

INS Annual Report

December 10, 2022 to January 31, 2024

1. Quarterly INS Newsletters, from January 2023 to September 2023, were published and soft copies uploaded on the INS website. A special Newsletter published by the outgoing Committee was distributed to recipients.
2. Public Outreach Programmes were conducted as follows.
 - i. National Symposium for Radiation Physics (NSRP-23) at University of Mysore during January 19-21, 2023.
 - ii. National Symposium on 'Nuclear Energy - Its Generation & Applications', jointly with Atomic Energy Retirees Association Kerala (AERAK) and the Union Christian College, Aluva, Kerala during Feb 23-24, 2023
 - iii. Two-day program at Brijlal Biyani College, Amravati, Maharashtra, during March 24-25, 2023. Workshop on Nuclear Medical Diagnostic Techniques for students on the first day, and Public Outreach Program under the theme 'Nuclear Science & Technology for Sustainable Development' on the second day.
 - iv. One-day workshop Nehru Science Centre (NSC) in collaboration with INYAS and NSC. Workshop on 'Opportunities in Nuclear Science (ONuS)'
 - v. Sindhudurg on 6th and 7th October 2023
 - vi. One-day workshop at BHU Varanasi on 'Nuclear Energy for Health, Environment and Development' on 14-10-2023 in collaboration with IIT, BHU, Varanasi.
 - vii. INS Mysuru Branch conducted the following programs:
 - Participated by the way of involving in arranging the display of posters in the 23rd National Symposium on Radiation Physics (NSRP-23) organized by Department of Studies in Physics, University of Mysore & Indian Society for Radiation Physics at Vijnana Bhavan, University of Mysore on 19-21 January 2023.
 - Participated in the celebration of "National Science Day" organized at Government Pre-University College, Yelwal, Mysuru on 28-02-2023.
 - Participated in "Applications of Atomic Energy in Food and Agriculture" on 08-03-2023 at the campus of College of Horticulture, Mysuru.
 - Seminar held at INS-Mysuru Branch on 26.10.2023
3. INS celebrated Republic Day - 2023 and Independence Day - 2023.
4. All the available old issues of INS Newsletters were scanned and digitized and archived. All the Balance Sheets were scanned and digitized for the records.
5. Charity Commission related activities were pursued vigorously to address the pending issues.
6. Constitution Amendments were proposed for INS and approval were obtained through special GBM held on 03-03-2023. The membership fees were also revised w.e.f. 01-04-2023. The related information are available on the INS website.
7. Secretarial help for INS was appointed up for smooth functioning of INS.

8. Expenditure statements were reviewed and approved on monthly basis. FDs were renewed towards earning more interest income for the Society.
9. The old and unused books and periodicals were disposed of by way of distribution to interested persons and shredding the remaining ones. The storerooms and the steel furniture were repainted.
10. The INS Compound (outside area of INS Office) was cleaned and resurfaced with the support of DCSEM.
11. Following Seminar talks (monthly basis) were organized during the report of the period at AERB Auditorium, Niyamak Bhavan, Anushaktinagar.
 - 'Relevance of Small and Modular Reactors in Indian Energy Scenario: Challenges and Opportunities' on 21-01-2023 by Dr AK Nayak, Head, NCPW, DAE.
 - 'Small and Modular Reactors' on April 08, 2023 by Shri GR Srinivasan, Former, Vice-Chairman, AERB
 - 'Physics of Next Generation Energy Systems – An Overview' on 08.07.2023 by Dr. K Umasankari, Head, Reactor Physics Design Division, Bhabha Atomic Research Centre and Senior Professor, Homi Bhabha National Institute.
 - 'Indigenous Electron Accelerators for Diverse Applications' on 12.08.2023 by Dr. Archana Sharma, Director, Beam Technology Development Group, BARC
 - 'Safety – Security Interface at Nuclear Power Plants' by Shri D.K. Shukla, Chairman, AERB on June 03, 2023
 - 'Nuclear Hydrogen towards quest for net Zero' on 16.09.2023 by Shri K.T. Shenoy, Director, Chemical Engineering Group, BARC.
12. INS started a "Young Nuclear Professional Forum". First Lecture on 'Seismic Design of NPP' was delivered by Shri S.D. Bhavsar, Associate Director (SA&S), NPCIL on 19-01-2024.
13. Cooperation MoUs signed with International Nuclear Associations, viz., American Nuclear Society (ANS), French Nuclear Society (SFEN) and Japanese Nuclear Society. More such MOUs with associations from other countries are in process.
14. Procured two laptops/desktops and a mobile phone for INS/INSIC-2023.
15. Initiative taken for In-house Expert Lecture Series under 'INS Young Professional Forum'. First lecture was conducted on 19-01-2024 on the topic "Seismic Design of Nuclear Power Plants" by Shri SD Bhavsar, NPCIL.
16. INS Participated in WNE-2023 held at Paris, France during November 28-30. Initiative taken on drafting of joint statement with French Nuclear Society on Nuclear Energy as Green Energy.
17. Revamping of the current INS website has been taken up.
18. INS supported The Goa International Robotics Festival at Goa, by sponsoring distribution 100 robotics-kit to youngsters during an event "Goatronics", held during 25-28 January 2024.
19. INS International Conference on 'Nuclear for Clean Energy Transition' INSIC-2023 was held during December 12 – 15, 2023 at the DAE Convention Centre, Anushaktinagar. Please see Annexure for report on INSIC-2023

Annexure: Report on International Conference INSIC-2023 organised by Indian Nuclear Society on “Nuclear for Clean Energy Transition”.

Introduction:

Indian Nuclear Society (INS) in association with NPCIL had organized the Indian Nuclear Society International Conference-2023 (INSIC-2023) with the theme “Nuclear for Clean Energy Transition” from December 12-15, 2023, at DAE Convention Centre, Anushaktinagar, Mumbai 400 094.

The INSIC-2023 was organized to bring together International and Indian experts from Industry, R&D Organizations and Academia to deliberate on the directions for decarbonisation with Nuclear as an essential foundation of the energy source. INSIC-2023 was arranged to bring more clarity on Nuclear Energy which is the inevitable choice to achieve deep-decarbonisation, since it is the largest source of base load power with minimum carbon footprint.

The intention of organizing INSIC-2023 was based on the present Government of India’s Policy i.e. ‘Make in India’, which gives vision to bring Indian Industries at par with global industries.

Brief details about INSIC-2023

About 500 delegates from Nuclear Fraternity & Nuclear Related Industry participated in the INSIC-2023 International Conference, including 30 foreign delegates.

The inauguration function of INSIC-2023 on 12/12/2023 was graced by Shri B.C. Pathak, CMD, NPCIL and Shri Vivek Bhasin, Director, BARC.

The INSIC-2023 had the following topics in its theme.

- a. Global Nuclear Industry & Capability to Sustain a Three-to Four-Fold increase in Nuclear Power.
- b. NPCIL on the Path of Nuclear Energy Growth
- c. Growth of Gen III and III+ Reactors
- d. Key Policy changes Required to Enhance the Role of Nuclear Power in India’s Pathway to Net Zero.
- e. Clean Core’s Thorium and HALEU based ANEEL Fuel for PHWRs.
- f. Emerging Technologies in Support of Nuclear Power Deployment Security & Safety.
- g. Delivering on the Promise of Small Modular Reactor.
- h. Developments in Hydrogen Production Schemes with Nuclear Energy.
- i. Design, Development and Deployment of Alkaline Water Electrolyser Technology at BARC.
- j. Sustainable Nuclear Fuel Cycle as an Answer to Spent Nuclear Fuel Management Challenge.
- k. Nuclear, both Big and Small Powers the Energy Transition.
- l. EDF’s GenIII & III+ Reactors – Growth Acceleration & Cost Reduction.
- m. Nuclear Power Development-Technologies and Skills Challenges: lessons learned in France and opportunities in India.
- n. Korea’s Nuclear Power Development Experience and Competitiveness.
- o. Second Stage of Indian Nuclear Programme Towards Green Energy Transition
- p. Role of Larsen & Toubro in Furthering Nuclear Growth in India.
- q. Role of Walchand Industries Ltd., in the Growth of Nuclear Power in India.
- r. General Aspects of SMR use.
- s. Climate Change and India’s Energy Transition: The Role of Nuclear Power.
- t. Accelerator Driven Sub-Critical System / Thorium for lower cost nuclear energy.
- u. Advanced Sub Critical Micro Reactors for Energy Distribution.
- v. Self Reliance and Diversification in Heavy Water Technologies.

w. Development of High Intensity Proton Accelerators – Present Status and Future Programme.

Ten International Experts and twelve Indian Experts delivered talks on the above topics. Over and above these presentations, there were three panel discussions in which the International Experts participated. At the end, a panel gave an overview of the INSIC-2023.

Conclusion:

The INSIC-2023 was very successfully conducted by the Indian Nuclear Society. The Conference was appreciated by all those who attended it. The theme “Nuclear for Clean Energy Transition” was very appropriate in the present global context. The Organizing Committee of INSIC-2023 took care of all the logistics required to host an International Conference of this scale. The INSIC-2023 showcased the purpose of the Indian Nuclear Society and its relevance in the Nuclear Energy scenario India.

The Conference ended with a vote of thanks to all those who were directly or indirectly involved in organizing and conducting INSIC-2023.

ACKNOWLEDGEMENTS

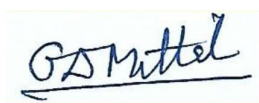
The Executive Committee continued to get the full support and guidance from the Board of Trustees for the growth of the Society. On behalf of the Executive Committee, I place on record our sincere thanks to the members of the Board of Trustees.

The Branches continued to hold various programmes during the period of this report. However, more needs to be done. Some of the branches need to be activated. I thank all the members of the Branch Committees for their support.

The strength of Society lies in its members, and I am indebted to all of them for giving me an opportunity and other Members of the Executive Committee to reflect their aspirations to achieve the objectives of the Society. Their cooperation is wholeheartedly acknowledged.

I express our thanks to the Auditors of the Society and officers and staff of the Punjab National Bank and State Bank of India, Anushaktinagar Branches, Society’s Bankers and the officers of TTM-II (DCS&EM) for their cooperation throughout the year.

Thanking you all,



(GD Mittal)
Secretary, INS

Mumbai-400094
January 31, 2024