

The selection committee will be made up of IAEA technical officers, and will be chaired by the Director of Division of Nuclear Power and the Director of Division of Fuel Cycle and Waste Technology.

All submissions will be assessed anonymously. The total assessment time will be two months.

Deadline to submit research proposal/speech: **5 December 2016**

Announcement of winners: **15 March 2017**

### **Terms and Conditions:**

The competition is open to participants from IAEA Member States only. Applicants should be below 35 years of age (i.e. born on or after 1 January 1982). Applicants may participate only in one of the two YGE challenges, with no more than one entry per candidate.

Submissions for the ‘Young Innovator’ challenge should be sent to the following email address: [C.Batra@iaea.org](mailto:C.Batra@iaea.org) or [A.Lazykina@iaea.org](mailto:A.Lazykina@iaea.org). Each submission should include the following<sup>1</sup>:

- The full research proposal (around 4 pages (maximum 8 including figures and references), provided as a PDF file (research proposal template available on conference website <http://fr17.org>).
- A completed YGE application form (application form available on conference website <http://fr17.org>), provided as a PDF file.
- In addition, they must send a completed
  - Participation Form (Form A), and
  - Grant Application Form (Form C) (if applicable),

as soon as possible to a competent official authority:

- Ministry of Foreign Affairs,
  - Permanent Mission to the IAEA, or
  - National Atomic Energy Authority,
- or to one of the organizations invited to participate for subsequent transmission to the IAEA, via email to: [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org).

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<sup>1</sup> Incomplete applications will not be evaluated.

*(more information can be found at conference announcement:*

<http://www-pub.iaea.org/iaeameetings/50810/International-Conference-on-Fast-Reactors-and-Related-Fuel-Cycles-Next-Generation-Nuclear-Systems-for-Sustainable-Development-FR17>)

Submissions for the ‘Young Global Leader’ challenge should be sent to the following email address: [C.Batra@iaea.org](mailto:C.Batra@iaea.org) or [A.Lazykina@iaea.org](mailto:A.Lazykina@iaea.org), and should include:

1. The complete power point presentation provided as a PDF file.
2. The full speech (maximum 15 minutes) provided either in written form or, preferably, recorded.
3. A completed YGE application form (application form available on conference website <http://fr17.org>), provided as a PDF file.
4. In addition, they must send a completed
  - Participation Form (Form A), and
  - Grant Application Form (Form C) (if applicable),

as soon as possible to a competent official authority:

- Ministry of Foreign Affairs,
- Permanent Mission to the IAEA, or
- National Atomic Energy Authority,

or to one of the organizations invited to participate for subsequent transmission to the IAEA, via email to: [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org).

*(more information can be found at conference announcement:*

<http://www-pub.iaea.org/iaeameetings/50810/International-Conference-on-Fast-Reactors-and-Related-Fuel-Cycles-Next-Generation-Nuclear-Systems-for-Sustainable-Development-FR17>)

To ensure that the evaluation is as anonymous as possible, please ensure that no personal information is included in the presentation/speech (e.g. nationality, name, occupation).

The deadline for submission is **5 December 2016 before midnight (CET)**. Applications submitted after this time will not be considered. Once an application has been submitted, there will not be an opportunity to revise it.

## **YGE Organizers**

### **Chirayu Batra**

Division of Nuclear Power

Department of Nuclear Energy

International Atomic Energy Agency

[C.Batra@iaea.org](mailto:C.Batra@iaea.org)

### **Anastasia Lazykina**

Division of Nuclear Fuel Cycle and Waste Technology

Department of Nuclear Energy

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[A.Lazykina@iaea.org](mailto:A.Lazykina@iaea.org)