

IYNC2024 PROGRAMME



29 September – 4 October 2024

Organized by the International Youth Nuclear Congress
in collaboration with the Barakah Youth Council and in
cooperation with the International Atomic Energy Agency

Abu Dhabi National Exhibition Center
Abu Dhabi, United Arab Emirates

IYNC Secretariat:

General Co-Chairs:

K. Madden, President, International Youth Nuclear Congress

A. Al Nuaimi, President, Barakah Youth Council

Programme Committee:

K. Abbott, Co-Technical Programme Chair, International Youth Nuclear Congress, United States of America

M. Ait Said, YGN Liaison Officer, International Youth Nuclear Congress, Morocco

A. Al Blooshi, Barakah Youth Council, United Arab Emirates

M. Al Blooshi, Vice-President, Barakah Youth Council, United Arab Emirates

R. Al Blooshi, Barakah Youth Council, United Arab Emirates

M. Al Darmaki, Barakah Youth Council, United Arab Emirates

M. Al Dhanhani, Local IYNC2024 Team, United Arab Emirates

K. Al Hashmi, Registration Co-Chair, Local IYNC2024 Team, United Arab Emirates

S. Al Jneibi, Local IYNC2024 Team, United Arab Emirates

S. Al Kalbani, Local IYNC2024 Team, United Arab Emirates

S. Al Khanbashi, Local IYNC2024 Team, United Arab Emirates

M. Al Mansoor, Local IYNC2024 Team, United Arab Emirates

H. Al Qayoudi, Local IYNC2024 Team, United Arab Emirates



R. Al Sereidi, Barakah Youth Council, United Arab Emirates

M.A. Al Shehhi, Local IYNC2024 Team, United Arab Emirates

M. Al Suwaidi, Registration Co-Chair, Local IYNC2024 Team, United Arab Emirates

A. Al Yammahi, Barakah Youth Council, United Arab Emirates

K. Al Zaabi, Barakah Youth Council, United Arab Emirates

R. Al Zeyoudi, Local IYNC2024 Team, United Arab Emirates

L. Andriolio, Immediate Past President, International Youth Nuclear Congress, France

J. Barndon, Panel Sessions Chair, International Youth Nuclear Congress, Canada/Australia

A. Cartus, Co-Technical Programme Chair, International Youth Nuclear Congress, Austria

A. Cunha da Silva, Professional Development Officer, International Youth Nuclear Congress, Brazil/Spain

D. Dong, Workshop Chair, International Youth Nuclear Congress, People's Republic of China

D. Ermakova, Innovation Officer, International Youth Nuclear Congress, Kazakhstan/United States of America

A. Fern, Strategic Advisory Officer, International Youth Nuclear Congress, United States of America

A. Gladtsin, Webmaster, International Youth Nuclear Congress, Russian Federation

K. Green, Plenary & Keynote Sessions Chair, International Youth Nuclear Congress, United States of America

J. Hussain, Local IYNC2024 Team, United Arab Emirates

M. Jain, Sponsorship Co-Chair, Local IYNC2024 Team, United Arab Emirates

N. Joseph Kardoush, Emirates Nuclear Energy Corporation, United Arab Emirates

E. Lamaitre, Mentoring Chair, International Youth Nuclear Congress, France



A. Martin, Speaker Registration Chair, International Youth Nuclear Congress, Austria/United States of America

L. McManniman, International Organizations Chair, International Youth Nuclear Congress, United Kingdom/United States of America

S. Naser Mohamed Somer, Emirates Nuclear Energy Corporation, United Arab Emirates

S. Mohammad, Local IYNC2024 Team, United Arab Emirates

T. Romming, Executive Secretary, International Youth Nuclear Congress, Germany

A. Sadiq Aliyu, Technical Tracks Chair, International Youth Nuclear Congress, Nigeria

O. Spoyalov, Communications Officer, International Youth Nuclear Congress, Germany

M. Sultanov, International Communications & External Relations Chair, International Youth Nuclear Congress, Russian Federation

T.Y. Wang, Treasurer, International Youth Nuclear Congress, Taiwan, China

K. Yoshinaga, Corporate Sponsorship Chair, International Youth Nuclear Congress, Japan

International Atomic Energy Agency Coordinators:

M. Brandstetter-Schmied, Department of Nuclear Energy, International Atomic Energy Agency

N. El-Naj, Department of Nuclear Sciences and Applications, International Atomic Energy Agency

K. Madden, Department of Safeguards, International Atomic Energy Agency

Location of the Event:

Abu Dhabi National Exhibition Center
Al Khaleej Al Arabi St
Al Rawdah - Al Ma'arid
Abu Dhabi, United Arab Emirates



Working Language: English



IYNC2024 Mobile Conference Application

Participants are encouraged to download the IYNC2024 Conference Application, Whova. The App is available on Google Play and the Apple App Store.

The features and functions of the App for smartphones and tablets will be used for various purposes during the event, including:

- View an up-to-date programme
- Check the floor map or sessions and exhibitions
- Read abstracts and full papers of speakers
- Participate in voting during sessions
- Raise questions to speakers during sessions
- Send messages to other participants
- Receive announcements via push-notification

If you have questions or require assistance on the App, please contact the Registration Desk.

TIMETABLE

Sunday, 29 September 2024

Time	Session Title/Break	Venue
12:00 – 15:30	Registration	ADNEC
10:00 – 15:00	IYNC Board of Directors' Meeting <i>Invited Participants Only</i>	ADNEC
15:30 – 18:30	IYNC Games: The Louvre Abu Dhabi <i>Meet at ADNEC for transportation to venue</i>	The Louvre Abu Dhabi
18:30 – 21:00	IYNC Games: Dinner	ADNEC
19:00 – 22:00	WANO Dinner <i>Invited Participants Only</i>	TBD

TIMETABLE

Monday, 30 September 2024

Time	Session Title/Break	Venue
09:00 – 11:00	Registration	ADNEC
10:30 – 11:00	Opening Session	ADNEC
11:00 – 12:00	Keynote Session	ADNEC
12:00 – 13:00	Plenary 1: Climate Resilience through Nuclear Science	ADNEC
13:00 – 14:00	Lunch	ADNEC
14:00 – 14:15	Keynote Session: Sustainability within the Nuclear Fuel Cycle	ADNEC
14:15 – 15:15	Plenary 2: Sustainability within the Nuclear Fuel Cycle	ADNEC
15:15 – 15:45	Coffee Break	ADNEC
15:45 – 16:00	Keynote Session: Harnessing Nuclear Science and Technology Beyond Power Generation	ADNEC
16:00 – 17:00	Plenary 3: Harnessing Nuclear Science and Technology Beyond Power Generation	ADNEC
17:00 – 17:30	Congress Reflections	ADNEC
17:30 – 19:00	IYNC2024 Opening Reception	ADNEC
19:00 – 22:00	IYNC Board of Directors' Meeting <i>By Invitation Only</i>	ADNEC

TIMETABLE

Tuesday, 1 October 2024

Time	Session Title/Break	Venue
08:00 – 10:00	Registration	ADNEC
09:00 – 09:30	Keynote Session: A Fireside Chat on Global Collaboration and Innovation for Sustainable Nuclear Communities	ADNEC
09:30 – 10:30	Plenary 4: Towards Sustainable Nuclear Communities	ADNEC
10:30 – 11:00	Coffee Break	ADNEC
11:00 – 13:00	Technical Session: Oral Presentations	ADNEC
13:00 – 14:00	Lunch	ADNEC
14:00 – 16:00	Technical Session: Workshops & Panel Sessions	ADNEC
14:00 – 16:00	IYNC Network: Country, Observer & Regional YGN Reports	ADNEC
16:00 – 16:30	Commute	-
16:30 – 18:30	Cultural Event: Sheikh Zayed Grand Mosque Center <i>Transportation provided from ADNEC</i>	Sheikh Zayed Grand Mosque Center

TIMETABLE

Wednesday, 2 October 2024

Time	Session Title/Break	Venue
08:00 – 10:00	Registration	ADNEC
09:00 – 09:30	Keynote Session: Designing for Innovation: A Fireside Chat on the Evolution of IAEA Safeguards	ADNEC
09:30 – 10:30	Plenary 5: Emerging Markets & Applications	ADNEC
10:30 – 11:00	Coffee Break	ADNEC
11:00 – 13:00	Technical Session: Oral Presentations	ADNEC
13:00 – 14:00	Lunch	ADNEC
14:00 – 16:00	Technical Session: Workshops & Panel Sessions	ADNEC
16:00 – 16:30	Coffee Break	ADNEC
16:30 – 17:00	Congress Reflections	ADNEC
17:00 – 19:00	Connect & Catalyze Reception	ADNEC
19:00 – 22:00	IYNC Board of Directors' Meeting <i>By Invitation Only</i>	ANDEC

TIMETABLE

Thursday, 3 October 2024

Time	Session Title/Break	Venue
08:00 – 10:00	Registration	ADNEC
09:00 – 09:30	Keynote Session: Navigating Innovation: A Fireside Chat on Strategic Investments and Sustainable Futures	ADNEC
09:30 – 10:30	Plenary 6: Financing Good Projects	ADNEC
10:30 – 11:00	Coffee Break	ADNEC
11:00 – 13:00	Technical Program: Workshops & Panel Sessions	ADNEC
13:00 – 14:00	Lunch	ADNEC
14:00 – 16:00	Technical Program: Workshops & Panel Sessions	ADNEC
14:00 – 16:00	Global Innovation4Nuclear Competition	ADNEC
16:30 – 23:00	Closing Ceremony: Desert Safari	-

TIMETABLE

Friday 4, October 2024

Time	Session Title/Break	Venue
08:00 – 09:00	Registration	ADNEC
09:00 – 10:00	Special Session: Youth Powering the Future	ADNEC
10:00 – 11:15	Awards Ceremony	ADNEC
11:15 – 12:00	Closing: Keynote Session	ADNEC
14:00 – 17:00	Technical Tours	FANR Laboratories

TIMETABLE

Saturday, 5 October 2024

Time	Session Title/Break	Venue
08:00 – 17:00	Technical Tours	Barakah Nuclear Power Plant Sheikh Shakhboub Medical City Technology Innovation Institute

IYNC2024

DETAILED SCHEDULE



IYNC2024

DETAILED SCHEDULE

Sunday, 29 September 2024





Sunday, 29 September 2024

10:00 – 15:00 IYNC Board of Directors' Meeting

The annual IYNC Board of Directors' meeting is open to Members of the Board and invited Observers.

Name	Organization	Title
Kristine Madden <i>Session Manager</i>	International Youth Nuclear Congress, Austria/United States of America	President
	IYNC2024	General Co-Chair

Sunday, 29 September 2024

15:30 – 18:30 IYNC Games: The Louvre Abu Dhabi

The IYNC Games offer a unique opportunity to immerse yourself in the local culture before the conference begins. Engage in fun, interactive activities that connect you with the host city's traditions and vibrant community while networking with fellow attendees.

Name	Organization	Title
Kristine Madden <i>Session Manager</i>	International Youth Nuclear Congress, Austria/United States of America IYNC2024	President General Co-Chair
Abdulla Al Nuaimi <i>Session Manager</i>	Barakah Youth Council, United Arab Emirates IYNC2024	President General Co-Chair

Sunday, 29 September 2024

18:30 – 21:00 IYNC Games: Dinner

The IYNC Games offer a unique opportunity to immerse yourself in the local culture before the conference begins. Engage in fun, interactive activities that connect you with the host city’s traditions and vibrant community while networking with fellow attendees.

Name	Organization	Title
Kristine Madden <i>Session Manager</i>	International Youth Nuclear Congress, Austria/United States of America IYNC2024	President General Co-Chair
Abdulla Al Nuaimi <i>Session Manager</i>	Barakah Youth Council, United Arab Emirates IYNC2024	President General Co-Chair

Sunday, 29 September 2024

19:00 – 22:00 WANO BGM: Dinner

This event is by invitation only.

Name	Organization	Title
Kristine Madden <i>Session Manager</i>	International Youth Nuclear Congress, Austria/United States of America	President
	IYNC2024	General Co-Chair
Abdulla Al Nuaimi <i>Session Manager</i>	Barakah Youth Council, United Arab Emirates	President
	IYNC2024	General Co-Chair

IYNC2024

DETAILED SCHEDULE

Monday, 30 September 2024



Monday, 30 September 2024

10:30 – 11:00 Opening Session

The opening session launches the conference, bringing together young professionals and senior executives to introduce the event and set the stage for discussions around the theme, Youth Powering the Future.

Name	Organization	Title
Kristine Madden <i>Opening Address</i>	International Youth Nuclear Congress, Austria/United States of America	President
	IYNC2024	General Co-Chair
Abdulla Al Nuaimi <i>Opening Address</i>	Barakah Youth Council, United Arab Emirates	President
	IYNC2024	General Co-Chair
H.E. Sultan Al Neyadi (TBC) <i>Keynote Address</i>	Ministry of Culture & Youth, United Arab Emirates	Minster of Youth

Monday, 30 September 2024

11:00 – 12:00 **Keynote Session**

Co-Managers: Abdulla Al Nuaimi, President, Barakah Youth Council and General Co-Chair, IYNC2024 & Kristine Madden, President International Youth Nuclear Congress and General Co-Chair, IYNC2024

This keynote session features prominent leaders delivering impactful messages and offering deeper insights into how the next generation can innovate and lead the future of the industry.

Name	Organization	Title
Rafael Mariano Grossi <i>Keynote Address</i>	International Atomic Energy Agency	Director General
Mohamed Al Hammadi <i>Keynote Address</i>	Emirates Nuclear Energy Corporation, United Arab Emirates	Managing Director and Chief Executive Officer
Nadjwa Aaraj (TBC) <i>Keynote Address</i>	Technical Innovation Institute, United Arab Emirates	Chief Executive Officer
Rita Baranwal <i>Keynote Address</i>	Westinghouse, United States of America	Senior Vice President

Monday, 30 September 2024

12:00 – 13:00 Plenary 1: Climate Resilience through Nuclear Science

This plenary explores the transformative potential of nuclear science in enhancing climate resilience. Experts will explore how nuclear technology is being utilized to mitigate climate change impacts, from low-carbon energy solutions to innovative techniques in agriculture and water management.

Name	Organization	Title
Meera Al Muhairi <i>Moderator</i>	Federal Authority for Nuclear Regulation, United Arab Emirates	Specialist, Inspection
Enobot Agboraw <i>Speaker</i>	African Commission on Nuclear Energy, South Africa	Executive Director
Muna Al Suwaidi <i>Speaker</i>	International Youth Nuclear Congress, United Arab Emirates	Climate Change Officer
Miriam Diaz <i>Speaker</i>	Jovenes Nucleares, Spain	Communications & Multimedia Content Coordinator
Victor Nian <i>Speaker</i>	Center for Strategic Energy and Resources, Singapore	Board Member & Chief Executive Officer
Ryota Taniguchi <i>Speaker</i>	International Energy Agency	Junior Policy Analyst
Yi Zhang <i>Speaker</i>	China National Nuclear Corporation, People’s Republic of China	Vice President, CNNC Middle East

Monday, 30 September 2024

14:00 – 14:15 Keynote Session: Sustainability within the NFC

This keynote session delves into the vital importance of sustainability within the nuclear fuel cycle (NFC), covering both fission and fusion technologies, providing key insights on innovative approaches to minimizing environmental impact, improving resource efficiency, and securing the long-term future of nuclear energy.

Name	Organization	Title
Dinara Ermakova <i>Session Chair</i>	International Youth Nuclear Congress, Kazakhstan/United States of America	Innovation Officer
Mikhail Chudakov <i>Keynote Address</i>	International Atomic Energy Agency	Deputy Director General and Head of the Department of Nuclear Energy

Monday, 30 September 2024

14:15 – 15:15 Plenary 2: Sustainability within the NFC

This plenary explores the critical role of sustainability within the nuclear fuel cycle, encompassing both fission and fusion technologies, in this insightful plenary session. Experts will discuss innovative strategies for reducing environmental impact, enhancing resource efficiency, and ensuring the long-term viability of nuclear energy.

Name	Organization	Title
Dinara Ermakova <i>Moderator</i>	International Youth Nuclear Congress, Kazakhstan/United States of America	Innovation Officer
Elsa Lemaitre <i>Speaker</i>	Andra, France	Systems Integration Director, Cigeo Operational Project
Winfred Ndubai <i>Speaker</i>	Nuclear Power and Energy Agency, Kenya	Director, Strategy & Planning
Henry Preston <i>Speaker</i>	World Nuclear Association, United Kingdom	Communications Manager
Louie Swallow <i>Speaker</i>	URENCO Global, United Kingdom	Market Intelligence Analyst
Sehila Gonzalez de Vicente <i>Speaker</i>	Clean Air Task Force, United States of America	Global Director, Fusion Energy

Monday, 30 September 2024

15:45 – 16:00 Keynote Session: Harnessing Nuclear Science: Innovations Beyond Nuclear Power

This keynote session explores the wide-ranging innovations of nuclear science outside of power generation including pioneering advancements in medicine, agriculture, and environmental management, demonstrating how nuclear technology is transforming these fields and addressing key global challenges.

Name	Organization	Title
Ciara Collins <i>Session Chair</i>	ANSTO, Australia	Manager, Regulatory Affairs and Compliance
Najat Mokhtar <i>Keynote Address</i>	International Atomic Energy Agency	Deputy Director General and Head of Nuclear Sciences and Applications

Monday, 30 September 2024

16:00 – 17:00 Plenary 3: Harnessing Nuclear Science: Innovations Beyond Nuclear Power

This keynote session explores the wide-ranging innovations of nuclear science outside of power generation, showcasing how nuclear technology is transforming these fields and addressing key global challenges.

Name	Organization	Title
Ciara Collins <i>Moderator</i>	ANSTO, Australia	Manager, Regulatory Affairs and Compliance
Samuel Boakye Dampare <i>Speaker</i>	Ghana Atomic Energy Commission, Ghana	Executive Director
Estiner Katengeza <i>Speaker</i>	Malawi University of Business and Applied Sciences, Malawi	Lecturer
Bo Liu <i>Speaker</i>	International Atomic Energy Agency	Technical Officer
Brenda Trust <i>Speaker</i>	Plymouth University, United Kingdom/Uganda & IAEA Marie Curie Fellow	PhD Candidate, Physical Geography



Monday, 30 September 2024

17:00 – 17:30 Congress Reflections

*This session introduces the inaugural **IYNC Global Youth Statement**, a bold and forward-looking call to action created by young leaders, urging the industry to take decisive steps for a sustainable future. Join us to explore how collaboration between generations can lead to meaningful and lasting impact.*

Name	Organization	Title
Kristine Madden <i>Session Manager</i>	International Youth Nuclear Congress, Austria/United States of America	President
	IYNC2024	General Co-Chair

Monday, 30 September 2024

17:30 – 19:00 Opening Reception

Name	Organization	Title
Abdulla Al Nuaimi	Barakah Youth Council, United Arab Emirates	President
<i>Session Manager</i>	IYNC2024	General Co-Chair



Monday, 30 September 2024

19:00 – 22:00 IYNC Board of Directors' Meeting

The annual IYNC Board of Directors' meeting is open to Members of the Board and invited Observers.

Name	Organization	Title
Kristine Madden <i>Session Manager</i>	International Youth Nuclear Congress, Austria/United States of America	President
	IYNC2024	General Co-Chair

IYNC2024

DETAILED SCHEDULE

Tuesday, 1 October 2024



Tuesday, 1 October 2024

09:00 – 09:30 Keynote Session: A Fireside Chat on Global Collaboration and Innovation for Sustainable Nuclear Communities

This keynote session emphasizes the crucial role of global collaboration and innovation in fostering sustainable nuclear communities through addressing how international cooperation and cutting-edge advancements can drive the development of safe, efficient, and resilient nuclear systems.

Name	Organization	Title
Andrew Cartas <i>Moderator</i>	International Youth Nuclear Congress, Austria/United States of America	Co-Chair, Technical Programme, IYNC2024
Aleshia Duncan <i>Speaker</i>	Office of Nuclear Energy, Department of Energy, United States of America	Deputy Assistant Secretary, International Cooperation
Hideki Masui <i>Speaker</i>	Japan Atomic Industrial Forum, Japan	President
Sehila Gonzalez de Vicente <i>Speaker</i>	Clean Air Task Force, United States of America	Chief Executive Officer

Tuesday, 1 October 2024

09:30 – 10:30 Plenary 4: Towards Sustainable Nuclear Communities

This dynamic plenary session takes you on a journey towards building sustainable nuclear communities. Explore the intersection of commercialization, community consensus, historical lessons, and IAEA safeguards as experts discuss how innovative practices—guided by past insights—promote sustainable development and secure community support for nuclear initiatives.

Name	Organization	Title
Khaled AlHashmi <i>Moderator</i>	Barakah Youth Council, United Arab Emirates	Registration Co-Chair, IYNC2024
Mosatiwa Rasweswe <i>Speaker</i>	International Atomic Energy Agency	Director, Operations, Department of Safeguards
Lenka Kollar <i>Speaker</i>	Helixos, Australia	Co-Founder
Hideki Masui <i>Speaker</i>	Japan Atomic Industrial Forum, Japan	President
Lisa Morton (TBC) <i>Speaker</i>	Nuclear Waste Management Organization, Canada	Vice President, Site Selection
Hanane Zajly <i>Speaker</i>	Nawah Energy Company, United Arab Emirates	Vice President, Talent Management

Tuesday, 1 October 2024

11:00 – 13:00 Technical Session 1: Nuclear Power Plants – Design, Operation, Maintenance & Digitalization

This session features oral presentations by young professionals from around the globe, showcasing their research and insights into nuclear science and technology. Attendees will gain exposure to cutting-edge developments and innovative solutions presented by the next generation of experts in the field.

Name, Country	Paper Title
Mark Gino Aliperio, Philippines <i>Speaker</i>	Risk Exposure for the Proposed Rehabilitation of Bataan Nuclear Power Plant
Belal Almomani, United Arab Emirates <i>Speaker</i>	Early Detection of LLOCA Accident Conditions in GPWR through Machine Learning-Based Inverse Analysis
Evgenii Borisiuk, Russian Federation <i>Speaker</i>	Optimization of the Balancing Calculations for Turbine Units
Elizaveta Semenyakina, Russian Federation <i>Speaker</i>	Assessment of the Possibilities of Using Mobile Robotic Systems for the Purposes of Non-destructive Testing and Maintenance of Power Plant Components
Ilia Komarov, Russian Federation <i>Speaker</i>	A Machine Learning Approach for Temperature Heterogeneity Mitigation in Hot Legs of PWR
Jeremiah Mbazor, Nigeria <i>Speaker</i>	Brute Force Parallel Monte Carlo Simulation for Failure Analysis of Large Engineering Systems
Jones Lukorito, Kenya <i>Speaker</i>	Harnessing Small Modular Reactors for Sustainable AI: A Future-Proof Solution to the Energy Demands of Advanced Computing

**Diksha Sharma, United
Kingdom**

Speaker

Technical Expertise and Innovations in the Defueling
Program for Advanced Gas cooled Reactor: Strategies for
Optimization, Reliability, and Safety

Tuesday, 1 October 2024

11:00 – 13:00 Technical Session 2: Policy, Economic & Social Aspects of Nuclear Technology Deployment

This session features oral presentations by young professionals from around the globe, showcasing their research and insights into nuclear science and technology. Attendees will gain exposure to cutting-edge developments and innovative solutions presented by the next generation of experts in the field.

Name, Country	Paper Title
Abdulmajeed Ibrahim, Nigeria <i>Speaker</i>	Energy Access Challenges in Africa and the Contribution of Nuclear Energy to Electricity Generation, Industrial Growth, Economic Advancement, and Environmental Sustainability
Nataliia Aksenova, Russian Federation <i>Speaker</i>	Legal Regulation of New Nuclear Technologies
Elizaveta Semenyakina, Russian Federation <i>Speaker</i>	Nuclear Desalination in the Middle East and North Africa: Finding an Optimal Combination between Nuclear Power Plants and Desalination Technologies
Jeremiah Mbazor, Nigeria <i>Speaker</i>	Financial Considerations and Suitability of Combined Nuclear and Renewables Deployment in Nigeria
Lucas Javier Fernandez de Losada, Italy <i>Speaker</i>	Assessment of the Lifecycle Cost of Nuclear-Grade Coolants for Advanced Nuclear Reactors
Valeriia Skliarenko, Italy <i>Speaker</i>	Nuclear Business: Transition from “Projects” to a “Program” leveraging an Ecosystem Approach
Jake Barndon, Canada <i>Speaker</i>	Navigating Regulatory and Impact Assessment Challenges in the Canadian Nuclear Industry

**Phoebe Lind, United States
of America**

Speaker

Leveraging Fossil Fuel Construction Techniques for
Deployment of SMRs

Tuesday, 1 October 2024

11:00 – 13:00 Technical Session 3: Nuclear Physics, Neutronics & Reactor Physics; Thermodynamics; and Nuclear & Structural Materials

This session features oral presentations by young professionals from around the globe, showcasing their research and insights into nuclear science and technology. Attendees will gain exposure to cutting-edge developments and innovative solutions presented by the next generation of experts in the field.

Name, Country	Paper Title
Feride Kutbay, Türkiye <i>Speaker</i>	Preliminary Performance Analysis of Full-Scale Model of the Thorium-Fueled High-Temperature Gas-Cooled Micro-Reactor
Juan Jose Gomez Rodriguez, Italy <i>Speaker</i>	Validation of the AKR-2 Reactor Simplified Model: A Deep Analysis of the Pile Oscillator Experiment
Dmitriy Menyuk, Russian Federation <i>Speaker</i>	Analysis of a Severe Accident caused by a Complete Long-Term Blackout of a Power Unit, using the example of a WWER-1000 V-302 Reactor Unit (Small Series)
Danyshpan Mukhambetalin, Russian Federation <i>Speaker</i>	Thermal-hydraulic Calculation of IBR-2M Pulsed Reactor Fuel Assembly
Gustavo Pereira, Brazil <i>Speaker</i>	A Three-Region Rewetting Analysis of a PWR Fuel Slab using an Improved Lumped Model
Feride Kutbay, Türkiye <i>Speaker</i>	Heat Transfer Correlation Development for High-Temperature Gas-Cooled Micro-Reactor Design with Graphite Blocks

Marek Adamech, Slovakia
Speaker

Assessment of the Pressurizer Materials from
Decommissioned V1 NPP to LTO Support on VVER Type
Units

Tuesday, 1 October 2024

11:00 – 13:00 Technical Session 4: Nuclear Safety, Security, Safeguards and Radiation Protection

This session features oral presentations by young professionals from around the globe, showcasing their research and insights into nuclear science and technology. Attendees will gain exposure to cutting-edge developments and innovative solutions presented by the next generation of experts in the field.

Name, Country	Paper Title
Ini Godwin, Nigeria <i>Speaker</i>	Measurement of Radioactivity and Radionuclides Contamination around Barkin Ladi and Jos North Mines, Plateau State, Nigeria: Health Impact
Linnet Nyamweya, Kenya <i>Speaker</i>	Assessment of Excess Lifetime Cancer Risk and Risk of Cancer associated with Soapstone Quarrying Activities in Kenya
Pavel Aksenov, Türkiye <i>Speaker</i>	Main Criteria for Level 2 Probabilistic Safety Assessment for Nuclear Power Plants to be built in Türkiye
Tebogo Kupi, South Africa <i>Speaker</i>	Lead Isotopic Ratios Analysis of Uranium Samples for Nuclear Forensic purpose using NexIon 2000 ICP-MS
Yoshiharu Kitayama, Japan <i>Speaker</i>	4 Pi Gamma-Ray Imaging with Coded Cube Camera for Gamma-Ray
Victoria Zaripova, Russian Federation <i>Speaker</i>	Justification for Modernization of the Emergency and Planned Low-Pressure Cooldown System using Probabilistic Safety Analysis for the First Power Unit of the Kalinin NPP
Suleiman Bello, Nigeria <i>Speaker</i>	Simulation of Radiobiological Impacts of Defunct Uranium Mining to Non-Human Biota in Nigeria

**Noha Nassar, United Arab
Emirates**

Impact of Nuclear Power Plants and Natural Radionuclides
On the Marine Environment

Owen LeGrone, IAEA

Space-Based Remote Sensing for International Nuclear
Safeguards: Present and Future

Tuesday, 1 October 2024

11:00 – 13:00 Technical Session 5: Nuclear Safety, Security & Safeguards; Radiation Protection; Waste Management; and Decommissioning

This session features oral presentations by young professionals from around the globe, showcasing their research and insights into nuclear science and technology. Attendees will gain exposure to cutting-edge developments and innovative solutions presented by the next generation of experts in the field.

Name, Country	Paper Title
Kamila Khuzhazhinova, Kazakhstan <i>Speaker</i>	Enhancing Nuclear Security: Comparative Analysis of International and National Approaches in Developing Countries – A Case Study of Kazakhstan
Dennis Rodriguez, Honduras <i>Speaker</i>	Design of a Radiological Shielding Calculation Methodology for Medical X-Ray Imaging Facilities to be implemented by the National Regulatory Authority of Honduras
Daniel Hackl, Austria <i>Speaker</i>	Evolution of Safety Concepts in Pressurized Water Reactors
Rizal Alfariji, Indonesia <i>Speaker</i>	Blockchain for Material Management in Indonesian Nuclear Facilities: Preliminary Study
Sui Satomi, Japan <i>Speaker</i>	Study on Water Stoppage of the Openings in the bottom of Primary Containment Vessel in Fukushima Daiichi NPP using Geopolymer

Tuesday, 1 October 2024

14:00 – 16:00 Workshop 1: Climate Fresk

This workshop offers an engaging, collaborative experience to explore the science behind climate change. In this hands-on session, participants work together to create a visual map of the factors driving climate change, guided by a trained facilitator. The workshop fosters deep understanding, critical thinking, and discussion, empowering attendees with knowledge and practical insights to inspire action for a sustainable future. Suitable for all levels, this workshop is an excellent opportunity to connect, learn, and contribute to meaningful change.

Name	Organization	Title
Saikat Das <i>Workshop Manager</i>	YOUNGO, India/United Kingdom	Partnership Coordinator, Energy Working Group
	European Young Engineers, India/United Kingdom	Policy Director

Tuesday, 1 October 2024

14:00 – 16:00 Workshop 2: InnoGames: Igniting Innovation through Interactive Workshops

This immersive innovation workshop is aimed at cultivating a forward-thinking mindset and fostering creativity among participants. Through engaging group activities and discussions, attendees will develop skills for challenging assumptions, embracing diverse perspectives, and reimagining existing paradigms. Led by experienced facilitators, this workshop aims to provide innovative insights that can spark meaningful change within organizations and projects. Join us for a dynamic exploration of innovation and unleash your creative potential!

Name	Organization	Title
Alice Cunha da Silva <i>Workshop Manager</i>	International Youth Nuclear Congress, Brazil/Spain	Professional Development Officer

Tuesday, 1 October 2024

14:00 – 16:00 Workshop 3: Atom's Journey: Exploring Nuclear Energy Through Play

Embark on an interactive journey with Atom's Journey, a captivating game designed to unravel the complexities of the nuclear fuel cycle and power generation principles. Created for post-baccalaureate students and nuclear industry professionals, this game features 37 elemental tiles and 56 counters representing material flows. Lasting approximately two hours, the workshop invites participants to reconstruct the fuel cycle and power plant operations while fostering a collaborative and engaging learning environment. Atom's Journey encourages collective intelligence, allowing players to grasp the nuances of nuclear energy in a participatory manner, without hierarchical knowledge dissemination. Developed by a diverse team under a Creative Commons license, this educational tool aims to demystify nuclear energy and promote informed discussions, making it accessible to all.

Name	Organization	Title
Clement Laclouere <i>Workshop Co-Manager</i>	Assystem, France	Safety Engineer
Benoit Erbacher <i>Workshop Co-Manager</i>	Framatome, France	Chief of Staff
Yousef Fargani <i>Workshop Co-Manager</i>	Framatome, France	Deputy Contract Engineer Lead
Alexis Rene <i>Workshop Co-Manager</i>	CERAP, France	Head of Operations

Tuesday, 1 October 2024

14:00 – 16:00 Workshop 4: Global Pathways to Nuclear Energy: Crafting Regional Roadmaps

This workshop explores the journey toward nuclear energy production, aiming to develop tailored roadmaps that address regional specificities worldwide. Geared towards young professionals, this session unfolds in interactive phases designed to deepen understanding of nuclear energy's role in sustainable development. The "Why" phase educates participants on assessing and reducing carbon footprints. In the "How" phases, attendees identify essential steps and priorities for nuclear power adoption specific to their regions, considering local needs and challenges. The "Who" phase fosters dialogue on potential collaborations among countries, organizations, and international bodies like the IAEA. The workshop concludes with a "Summary" phase, where a generic roadmap inspired by global regional insights is crafted and reviewed. This format encourages active participation and knowledge exchange, ensuring that participants leave with a clear vision of how to advocate for and implement nuclear energy solutions in diverse settings.

Name	Organization	Title
Adeline Yuego <i>Workshop Co-Manager</i>	Women in Nuclear Global Young Generation Network, Nigeria	Member
Larissa Noudem <i>Workshop Co-Manager</i>	Women in Nuclear Global Young Generation Network, France	Chair
Enobot Agboraw <i>Facilitator</i>	African Commission on Nuclear Energy, South Africa	Executive Secretary
Aleshia Duncan <i>Facilitator</i>	Office of Nuclear Energy, Department of Energy, United States of America	Deputy Assistant Secretary, International Cooperation
Eva Gyane <i>Facilitator</i>	Consultant, Austria	Consultant



Tuesday, 1 October 2024

14:00 – 16:00 IYNC Network: Country, Observer & Regional YGN Reports

This session presents a comprehensive overview of the status of nuclear science and technology across various countries. It highlights the achievements and challenges faced by the nuclear industry worldwide. The session features reports from Young Generation Networks (YGN), detailing their activities over the past year. These reports showcase initiatives undertaken by young professionals, including educational outreach, public engagement, and technical projects. The session serves as a platform for sharing knowledge, fostering international collaboration, and inspiring future leaders in the nuclear field.

Name	Organization	Title
Thomas Romming <i>Session Manager</i>	International Youth Nuclear Congress, Germany	Executive Secretary

Tuesday, 1 October 2024

16:30 – 18:30 Cultural Event: Sheikh Zayed Grand Mosque Center

Each IYNC conference provides an opportunity to experience the unique heritage of the host city. This year, we will visit the Sheikh Zayed Grand Mosque Center, immersing ourselves in its architectural grandeur and cultural significance.

Name	Organization	Title
Kristine Madden <i>Session Co-Manager</i>	International Youth Nuclear Congress, Austria/United States of America IYNC2024	President General Co-Chair
Abdulla Al Nuaimi <i>Session Co-Manager</i>	Barakah Youth Council, United Arab Emirates IYNC2024	President General Co-Chair

IYNC2024
DETAILED SCHEDULE
Wednesday, 2 October 2024



Wednesday, 2 October 2024

09:00 – 09:30 Keynote Session: Designing for Innovation: A Fireside Chat on the Evolution of IAEA Safeguards

This insightful fireside chat features a discussion between the Emirates Nuclear Energy Corporation and International Atomic Energy Agency on the effectiveness of safeguards-by-design (SBD) in the UAE. This keynote session will discuss the innovative practices adopted, the positive outcomes achieved, and the broader benefits SBD provides in the implementation of IAEA Safeguards globally.

Name	Organization	Title
Kristine Madden <i>Moderator</i>	International Youth Nuclear Congress, Austria/United States of America	President
	IYNC2024	General Co-Chair
Mosatiwa Rasweswe <i>Speaker</i>	International Atomic Energy Agency	Director, Operations, Department of Safeguards
TBD <i>Speaker</i>	Emirates Nuclear Energy Corporation, United Arab Emirates	TBD

Wednesday, 2 October 2024

09:30 – 10:30 Plenary 5: Emerging Markets & Applications

Delve into captivating insights on emerging market applications in this plenary session, where a spectrum of nuclear innovations, from desalination and district heating to pioneering designs like floating nuclear power plants, are highlighted. Navigate through the complex regulatory landscape, unveiling how these technologies are progressing in emerging markets to fulfil crucial needs while ensuring rigorous IAEA Safeguards, security and safety measures.

Name	Organization	Title
Alice Cunha Da Silva <i>Moderator</i>	International Youth Nuclear Congress, Brazil/Spain	Professional Development Officer
Aleshia Duncan <i>Speaker</i>	Office of Nuclear Energy, Department of Energy, United States of America	Deputy Assistant Secretary, International Cooperation
Kristine Madden (TBC) <i>Speaker</i>	International Atomic Energy Agency	Safeguards Evaluator
Khalid Khasawneh <i>Speaker</i>	Jordan Atomic Energy Commission, Jordan	Commissioner for Nuclear Power Reactors
Hans Korteweg <i>Speaker</i>	COGEN World Coalition, Belgium COGEN Europe, Belgium	Executive Director Managing Director
Federico Puente-Espel <i>Speaker</i>	Prodigy SMR, Canada	Vice President, Technology Implementation

Wednesday, 2 October 2024

11:00 – 13:00 Technical Session 1: Non-Power Nuclear Applications & Advanced Reactors, SMRs and Fusion Technology

This session features oral presentations by young professionals from around the globe, showcasing their research and insights into nuclear science and technology. Attendees will gain exposure to cutting-edge developments and innovative solutions presented by the next generation of experts in the field.

Name, Country	Paper Title
Liza Marie Banquerigo, Philippines <i>Speaker</i>	Proton Therapy Dose Distribution Calculations in Pediatric Brain Tumor Patients using Monte Carlo Simulations
Damascene Sibomana, Russian Federation <i>Speaker</i>	Improvement of Irradiated Target Design for the Production of Californium-252 with Neutron Spectrum
Thiago Augusto de Almeida, Brazil <i>Speaker</i>	Integrating Nuclear Analytical Techniques with Artificial Intelligence for Ore Hardness Characterization: A Principal Component Analysis Study
Philip Marinov, Bulgaria <i>Speaker</i>	Effect of Ionizing Radiation generated from Medical Linear Accelerator (LINAC) on the Structure and Function of Biological Species.
Mark Bedretdinov, Russian Federation <i>Speaker</i>	Thermal-Hydraulic Calculations for the New Integral Small Modular Reactor VVER-I with Natural Circulation in Primary Circuit
Ryan MacLeod, Canada <i>Speaker</i>	Small Modular Reactors and Digital Asset Mining Bitcoin to Maximize the Utility of Nuclear Power Assets
Umar Farouk Ahmad, Nigeria	Machine Learning for Enhanced Antineutrino-Based Safeguards in Next-Generation Reactors

Speaker

Milana Ozerina, Austria

Speaker

Empowering Remote Communities: Small Modular Reactors
for Off-Grid Energy Solutions

Stefan Dos Santos, Canada

Speaker

Navigating the Siting Process for Small Modular Reactors in
the Canadian Nuclear Landscape

Wednesday, 2 October 2024

11:00 – 13:00 Technical Session 2: Economic, Communication, Knowledge Management and YGN Best Practices

This session features oral presentations by young professionals from around the globe, showcasing their research and insights into nuclear science and technology. Attendees will gain exposure to cutting-edge developments and innovative solutions presented by the next generation of experts in the field.

Name, Country	Paper Title
Jones Lukorito, Kenya/Tanzania <i>Speaker</i>	The Double-Edged Atom: The Dilemmas of Nuclear Energy Financing in the Global South
Alexander Phiri, Zambia <i>Speaker</i>	YGN-PZ Career Campaign in High Schools Lusaka,Zambia
Evgenii Nikulin, Russian Federation <i>Speaker</i>	The Experience of Rosatom Technical Academy in Nuclear Power Plant Personnel Training
Daria Avilova, Russian Federation <i>Speaker</i>	IT Education Practices at the State Atomic Energy Corporation "Rosatom"
Amelia Martin, IAEA <i>Speaker</i>	Crossing the Communication Chasm: Communicating Proposed Safeguards Activities to a Non-Expert Audience
Abdulsamad Asuku, Nigeria <i>Speaker</i>	Ensuring Sustainable Nuclear Knowledge Management: Insights from Two Decades of Operating Nigeria's Miniature Neutron Source Reactor
John Mobley IV, United States of America <i>Speaker</i>	Extended Exploration of Multidisciplinary Student Sentiments in a Nuclear Survey Seminar

Andrea Kozlowski, United Kingdom

Speaker

European YGNs – Their Work, Achievements, and Updates

Ana González Felgueroso, Spain

Speaker

Jovenes Nucleares, Facing the Changes

Wednesday, 2 October 2024

11:00 – 13:00 Technical Session 3: Thermal Hydraulics and Nuclear Physics, Neutronics & Reactor Physics

This session features oral presentations by young professionals from around the globe, showcasing their research and insights into nuclear science and technology. Attendees will gain exposure to cutting-edge developments and innovative solutions presented by the next generation of experts in the field.

Name, Country	Paper Title
Abdulsamad Asuku, Nigeria <i>Speaker</i>	Kinetic Parameters Verification of a Typical Miniature Neutron Source Reactor After Conversion from High Enriched Uranium using Scale 6.2.3 Code
Karel Týr, Czechia <i>Speaker</i>	Response of a Nuclear Reactor to a Series of Rapid Changes in Reactivity
Theo Victor Cavite, Philippines <i>Speaker</i>	Neutron Dose Evaluation via In-115 Activation Foils and Neutron TLDs at the Philippines' Sole Research Reactor
Vadim Kuzin, Russian Federation <i>Speaker</i>	VVER 24-Month Cycle and Power Uprate based on Uranium-Erbium Fuel enriched over 5%
Mohammad Alrwashdeh, United Arab Emirates <i>Speaker</i>	Neutronics Analysis of Chromium Coating in the Fuel Cladding System of APR 1400 Reactor
Gino Natali, Sweden <i>Speaker</i>	Complex Geometry Description for Legacy Lattice Physics Codes using Modern CAD Tools
Mohammad Alrwashdeh, United Arab Emirates <i>Speaker</i>	Very Low Soluble-Boron APR-1400 Design Studies using CIMBA Fuel

**Kseniya Doboni, Russian
Federation**

Speaker

Mathematical Modeling of Thermohydraulic and Chemical Processes of Special Water Treatment and Chemical Water Treatment Systems used in the development of Full-Scale Simulators for Pressurized Water Reactors

Wednesday, 2 October 2024

11:00 – 13:00 Technical Session 4: Nuclear Safety, Security & Safeguards; Radiation Protection; Waste Management; and Decommissioning

This session features oral presentations by young professionals from around the globe, showcasing their research and insights into nuclear science and technology. Attendees will gain exposure to cutting-edge developments and innovative solutions presented by the next generation of experts in the field.

Name, Country	Paper Title
Syeda Saba Batool, Pakistan <i>Speaker</i>	Advancing Nuclear Safety and Security Culture in Pakistan
Jibril Musa, Nigeria <i>Speaker</i>	Analysis of Core Damage State of Nigerian Research Reactor-1 (NIRR-1): A Probabilistic Safety Assessment (PSA)
Lorenz Fischer, Denmark <i>Speaker</i>	Radiation Shielding Analysis for Spent Fuel Salt in Maritime Environments
Robyn Sayles, The Netherlands <i>Speaker</i>	Approach To Creating A Radiological Environmental Monitoring Baseline For A New Build Nuclear Project, case study of the PALLAS reactor, Netherlands
Stephen Friday Olukotun, Nigeria <i>Speaker</i>	Nuclear Forensic Science: A Pathway for Preventing Environmental Impact and Associated Risks from Nuclear Wastes
Renaldy Bernardo Saragih, Indonesia <i>Speaker</i>	Development Of Computer Systems and Computer Modelling for Planning and Management Of Indonesia's Triga Mark II Reactor Decommissioning
Pavel Shorokhov, Russian Federation <i>Speaker</i>	Digital Twins for Fire Safety Systems in the Nuclear Industry

**Gunjan Indauliya, United
Kingdom**

Speaker

A Methodological Approach for Assessing Neutronic Impact
on Radiological Responses in Irradiated Materials for Waste
Management

Wednesday, 2 October 2024

14:00 – 16:00 Workshop 5: Next-Gen Nuclear: Innovating with Advanced Coolants

Dive into the future of nuclear technology in this engaging workshop that explores the use of non-traditional coolants like liquid metal, helium, and liquid salt in advanced reactors. These innovations promise enhanced safety, economic benefits, and reduced operational costs. The session starts with expert insights on how these technologies address global challenges like the climate crisis and energy distribution. Participants will brainstorm solutions to overcome technical and regulatory challenges, then form groups to develop and defend their reactor designs to a panel of experts. The workshop concludes with the energetic "ROCK-PAPER-NUCLEAR" game, fostering a fun and dynamic learning environment.

Name	Organization	Title
Okan Yildiz <i>Workshop Manager</i>	Akkuyu Nuclear JSC, Türkiye	Lead Specialist, International Cooperation

Wednesday, 2 October 2024

14:00 – 16:00 Workshop 6: AI Revolution in Nuclear: Developing Chatbots for Enhanced Efficiency

This workshop is tailor-made for young professionals eager to harness artificial intelligence and chatbot technology to boost efficiency within the nuclear industry. Participants will gain practical experience in developing and deploying a customized chatbot, specifically designed to meet the unique demands of their organizations, such as ensuring compliance with nuclear regulatory standards. Throughout the session, we will delve into the significant potential of chatbots to transform daily operations and enhance regulatory adherence in nuclear settings. Starting with an introduction to the technology and its applications, the workshop will guide attendees through identifying specific organizational challenges, designing the chatbot's conversational flow, and ultimately testing and refining their creations. Facilitated by Sara Dara, an experienced nuclear industry analyst with a passion for sustainable innovation, this workshop promises to equip participants with the knowledge and tools to initiate their AI solutions, optimizing operational processes within their roles.

Name	Organization	Title
Sara Dara <i>Workshop Manager</i>	Kinectrics, Canada	Associate Analyst, Design Engineering and Services

Wednesday, 2 October 2024

14:00 – 16:00 Workshop 7: Enhancing Safety in Nuclear Power Plants: A Deep Dive into Reactor Shop Safety Systems

This workshop aims to deepen participants' understanding of the critical safety systems within the reactor shops of nuclear power plants, focusing on modern systems implemented in VVER, AP, and EPR projects. Through detailed examinations of specific systems such as the Reactor Coolant Circuit, Passive Heat Removal, and Emergency Steam Generator Cooldown Systems, among others, attendees will explore operational principles, assess potential threats, and discuss system features and types. The session will blend presentations with active group discussions, allowing participants to evaluate safety systems and brainstorm improvements. The workshop is structured to encourage critical thinking and technical analysis, enhancing participants' abilities to identify system features, understand their operational dynamics, and propose innovative solutions. By the end of this engaging session, attendees will be better equipped to contribute to the safety enhancements in nuclear power plant operations, carrying forward their learned skills in technical scheme analysis and collaborative problem-solving.

Name	Organization	Title
Dmitry Nesterets <i>Workshop Manager</i>	Rosatom Technical Academy, Russian Federation	Lead Engineer, NPP Personnel Training

Wednesday, 2 October 2024

14:00 – 16:00 IYNC Network: Strategy Committee Meeting

The meeting will focus on discussing and developing strategic initiatives for the International Youth Nuclear Congress (IYNC) Network. Members will collaborate on setting goals, evaluating current strategies, and planning future activities to enhance the network's impact and engagement within the nuclear industry. This meeting is by invitation only.

Name	Organization	Title
Lena Andriolo <i>Session Co-Manager</i>	International Youth Nuclear Congress, France	Immediate Past President
Denis Janin <i>Session Co-Manager</i>	International Youth Nuclear Congress, Denmark	Former President

Wednesday, 2 October 2024

14:00 – 15:00 Panel 1: Fusion Forum: Bridging Communities for Climate Action

Co-Managers: Muna Al Suwaidi, Climate Change Officer, International Youth Nuclear Congress & Kristine Madden, President, International Youth Nuclear Congress and General Co-Chair, IYNC2024

This panel brings together a diverse group of non-nuclear experts—from environmentalists and educators to community leaders—to discuss strategies for effective integration and communication between the nuclear community and the broader public. The goal is to explore innovative ways to demystify nuclear science and technology, enhance transparency, and foster a dialogue that is both accessible and engaging to non-experts. Panelists will provide feedback on current outreach efforts and propose new approaches to ensure that the nuclear community not only informs but also listens and responds to public concerns, thereby building trust and understanding across different sectors.

Name	Organization	Title
Kristine Madden <i>Session Co-Manager</i>	International Youth Nuclear Congress, Austria/United States of America IYNC2024	President General Co-Chair
Saikat Das <i>Speaker</i>	YOUNGO, India/United Kingdom European Young Engineers, India/United Kingdom	Partnership Coordinator, Energy Working Group Policy Director
Arshi Ayub Zaveri <i>Speaker</i>	Trust with Trade Group UAE, United Arab Emirates	Chief Executive Officer
Mehak Sudan	Global Warming Mitigation Project, United Arab Emirates/India	Contributing Partner

Wednesday, 2 October 2024

15:00 – 16:00 Panel 2: Diversity Drives Innovation: Building a Thriving Industry

Manager: Larissa Noudem, Chair, Women in Nuclear Global Young Generation Network

Discover the transformative power of diversity in shaping the future of our industry. In this dynamic panel discussion, we will explore the importance of diversity across generations, genders, and geographic regions and more. A diverse group of experts will share insights and strategies for fostering inclusivity and representation at all levels of the nuclear sector. From recruitment practices to leadership development, attendees will gain practical insights into harnessing the strengths of diverse perspectives. The panel will focus on key areas, each represented by a speaker who can provide insights into the implementation of diversity initiatives, the challenges faced, and the objectives for the future: industry, education and institutional organizations, diplomatic sectors and nongovernmental organizations.

Name	Organization	Title
Larissa Noudem <i>Moderator</i>	Women in Nuclear Global Young Generation Network	Chair
Estiner Katengeza <i>Speaker</i>	Malawi University of Business and Applied Sciences, Malawi	Lecturer
Makino Momoe <i>Speaker</i>	Japan External Trade Organization, Japan	Senior Research Fellow, Development Studies Center, Institute of Developing Economies
Veeshesh Sunassay <i>Speaker</i>	NAYGN Durham, Canada/Mauritius	Chapter President
Callum Thomas (TBC) <i>Speaker</i>	Thomas Thor	Chief Executive Officer

Wednesday, 2 October 2024

14:00 – 16:00 Formal Mentoring Session

The Formal Mentoring Program is designed to foster professional growth and development by pairing experienced mentors with mentees seeking guidance in their career paths. This structured program aims to facilitate knowledge transfer, skill enhancement, and career progression through regular, one-on-one interactions. Mentors provide insights, advice, and support, while mentees are encouraged to set goals, ask questions, and actively engage in their own development. The program is committed to cultivating a collaborative environment that supports personal and professional advancement, builds networks, and enhances the overall success of participants.

Name	Organization	Title
Elsa Lemaitre <i>Session Manager</i>	Andra	Systems Integration Director, Cigeo Operational Project

Wednesday, 2 October 2024

16:30 – 17:00 Congress Reflections

Name	Organization	Title
Kristine Madden <i>Session Co-Manager</i>	International Youth Nuclear Congress, Austria/United States of America	President
	IYNC2024	General Co-Chair
Abdulla Al Nuaimi <i>Session Co-Manager</i>	Barakah Youth Council, United Arab Emirates	President
	IYNC2024	General Co-Chair

Wednesday, 2 October 2024

17:00 – 19:00 Connect & Catalyze Reception

The Connect & Catalyze Reception serves as a networking platform, bringing together external stakeholders from non-nuclear backgrounds with participants of the IYNC2024 conference. Attendees mingle, share ideas, and establish connections while enjoying a relaxed atmosphere. As part of the event, individuals can sign up for Lightning Talks, providing brief pitches on topics of interest or ongoing projects. This dynamic gathering fosters collaboration and sparks innovation within the global nuclear community.

Name	Organization	Title
Kristine Madden <i>Session Co-Manager</i>	International Youth Nuclear Congress, Austria/United States of America IYNC2024	President General Co-Chair
Abdulla Al Nuaimi <i>Session Co-Manager</i>	Barakah Youth Council, United Arab Emirates IYNC2024	President General Co-Chair



Wednesday, 2 October 2024

19:00 – 22:00 IYNC Board of Directors' Meeting

The annual IYNC Board of Directors' meeting is open to Members of the Board and invited Observers.

Name	Organization	Title
Kristine Madden <i>Session Manager</i>	International Youth Nuclear Congress, Austria/United States of America	President
	IYNC2024	General Co-Chair

IYNC2024

DETAILED SCHEDULE

Thursday, 3 October 2024



Thursday, 3 October 2024

09:00 – 09:30 Keynote Session: Navigating Innovation: A Fireside Chat on Strategic Investments and Sustainable Futures

Join us for an engaging fireside chat on how strategic investments are shaping sustainable futures in the nuclear sector. Experts will discuss the critical role of forward-thinking investments in driving long-term sustainability, exploring innovative approaches and successful case studies that are paving the way for a more resilient and eco-friendly nuclear industry.

Name	Organization	Title
Abdulla Al Nuaimi <i>Moderator</i>	Barakah Youth Council, United Arab Emirates	President
	IYNC2024	General Co-Chair
Enobot Agboraw <i>Speaker</i>	African Commission on Nuclear Energy, South Africa	Executive Secretary
TBD <i>Speaker</i>	Technology Innovation Institute, United Arab Emirates	TBD

Thursday, 3 October 2024

09:30 – 10:30 Plenary 6: Financing Good Projects

During this plenary, explore the pivotal elements that inform investment decisions, ranging from assessing the feasibility of various designs to navigating the intricacies of workforce development and fortifying supply chains. Together, these factors converge to chart the course of sustainable energy endeavors, reflecting the nuanced dynamics of the nuclear sphere.

Name	Organization	Title
Brianna Lazerwitz <i>Moderator</i>	International Atomic Energy Agency	Energy Economist
Amal Al Sulaimani <i>Speaker</i>	Nawah Energy Company, United Arab Emirates	Vice President, Supply Chain
August Fern <i>Speaker</i>	Baruch Future Ventures, United States of America	Partner & Climate Tech Investor
	International Youth Nuclear Congress, United States of America	Strategic Advisory Officer & Co-Founder
Denis Janin (TBC) <i>Speaker</i>	Bain & Company, Denmark	Senior Manager
Milko Kovachev <i>Speaker</i>	International Bank for Nuclear Infrastructure, Bulgaria	Board of Directors
Hee Yong Lee <i>Speaker</i>	JEIL Partners, Republic of Korea	Co-Chief Executive Officer

Thursday, 3 October 2024

11:00 – 13:00 Workshop 8: Synergy Workshop: Crafting Pathways for Integration

Following a panel discussion with leading climate change advocates, this workshop offers a unique opportunity to dive deeper into how the nuclear industry can effectively enhance its role within the clean energy sector. Participants will explore actionable strategies for better integration and improved communication with other clean energy initiatives. Through guided discussions and collaborative activities, you'll engage with experts and peers to develop innovative solutions that align nuclear energy more closely with global sustainability goals. This session is designed for professionals eager to bridge gaps and foster partnerships that leverage nuclear energy's potential as a pivotal component of the clean energy landscape.

Name	Organization	Title
Kristine Madden <i>Workshop Co-Manager</i>	International Youth Nuclear Congress, Austria/United States of America IYNC2024	President General Co-Chair
Saikat Das <i>Workshop Co-Manager</i>	YOUNGO, India/United Kingdom European Young Engineers, India/United Kingdom	Partnership Coordinator, Energy Working Group Policy Director

Thursday, 3 October 2024

11:00 – 13:00 Workshop 9: Nuclear Energy in Tomorrow's Energy Ecosystem

This workshop delves into the integration of nuclear energy within the future energy landscape, aiming to explore and understand the criteria that guide the selection of energy generation methods. Throughout this interactive session, participants will engage in analyzing how various energy systems function, assess alternative energy generation methods, and pinpoint the unique advantages of nuclear energy. Key topics include the influence of geographic and economic contexts on energy choices and the decision-making process regarding the viability of different energy generation types. The event format includes an initial presentation followed by participant-driven group discussions and problem-solving activities, lasting 2-3 hours. Participants will leave with practical insights into energy balance, the strengths of nuclear power, and tailored strategies for energy system modeling.

Name	Organization	Title
Valeriia Liapina <i>Workshop Manager</i>	AAEM LLC, Russian Federation	Lead Engineer, Turbine Hall Arrangement Department

Thursday, 3 October 2024

11:00 – 13:00 Workshop 10: Nuclear Nexus: Strategic Workshop for Newcomer Nuclear Power Programs

The Nuclear Nexus Game, developed by the World Nuclear Association, is an engaging and interactive card game that immerses participants in the complexities of establishing a nuclear power program in a newcomer country. Players explore the various stages, stakeholders, and strategies involved, gaining a comprehensive understanding of how these elements interconnect while sharing expertise and experiences from different sectors of the nuclear industry. Featuring around 30 cards, the game covers key topics such as supply chains, regulations and laws, finance, energy policy and politics, technological advancements, environmental considerations, and public engagement. Additionally, participants can use a "wildcard" to introduce any element they believe is crucial to the discussion.

Name	Organization	Title
Henry Preston <i>Workshop Manager</i>	World Nuclear Association, United Kingdom	Communications Manager

Thursday, 3 October 2024

11:00 – 12:00 Panel 3: Connecting Generations: Empowering Youth in Nuclear Networks

Manager: Lena Andriolo, Immediate Past President, International Youth Nuclear Congress, France

This panel showcases how young generation in nuclear networks effectively engage with the public and drive industry progress. From innovative public information tools, such as children's books and essay contests, to impactful events such as continental conferences and public engagement, attendees will gain insights into effective strategies for expanding reach and advocating for clean energy. Additionally, the panel will explore the role of committees and mentorship programs in nurturing future leaders.

Name	Organization	Title
Lena Andriolo <i>Moderator</i>	International Youth Nuclear Congress, France	Immediate Past President
Abdulla Al Nuaimi <i>Speaker</i>	Barakah Youth Council, United Arab Emirates	President
Ana Gonzalez <i>Speaker</i>	Jovenes Nucleares, Spain	Head of Treasury and Legal Affairs
Kota Kawai <i>Speaker</i>	Japan Young Generation Network, Japan	President
Andrea Kozlowski <i>Speaker</i>	European Nuclear Society Young Generation Network, United Kingdom	President
Matthew Mairinger <i>Speaker</i>	North American Young Generation in Nuclear, Canada	Immediate Past President
Nitendra Singh <i>Speaker</i>	Indian Youth Nuclear Society, India	President

Thursday, 3 October 2024

12:00 – 13:00 Panel 4: Global Perspectives: Nuclear Advocacy and Criticism Post-COP28

Co-Managers: Christophe Corazza, PhD Candidate, KU Leuven University – Belgian Nuclear Research Centre SCK CEN, Belgium & Ini Godwin, Senior Scientific Officer, Nigeria Atomic Energy Agency, Nigeria

This panel discussion delves into the outcomes of the first UN global stocktake, concluded at COP28 in Dubai, and its ramifications on national policies surrounding nuclear energy across the globe. From examining pre-COP28 stances to exploring shifts in policy post-conference, our panelists offer insights into how this global assessment has influenced the nuclear discourse in their respective countries. This forum aims to foster understanding and constructive dialogue between stakeholders worldwide, shedding light on the complexities and nuances of nuclear energy's role in addressing climate change and sustainable development goals on a global scale.

Name	Organization	Title
Maria Brandstetter-Schmied <i>Moderator</i>	International Atomic Energy Agency	Programme & Publication Officer
Samiru Alhassan <i>Speaker</i>	Tomsk Polytechnic University, Ghana	Researcher
Alice Cunha da Silva <i>Speaker</i>	International Youth Nuclear Congress, Brazil/Spain	Professional Development Officer
Sungjune Sohn <i>Speaker</i>	Korea Atomic Energy Research Institute, Republic of Korea	Senior Researcher, Decommissioning Technology Research Division
Lena Andriolo <i>Speaker</i>	EDF, France	R&D Project Manager

Thursday, 3 October 2024

14:00 – 16:00 Workshop 11: Strategic Energy Planning for Net-Zero: Harnessing IAEA Tools for Tailored Solutions

This interactive workshop invites participants to delve into the world of strategic energy planning using the International Atomic Energy Agency's (IAEA) advanced energy planning tools. Through hands-on simulations, attendees will learn how to utilize these tools to create customized energy strategies that align with the goal of achieving net-zero emissions in their respective countries. The workshop will guide participants through various scenarios, teaching them to adjust and optimize energy mixes and infrastructure investments effectively. By the end of the session, participants will have developed actionable strategies tailored to the unique needs and resources of their countries, empowering them to make informed decisions towards a sustainable energy future.

Name	Organization	Title
Brianna Lazerwitz <i>Workshop Manager</i>	International Atomic Energy Agency	Economics Analyst

Thursday, 3 October 2024

14:00 – 16:00 Workshop 12: Deciphering Safety Culture: Differentiating Climate from Culture

Safety culture and safety climate are often used interchangeably, yet they represent distinct constructs in organizational behavior. This workshop aims to unravel the complexities surrounding these terms, exploring their differences and commonalities. Through interactive discussions and team-based activities, participants will delve into the key components of safety culture models and learn to distinguish between lagging and leading indicators of safety performance. By engaging in group exercises tailored to various organizational departments, attendees will gain practical insights into developing customized indicators and fostering a robust safety culture within their workplaces. With a flexible format accommodating various time constraints, this workshop promises valuable takeaways for professionals seeking to enhance safety practices and promote a culture of well-being in their organizations.

Name	Organization	Title
James Hylko <i>Workshop Manager</i>	Hylko Nuclear, LLC, United States of America	President

Thursday, 3 October 2024

**14:00 – 16:00 Workshop 13: Navigating Climate Diplomacy: UNFCCC Simulation
Workshop**

Step into the world of international climate diplomacy with our interactive workshop designed to immerse participants in the complexities of the UNFCCC negotiation process. Through engaging simulations and in-depth discussions, attendees will gain a deep understanding of the dynamics shaping global climate agreements. Led by experienced facilitators, this session will challenge participants to adopt diplomatic roles and negotiate on behalf of different nations, allowing them to experience firsthand the intricacies of international climate negotiations. Whether you're a seasoned climate policy expert or new to the field, this workshop offers a unique opportunity to explore the challenges and opportunities of climate diplomacy in a collaborative and interactive setting.

Name	Organization	Title
Saikat Das <i>Workshop Manager</i>	YOUNGO, India/United Kingdom	Partnership Coordinator, Energy Working Group
	European Young Engineers, India/United Kingdom	Policy Director

Thursday, 3 October 2024

14:00 – 16:00 Workshop 14: Mastering Communication: Crafting Compelling Messages for Diverse Audiences

This workshop is dedicated to enhancing your communications and media skills, crucial for crafting compelling messages and engaging effectively with diverse audiences. Participants will undergo practical training in media relations, public speaking, and digital communication techniques. Through interactive sessions led by experienced communicators, you'll learn how to confidently handle interviews, press conferences, and social media platforms. This hands-on workshop is ideal for anyone looking to improve their media presence and communication strategies, ensuring your messages are not only heard but resonate strongly with your target audience.

Name	Organization	Title
Lubomir Mitev <i>Workshop Manager</i>	United Arab Emirates/Bulgaria	-

Thursday, 3 October 2024

14:00 – 15:00 Panel 5: Compact Power: Advancing 3S in Small Modular Reactors and Advanced Nuclear Technologies

Co-Managers: Owen Legrome, Associate Safeguards Information Analyst, International Atomic Energy Agency & Milana Ozerina, Intern, International Atomic Energy Agency

This panel will explore key safety, security, and safeguard (3S) issues in advanced nuclear technologies and small modular reactors (SMRs). Industry experts, regulators, and academics will discuss the latest innovations and 3S challenges, focusing on designing, regulating, and implementing SMRs to meet top safety and security standards. The session will highlight the potential of these technologies in supporting a sustainable and secure energy future, emphasizing collaboration and public trust.

Name	Organization	Title
Eva Gyane <i>Moderator</i>	Consultant, Austria	Consultant
Na Young Lee <i>Speaker</i>	Korea Institute of Nuclear Nonproliferation and Control, Republic of Korea	Director General, Office of Nuclear Nonproliferation
Nadezhda Salnikova <i>Speaker</i>	OKBM Afrikantov, Russian Federation	Head of SMR Project Support Development
Sola Talabi <i>Speaker</i>	Pittsburgh Technical	President
Natallia Varapai <i>Speaker</i>	SCK CEN, Belgium	Safety Engineer

Thursday, 3 October 2024

15:00 – 16:00 Panel 6: Innovating to Scale: Empowering Nuclear Entrepreneurs

Manager: Okan Yildiz, Lead Specialist, International Cooperation, Akkuyu Nuclear JSC, Türkiye

Explore how innovative talent drives growth in both large corporations and startups within the nuclear sector. Our panel of industry experts will share their experiences and strategies for success in nuclear innovation and entrepreneurship. From generating business ideas to navigating organizational structures and maintaining leadership, attendees will gain practical insights into building thriving nuclear ventures. Engage in a mini-business start-up simulation and connect with speakers for exclusive networking opportunities. Join us to empower your entrepreneurial ambitions in the nuclear industry.

Name	Organization	Title
Okan Yildiz <i>Moderator</i>	Akkuyu Nuclear JSC, Türkiye	Lead Specialist, International Cooperation
Cigdem Cildag <i>Speaker</i>	AktinRealis, United Arab Emirates	Lead Engineer
Phoebe Lind <i>Speaker</i>	Last Energy, United States of America	Government Relations Associate
Alessio Luvara <i>Speaker</i>	CAELUS, Italy/United States of America	Founder & Chief Executive Officer
Alexandra Wyler <i>Speaker</i>	Blykalla, Sweden	Communications Manager

Thursday, 3 October 2024

14:00 – 16:00 Global Innovation4Nuclear Competition

The Global Innovation4Nuclear Competition gathers regional winners from around the world to present groundbreaking ideas in nuclear science and technology. This event offers a platform for collaboration and networking, where participants can share and be inspired by cutting-edge projects that are driving innovation and shaping the future of nuclear energy.

Name	Organization	Title
Dinara Ermakova <i>Moderator</i>	International Youth Nuclear Congress, Kazakhstan/United States of America	Innovation Chair

Thursday, 3 October 2024

16:30 – 23:00 Closing Event: Desert Safari

A must-try activity in this region, the tour offers a delightful evening in the Abu Dhabi desert, complete with a BBQ dinner, dune bashing and more.

Name	Organization	Title
Kristine Madden <i>Session Co-Manager</i>	International Youth Nuclear Congress, Austria/United States of America IYNC2024	President General Co-Chair
Abdulla Al Nuaimi <i>Session Co-Manager</i>	Barakah Youth Council, United Arab Emirates IYNC2024	President General Co-Chair

IYNC2024
DETAILED SCHEDULE
Friday, 4 October 2024



Friday, 4 October 2024

09:00 – 10:00 Special Session: Youth Powering the Future

Participate in a dynamic intergenerational dialogue as industry executives collaborate with emerging leaders from the nuclear and broader energy sectors. Together, we'll reflect on pivotal insights gleaned from the week's discussions, leveraging our collective expertise to chart actionable steps towards forging a sustainable and inclusive energy landscape. Explore the intersection of seasoned wisdom and fresh perspectives, harnessing this synergy to drive meaningful change for generations to come.

Name	Organization	Title
Kristine Madden <i>Moderator</i>	International Youth Nuclear Congress, Austria/United States of America IYNC2024	President General Co-Chair
Ghayah Al Harmoodi <i>Speaker</i>	University of Sharjah, United Arab Emirates	Senior Nuclear Engineering Student
Sama Bilbao y Leon <i>Speaker</i>	World Nuclear Association, United Kingdom	Director General
Saikat Das <i>Speaker</i>	YOUNGO, India/United Kingdom European Young Engineers, India/United Kingdom	Partnership Coordinator, Energy Working Group Policy Director
Osama Baig <i>Speaker</i>	Ontario Power Generation, Canada	Safeguards Officer

Friday, 4 October 2024

10:00 – 11:15 Awards Ceremony

Celebrate excellence in nuclear science and technology at the IYNC Awards Ceremony. This prestigious event honors outstanding achievements and contributions by young and seasoned professionals in the field. Join us as we recognize and applaud the innovative work and dedication of individuals who are shaping the future of the nuclear industry.

Name	Organization	Title
Kristine Madden <i>Session Co-Manager</i>	International Youth Nuclear Congress, Austria/United States of America IYNC2024	President General Co-Chair
Abdulla Al Nuaimi <i>Session Co-Manager</i>	Barakah Youth Council, United Arab Emirates IYNC2024	President General Co-Chair

Friday, 4 October 2024

11:15 – 12:00 Closing: Keynote Session

As IYNC204 concludes, join us for the closing remarks, where key takeaways and reflections on the conference will be shared. This final session will highlight the key insights and achievements from the event, celebrating the collaborative spirit and forward-thinking ideas that emerged. Attendees will be inspired to continue driving innovation and excellence in the nuclear field as we look ahead to future opportunities and challenges.

Name	Organization	Title
TBC	Emirates Nuclear Energy Corporation, United Arab Emirates	TBD
Sama Bilbao y Leon	Executive Director, World Nuclear Association, United Kingdom	Keynote Address
Abdulla Al Nuaimi	President, Barakah Youth Council, United Arab Emirates General Co-Chair, IYNC2024	Keynote Address
Kristine Madden	President, International Youth Nuclear Congress, Austria/United States of America General Co-Chair, IYNC2024	Keynote Address
TBD	Incoming President, International Youth Nuclear Congress	Keynote Address

Friday, 4 October 2024**14:00 – 17:00 Technical Tours: FANR Laboratories**

Experience the cutting edge of nuclear science with our technical tours at FANR Laboratories. These guided tours offer an exclusive behind-the-scenes look at the latest research and technological advancements in nuclear science and technology. Participants will have the opportunity to explore state-of-the-art facilities, interact with leading experts, and gain valuable insights into the operational and regulatory aspects of nuclear technology.

Name	Organization	Title
Abdulla Al Nuaimi	Barakah Youth Council, United Arab Emirates	President
<i>Session Manager</i>	IYNC2024	General Co-Chair

IYNC2024

DETAILED SCHEDULE

Saturday, 5 October 2024





Saturday, 5 October 2024

08:00 – 17:00 **Technical Tours:** Barakah Nuclear Power Plant, Sheikh Shakbout Medical City & Technology Innovation Institute

Experience the cutting edge of nuclear science with our technical tours at Barakah Nuclear Power Plant, Sheikh Shakbout Medical City & Technology Innovation Institute. These guided tours offer an exclusive behind-the-scenes look at the latest research and technological advancements in nuclear science and technology. Participants will have the opportunity to explore state-of-the-art facilities, interact with leading experts, and gain valuable insights into the operational and regulatory aspects of nuclear technology.

Name	Organization	Title
Abdulla Al Nuaimi	Barakah Youth Council, United Arab Emirates	President
<i>Session Manager</i>	IYNC2024	General Co-Chair