



-  XXIII ENFIR
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Nuclear Energy:

Assuring Energy, Health and Food

May 6-10, 2024

Escola de Guerra Naval (EGN) | Rio de Janeiro | RJ | Brazil

Promotion



The Brazilian Nuclear Energy Association - ABEN proudly announces the 11th International Nuclear Atlantic Conference 2024 (INAC 2024), scheduled to take place in the vibrant city of Rio de Janeiro, RJ, from May 6th to 10th. Under the overarching theme of "Nuclear Energy: Assuring Energy, Health, and Food," INAC 2024 aims to facilitate insightful discussions on the indispensable role of nuclear science and technology in various aspects of society's advancement. We are also pleased to inform that Dr Maria de Lourdes Moreira, will Chair the event and the Organizing Committee.

John M Albuquerque Forman

President of the Brazilian Nuclear Energy Association

INAC 2024 serves as an intellectual platform for a profound exploration of nuclear energy's multifaceted sides, particularly its role as a catalyst for industrial growth, employment generation, and socio-economic advancement. Additionally, the conference aims to highlight the invaluable contributions of nuclear science and technology to environmental sustainability in regions and nations where these resources are deployed.

INAC 2024 encompasses three distinct yet interconnected technical meetings: the XXIII Meeting on Nuclear Reactor Physics and Thermal Hydraulics (XXIII ENFIR), the XVI Meeting on Nuclear Applications (XVI ENAN), and the VIII Meeting on Nuclear Industry (VIII ENIN). Additionally, we are delighted to present the tenth edition of the Junior Poster Technical Sessions, specially designed for undergraduate students from various colleges and universities. This platform allows them to share their invaluable research findings, nurtured under the guidance of esteemed nuclear researchers from Brazilian Institutions.

Complementing the conference program, Expo INAC 2024, our renowned technical and commercial exhibition, will run parallel to INAC 2024 itself. This presents an invaluable opportunity to network with delegates, strengthen ties with existing partners, forge new relationships, display products and services, unveil innovative solutions, and explore international collaborations that can form the basis of lasting alliances.

We extend our sincere gratitude to all contributors who have played a role in the publication of the Proceedings – the authors, the diligent board of referees, and the dedicated editorial committee. We would also like to commend the Chairs and Co-Chairs of the technical meetings for their unwavering commitment to ensuring the success and technical excellence of INAC, the largest nuclear event in South America.

We acknowledge, with deep appreciation, the support of our sponsors, government agencies, industries, and institutions, both past and present, whose direct and indirect contributions have been instrumental in ensuring the triumph of this event.

ABEN and the INAC 2024 Organizing Committee recognize that the true essence of this meeting lies in your participation. We thank you in advance for sharing your valuable time with us and extend our warmest wishes for an enriching and enjoyable experience during your visit to Rio de Janeiro, RJ.

We cordially invite you to be our honored guests at INAC 2024!

Maria de Lourdes Moreira
INAC 2024 Chair

Subject Areas



XXIII ENFIR

Subject Areas

- R01** Nuclear Reactor Physics, Advanced Nuclear Reactors
- R02** Nuclear Reactor Thermal Hydraulics, Reactor Safety Analysis, Nuclear Reactor Licensing and Regulation
- R03** Applied Mathematics and Computation, Computational Fluid Dynamics
- R04** Artificial Intelligence and Virtual Reality, Nuclear Reactor Instrumentation and Control, Man Machine Interface
- R05** Structural Mechanics, Nuclear Reactor Fuel Fabrication and Design, Fuel Cycle Management and Services
- R06** Nuclear Power Plant Viability, Design, Construction and Operation, Environmental Impact Applied to Nuclear Reactors and Fuel Cycle
- R07** Security

Frederico Antonio Genezini

XXIII ENFIR CHAIR



XVI ENAN

Subject Areas

- E01** Dosimetry and Nuclear Instrumentation
- E02** Applications to the Environment
- E03** Applications in Health and Industry
- E04** Applications in Agriculture and Food
- E05** Radioactive Waste
- E06** Applications to Cultural Heritage

Carmen Cecilia Bueno

XVI ENAN CHAIR



Subject Areas

- I01** Energy Generation Sector, Advances in New Nuclear Power Plants Deployment and Technology Innovations & trends
- I02** Plant Operation Strategies, costs and capacity factors in the Nuclear Generation of Large Utilities
- I03** Uranium Market and Nuclear Fuel Cycle Industry
- I04** Public Awareness, sustainability and social impact of nuclear technologies
- I05** Nuclear Safety & Security, non-Proliferation, Safeguards and Nuclear Forensics, Radioprotection and Safety Culture
- I06** Human Resources and Professional Development

João da Silva Gonçalves
VIII ENIN CHAIR

INAC 2024

Maria de Lourdes Moreira
INAC 2024 CHAIR



X JR. POSTER

Junior Poster Technical Sessions

Graciete S. de Andrade e Silva
Jr Poster Chair

Leonardo de Andrade e Silva
Ricardo C. Barros
Jr Poster Co-Chairs

Nuclear Ambassadors Award 2024

The Brazilian Nuclear Energy Association (ABEN) Nuclear Ambassadors Competition aims at increasing the reach of information about nuclear technology and its benefits, seeking to educate the public and multiply the number of people who understand the advantages of developing the nuclear sector in the country. In a specific INAC 2024 session, there will be the nomination of the third award winning groups in the undergraduate and postgraduate/teachers categories, who will make a short presentation of their work followed by the delivery of certificates

Olga Y. Mafra

Nuclear Ambassador Competition Coordinator

Key dates, call for papers and information

www.aben.org.br

E-mail: aben@aben.org.br

Phones: +55 21 2266.0480 | 2588.7000 Ramal 4721

Official website INAC 2024

www.inac2024.com.br