

The logo for the International Conference on Fast Reactors and Related Fuel Cycles (FR 22) features the letters 'FR' in a bold, red, sans-serif font, followed by the number '22' in a similar font. The '22' is partially enclosed by a grey hexagonal pattern of small circles, resembling a honeycomb or nuclear fuel element structure.

IAEA Young Generation Event (YGE) – FR 22

Sustainable Clean Energy for the Future

International Conference on Fast Reactors and Related Fuel Cycles: Sustainable Clean Energy for the Future

19–22 April 2022, Vienna, Austria

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. In the framework of the IAEA International Conference on Fast Reactors and Related Fuel Cycles, the Organizing Committee invites early career professionals to make proposal on how to address the following United Nations Sustainable Development Goals (SDGs), while discussing the necessary innovative technology and methods.



Like the previous young generation competitions, held in conjunction with the past Fast Reactors and Related Fuel Cycles conferences since 2009, the event provides students and young professionals in nuclear an opportunity to present their work and their vision of the nuclear energy technology field.

The 2022 Young Generation Event (YGE) invites early career colleagues to share an essay on their vision of fast reactor technology.

‘Future Innovator’ Essay Challenge

In the challenge, participants are asked to submit a short essay (1500 words maximum) on emerging ideas and innovations related to fast reactors nuclear technology and related fuel cycles. The paper should:

- Identify a novel or emerging technology related to fast reactors or an idea for future work
- Identify where it may be deployed or where it may have the most impact
- Identify challenges to adopting the technology, and opportunities for future research

The objective is to provide young professionals with a space to acknowledge and discuss new strategies, technologies, tools, and ideas. The range of topics is very broad, participants are invited to present their various ideas related to fast reactors including such as innovative fuel types, simulation codes, systems, components, materials, or manufacturing tools.

The challenge will follow the milestones:

04 February 2022	Event Announcement
24 March 2022	Submission Deadline
24-31 March 2022	IAEA Review
04 April 2022	Winners Announced
18-22 April 2022	FR22

Terms and Conditions:

The event is open to participants from IAEA Member States only. Applicants should be below 35 years old (i.e. born on or after 1 January 1987).

1. Submission

Submissions for the ‘**Future Innovator**’ challenge should be sent to the following email address: fr22@iaea.org. Each submission should include the following:

1. The title of the email should read: “Future Innovator FR22 Essay Contest Submission ‘FAMILY NAME’”
2. The full white paper (maximum 1500 words, including figures and references) in English, provided as a PDF.
3. Include the following information in the body of the e-mail:
 - Applicant’s first and last name as in the passport
 - Title (Mr/Ms)
 - School/organization/affiliation
 - If a student, enrolled programme (bachelors, Masters, PhD)
 - Country of passport

4. Essays must be submitted by an applicant acting in their own personal capacity and not on behalf of an organization, company, or government.
5. All essays must be original work by the applicant in their own words, except for quotations from published and unpublished sources, where they must be clearly indicated and acknowledged as such.
6. In addition, [register through the InTouch+ Platform](#) OR they must send a completed
 - a. Participation Form (Form A),
 - b. Form for Submission of a Paper (Form B) (if applicable), and
 - c. 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.

The deadline for submission is **24 March 2022 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.

2. Selection

Submissions will be reviewed by members of the International Scientific Program Committee of the Conference. Successful submissions will show a good insight of the nuclear emerging technology addressed, its possible applications, impact and provide evidence both for and critiquing the selected topic. Submitted essays will be evaluated anonymously and without regard to nationality, gender, or occupation of the applicant.

3. Prizes

Three participants will be selected as winners of this contest and will be invited to record a presentation for one of the conference sessions. On top of that winners will receive a travel grant (or compensation in case of travel restrictions) and a special IAEA certificate of recognition. The IAEA will discuss the winning research proposal at a future meeting of the Technical Working Group on Fast Reactors (TWG-FR) or Technical Working Group on Nuclear Fuel Cycle Options (TWG-NFCO) to explore possible study of the topic, as a way of fostering innovation in the field of fast reactors and related fuel cycles.

All submitters will receive an IAEA certificate of participation and their essays will be available in the conference app to acknowledge their work.

For any further questions please contact FR22@iaea.org.