

Title: Role of Nuclear towards the achievement of climate goals
20th April 2023

Amity Institute of Nuclear Science and Technology, Amity University Uttar Pradesh and Indian Youth Nuclear Society (IYNS) have joined hands to strengthen the promotion & education of Nuclear Technology (both fission and fusion), women's empowerment, and awareness towards climate change & innovation to mitigate the same. Both organisations are working on the similar mission.

A half day event on the topic "Role of nuclear towards the achievement of climate goals" will synergize our actions towards net zero carbon goals and will bring interaction, career, and training opportunities for students in the Nuclear Sciences. Students will get national and international exposure on nuclear fission and Fusion (ITER France) Industry. We are fortunate to be joined by experts from the **Centre for Air Power Studies, Delhi, International Thermonuclear Experimental Reactor (ITER), France, GE Aerospace Bengaluru**. Some of the experts are in the steering committee of **Women in fusion (WiF)**, a global association of women working in the Fusion Sector and **Women in Nuclear India (WiN)**: Association, an initiative by Indian women working in the nuclear sector to mark their presence.

The event has been organized in hybrid mode (physical presence of speakers and audience at Amity University) and live on social media (through the IYNS/Amity Channel). Students from various courses apart from Sciences and Engineering can join for the interaction.

Date: 20th April 2023, Amity Institute of Nuclear Science & Technology
Conference Room G 06, B block.

The agenda of the event was as follows:

Time	Particulars	Speakers
3-3:02PM	Welcome of Guests	Ms. Archana Yadav Assistant Professor AINST BoD WiN India Association
3:02-3:06	Opening remarks	Prof. AK Jain Advisor and Hon. Professor AINST
3:06-4:30PM	Panel discussion on ' Role of Nuclear towards the achievement of climate goals', unleashing the capability and knowledge of Women. Moderated by Dr. Nitendra Singh (IYNS) and Ms. Archana Yadav (AUUP)	<u>Speakers:</u> 1. Dr. Manpreet Sethi, Centre for Air Power Studies, Delhi. 2. Dr. Alpana Goel, AINST, AUUP 3. Ms. Shira Tabchnikoff, ITER France 4. Dr. Eshita Pal, GE Aerospace. 5. Ms. Ankita Singh, IIT Mumbai.
4:30- 4:50PM	Nuclear fusion: the key to the NetZero Future by Dr. Nitendra Singh,	President IYNS BOD (Board of Directors) WiN-India Member of Women in Fusion (WiF), Steering Committee
4:50-5:10PM	Role of women and opportunities in fusion: a global scenario	Ms. Shira Tabchnikoff, Dy. Head C&IR, ITER Co-Chair of WiF Steering Committee)

5:10-5:20	Felicitation of Guests	Prof. A K Jain & Dr. Nitendra Singh
5:20-5:25	Vote of thanks	Dr. Jehaan Nicholson IYNS Representative (AINST Alumni)
5:25PM	High Tea	By Invitation

Additional Attendees:

1. Mr. Samyak Munot, DGFS Fellow, HBNI, Mumbai. (General Manager IYNS) (Alumni AINST)
2. Dr. Sapna Singh, Guest Faculty, LAJPAT RAI COLLEGE.

Envisaged Outcomes:

1. Illustrate about the role of nuclear in reducing carbon footprints.
2. Elaborate upon the opportunities available (internship/placements) in ITER (Fusion reactor technology).
3. Appraise the role of women in nuclear sector (National/International).
4. Formulate the role of everyone in contribution towards the net zero future.

Achieved Outcomes: All the panellists presented their views and contribution of their respective sector towards decarbonization and need for gender equity. Through the discussions amongst the panellists and senior members of AINST it was concluded that

1. Women might have to withstand the most of both poor environments outside and internally in terms of attitudes of co-workers.
2. Awareness about the need for education is must and further the opportunities available are to bring to the focus of the beneficiaries for them to understand the effectiveness of being educated.
3. The need of the hour is to live a sustainable lifestyle rather than a comfort based.
4. Everyone must take up small measures to contribute to sustenance, this might start with conserving food, water, or energy for that matter.
5. Nuclear is a viable option but amidst fear and apprehension, awareness must be provided for people to better adapt to this technology.
6. Industry has slowly started supporting women workforces to cater to their personal commitments and this is encouraging women to pursue their careers.

This event was livestreamed on IYNS channel, and the link is as follows:

<https://www.youtube.com/watch?v=LQ0OK19TS84&t=328>

Glimpses of the event



IYNS Shiv Nadar School Boot Camp: Laboratory demonstration at AINST laboratory

The demonstration was held in the Amity Nuclear Security Education, Training and Research Facility setup under the patronage of Texas A & M University (TAMU) and Défense Threat Reduction Agency (DTRA), US.

Held on 21st April 2023, 8 students along with their teachers (2) from Shiv Nadar School visited Amity for a hands-on training AINST laboratory and this was live demonstrated to many more students attending the boot camp in association with IYNS at Shiv Nadar School, Faridabad.

The link of the recording is as follows: <https://www.youtube.com/watch?v=EM1uVjx-Jvw&t=28s>

The students performed experiments pertaining to identification of radiation, detector calibration and searching for source in a room with the help of Radioisotope identification devices.

Outcomes:

1. Hands on training on radiation equipment to school children
2. Visibility of the institute and encouraging more students to join Nuclear Sciences.
3. Spreading awareness about nuclear radiations, their safe detection and latest in technology.

Future aspect: more students will be coming for a hands-on training.

Glimpses of the hands-on training in Laboratory



