NORM XI

11th International Symposium on Naturally Occurring Radioactive Material (NORM)

October 13-17, 2025
@ Mensvic Grand Hotel,
Accra - Ghana

SYMPOSIUM HIGHLIGHTS

- 5 days of scientific presentations
- Refresher Courses
- Social Events
- Trade Exhibition

THEME

Broadening Optimization in Industrial Processes Involving NORM: A Focus on Sustainability in Extractive Industries

2ND ANNOUNCEMENT

Contact Us

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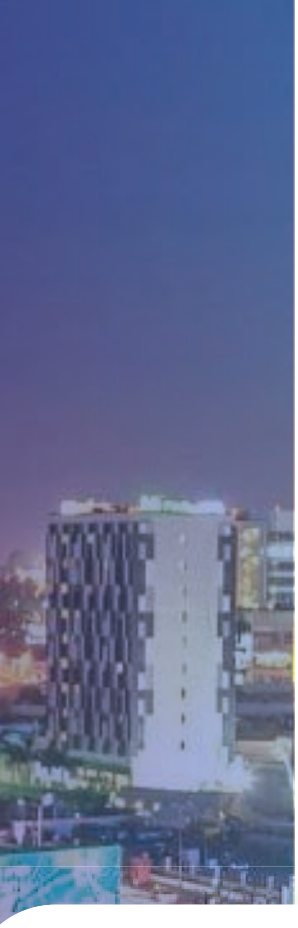
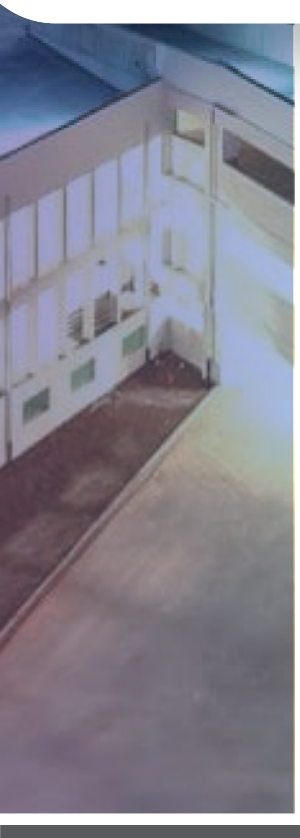


Organized By

In cooperation with:



Welcome message
from the Symposium President

I am pleased to announce that the 11th International Symposium on Naturally Occurring Radioactive Materials (NORM XI) will be held from October 13-17, 2025, in Accra, Ghana. Hosted by the Ghana Atomic Energy Commission (GAEC), Ghana Association for Radiation Protection (GARP), African ALARA Network (AFAN), and the Nuclear Regulatory Authority, Ghana (NRA), the event is organized in collaboration with the International Atomic Energy Agency (IAEA) and other key international organizations.

Since its inception in 1997, the NORM Symposium has grown into a global platform for industry experts, researchers, and regulators to exchange knowledge on NORM management. Previously hosted in countries such as Germany, Belgium, Spain, Morocco, China, Brazil, the USA, and most recently, the Netherlands in 2022, the symposium continues to foster collaboration and innovation in the field.

Set in Accra, a vibrant city known for its rich culture and hospitality, NORM XI will focus on the theme: ***"Broadening Optimization in Industrial Processes Involving NORM: A Focus on Sustainability in Extractive Industries."*** Discussions will address regulatory frameworks, environmental monitoring, waste management, occupational radiation protection, and the valorization of NORM residues.

The five-day programme will feature plenary sessions, technical discussions, and poster presentations, offering opportunities for networking and collaboration among industry professionals, scientists, and regulators. Participants will explore advancements in NORM research, evolving policies, and best practices for sustainable industrial processes.

As hosts, we are honored to welcome experts from around the world to this important event. I encourage you to share this announcement widely and participate in NORM XI to contribute to the future of NORM management.

I look forward to welcoming you to Accra, Ghana, in October 2025.

- Prof. Samuel Boakye Dampare
President, NORM XI Symposium
Director General, Ghana Atomic Energy Commission

NORM XI Symposium 2025

The basis for the scientific programme is the symposium theme:

Broadening Optimization in Industrial Processes Involving NORM: A Focus on Sustainability in Extractive Industries

NORM XI is organised in cooperation with IAEA, ILO, IRPA, ICRP, UNSCEAR, and ENA. The symposium targets a diverse audience, including stakeholders from various industries related to NORM, disposal facilities, international transport, as well as regulators, researchers, and service providers. The goal of NORM XI is to enhance the harmonization of operational practices to promote sustainability in the management of NORM residues and waste. It also aims to encourage the broader application of international guidelines and regulations, including the IAEA Basic Safety Standards (BSS) (General Safety Requirements Part 3) and the EU BSS (European Council Directive 2013/59/EURATOM), which have already achieved significant mutual harmonization.

Symposium Board

- Samuel Boakye Dampare (President)
- Eric Glover
- Augustine Faanu
- Joseph Amoako
- David Okoh Kpeglo (Scientific Secretary)
- Edith Amoatey

IAEA Technical officer for NORMXI Symposium

- Halil Burçin Okyar

Represents the IAEA and serves as a member of the Steering and Scientific Programme Committees.

Steering Committee

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Stefan Mundigl	European Commission (EC)
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José - Luis Gutiérrez Villanueva	European Radon Association (ERA)
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José Marcus Godoy	Latin America Occupational Radiation Protection Optimization Network (REPROLAM)
Innocent Imayida	Regulatory Services, Radiation Protection Authority, Zimbabwe & African ALARA Network AFAN)
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Local Organizing Committee

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Julian Hilton	Aleff Group, UK
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Obusitse John Pule	South Africa National Nuclear Regulator
Alongkot Fanka	Chulalongkorn University Bangkok, Thailand
Yasser Khawassek	Nuclear Materials Authority, Egypt
Horst Monken-Fernandes	Environmental Remediation Specialist, IAEA

SYMPOSIUM PROGRAMME

The NORM XI Symposium provides a unique opportunity for industry leaders, researchers, regulators, and other stakeholders to come together and share the latest advancements, innovations, and best practices in NORM management.

The programme will feature a series of keynote plenary presentation sessions, technical topical sessions, poster sessions, plenary summaries, panel discussions, and networking events - all focused on the critical challenges and opportunities in this rapidly evolving field. The plenary sessions, featuring world-leading NORM experts and NORM practitioners, will highlight the current state of key topics. The final plenary session will identify the principal conclusions and outcomes from the Symposium. The preliminary programme contains twelve topical sessions. These sessions will provide oral presentations of submitted papers and selected keynote presentations, reflecting the scientific and practical areas defined by the topics and subjects:

01 Fundamental and Practical Implementation Aspects of Regulations Applicable to NORM in line with the international safety standards: Strategies to support the circular economy

- This theme explores the regulatory frameworks governing NORM, empha sizing compliance with international safety standards such as IAEA GSR Part 3 and its application to NORM management
- It will examine practical strategies for integrating these regulations into industry practices, promoting the circular economy by minimizing waste and enhancing resource recovery.
- Case studies and experiences demonstrating successful regulatory implementation and provide insights into effective practices that align with sustainable goals.

02 Optimization of Radiation Protection in Different Situations Involving NORM: Embedding the UN SDGs.

- This thematic area focuses on optimizing radiation protection strategies in various contexts of exposure to NORM, including industrial and environmental settings.
- It will highlight the integration of the United Nations Sustainable Development Goals into radiation protection policies aligning radiation protection strategies with sustainable development goals.
- Innovative approaches to minimize exposure while supporting sustainable development, emphasizing the balance between economic growth and radiation safety.

03 Application of the Graded Approach to the Regulation of NORM : Challenges and case studies.

- This topic addresses the challenges (gaps and barriers) and successes of applying a graded approach to NORM regulation.
- Case Studies on Graded Approach Implementation from different industrial processes involving NORM
- Adaptive Management Strategies to develop flexible regulatory frameworks that respond to new data and technologies with potential solutions that can enhance regulatory efficiency and effectiveness.
- Optimizing the regulator and operator resources

04 Sustainable Management of NORM: Valorisation of NORM tailings and residues. Fostering emerging markets of secondary raw materials.

- This theme will focus on sustainable practices for managing NORM, particularly the valorization of tailings and residues.
- Innovative methods for repurpose of these materials into secondary raw materials, fostering emerging markets.
- Technological advancements and policy frameworks that support sustainable practices, contributing to a circular economy within the extractive industries.
- Lifecycle Assessment to evaluate the environmental impacts of NORM management practices.

SYMPOSIUM PROGRAMME

05 Environmental Aspects of NORM; Discharges and management of residues

- Discharge Management Techniques: Best practices for managing NORM discharges into the environment.
- Residual Waste Management strategies for the safe disposal and treatment of NORM residues emphasizing the need for effective monitoring and mitigation strategies.
- Impact Assessment Studies for evaluating the ecological consequences of NORM-related activities.
- Regulatory compliance, public health concerns, and the long-term sustainability of environmental management practices.

06 NORM Sampling and Radiological Characterization; Metrology and quality assurance

- This thematic area highlights the importance of accurate sampling, on-site and laboratory radiological characterization of NORM.
- Metrology standards and quality assurance protocols necessary for reliable data collection and analysis.
- Enhancing the accuracy of measurements, improving safety protocols, and supporting regulatory compliance through robust characterization methodologies.
- Intercomparison exercises
- Development of new reference materials for the rapid determination of radionuclides
- Optimization of analytical methods to characterize complex mixtures of radionuclides

07 Occupational Radiation Protection in NORM involving industries, including exposure to radon and thoron.

- This theme will address occupational radiation protection strategies in industries managing NORM, particularly concerning radon and thoron exposure, in line with the international safety standards (e.g., IAEA GSR Part 3, GSG-7, etc.).
- Experiences and best practices for safeguarding workers, including risk assessment frameworks and training programmes.
- The integration of health and safety regulations into operational practices will be examined, aiming to enhance worker protection while promoting sustainable industry practices.

08 Assessment of Doses to People and Non-Human Species

- This area will investigate methodologies for assessing radiation doses to humans and non-human species affected by NORM activities,
- Risk assessment models and data collection techniques, emphasizing the importance of comprehensive assessments for environmental and public health protection.
- Holistic approach and discussions with aim to strengthen frameworks for environmental and public health protection.

09 Decommissioning and Remediation of Legacy Sites: Lessons learned and innovative approaches

- Decommissioning and remediation of legacy NORM sites, sharing lessons learned from past experiences.
- Innovative approaches in technology and policy highlighting successful case studies that demonstrate effective remediation strategies.
- Ensuring safety, environmental protection, and community involvement in the remediation process.
- Strategies to support NORM residue management and decommissioning policies

10 Radiation Protection Aspects of NORM Transport, Trade, and Commerce

- This thematic area examines the radiation protection considerations involved in the transport, trade, and commerce of NORM, including addressing logistic challenge issues in the safe transport of NORM materials
- Regulatory compliance ensuring adherence to international regulations in NORM trade and challenges, safety protocols, and best practices for ensuring safe handling and transportation.
- International collaboration and compliance with safety standards will be emphasized to protect public health and the environment.

SYMPOSIUM PROGRAMME

11 Stakeholder Engagement and Community Development Projects

- The role of stakeholder engagement in the safe management of NORM and its impact on community development.
- Strategies for involving local communities in decision-making processes, fostering transparency, and building trust.
- Sharing experience on successful community development projects linked to NORM management, highlighting their contribution to sustainable development goals.
- Programs aimed at enhancing community understanding of NORM related issues.

12 Strategies for Capacity Building and Knowledge Management

- The importance of knowledge management and capacity building in the context of NORM regulation and management.
- Training and education programmes designed to enhance expertise among stakeholders, including industry professionals, regulators, and communities.
- Sharing best practices, fostering innovation, and ensuring the sustainability of NORM management efforts through knowledge transfer.

REFRESHER COURSES

The Refresher course programme provides participants with the opportunity to update their knowledge in specific areas of radiation protection science and the practice of NORM. The courses are aimed at providing a broad overview of the current state of a given topic, thereby giving participants not working directly in that field a sound understanding of the current status and at giving experienced practitioners a more detailed understanding of up-to-date developments in a field.

The courses will be delivered by selected instructors according to their outstanding expertise and competence in teaching. Some will be at the beginner level, some at a more advanced level, and some courses will be aimed at young professionals.

The subjects of the refresher courses are:

- ✓ Measurement and characterization
- ✓ Practical application of NORM regulations
- ✓ Strategies for proper use of IAEA Safety Standards, Graded approach
- ✓ ICRP Course on Hazard / risk assessment
- ✓ Policies and Strategies for the Management of NORM Residues and Wastes

CALL FOR ABSTRACTS

The Scientific Programme Committee invites participants to submit their contributions to the NORM XI Symposium through the online submission system.

- Once accepted, the Scientific Programme Committee will decide whether your contribution will be presented as a poster or oral presentation, taking your preference into account.
- Your poster, presentation, and full paper or abstract will be made publicly available through:
  - The NORM XI website after the symposium.
  - The NORM XI Symposium Proceedings/Book of Abstracts, published by the IAEA.

Important Dates & Review Process

✓ **Abstract submission deadline: May 15, 2025**

After submission:

- Abstracts will be reviewed for scientific and technical quality.
- Authors will be notified as soon as possible regarding acceptance.

Abstract Guidelines

- The abstract should clearly summarize the proposed content, including significant scientific findings or conclusions.

  The clarity and quality of the information provided will determine acceptance.

Registration & Contact Information

- The presenting author must register online as a participant.
- The website will guide you through the registration and submission process.
- If you have any questions, please contact the organizers at info@normxi2025.com.
- Once registered, you will receive a confirmation email.

More Information & Submission:
https://normxi2025.com/submission-of-abstracts/

Call for Sponsors | Exhibitors

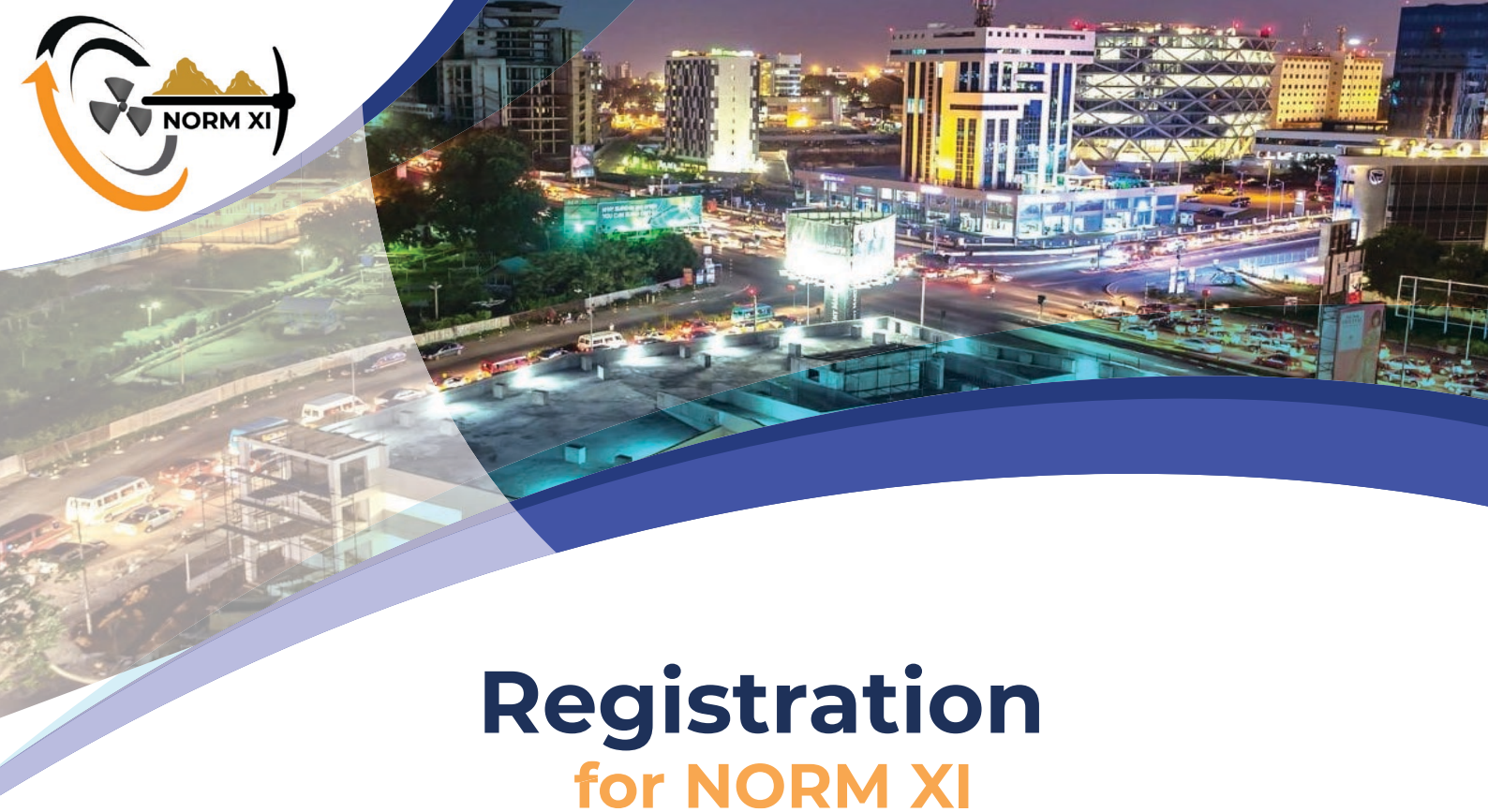
The NORM XI Symposium offers opportunities for advertising and promoting your company, products, and services.

Why Sponsor or Exhibit?

- Reach an international audience of radiation protection professionals.

  Based on attendance at previous NORM Symposia (NORM IX and X), approximately 300 participants from around the world are expected.

Sponsor & Exhibition Prospectus:
https://normxi2025.com/exhibitors/



Registration
for NORM XI

How to Register

Registration for NORM XI is now open! Secure your spot by visiting our official registration page:

Register Here:
https://forms.office.com/r/MXLHAiTuv4

All participants, including presenters, must complete their registration online. Early registration is encouraged to benefit from lower fees and ensure participation in all symposium activities.

Registration Fees

CATEGORY	FEE
Early-Bird Registration (until 15 Mar, 2025)	US$ 540
Standard Registration (by 30 Aug, 2025)	US$ 625
Last Minutes | On-Site Registration (from 13 Oct, 2025)	US$ 750
* For Students	US$ 300

What's Included?

- ✓ Access to all symposium sessions and technical presentations
- ✓ Symposium materials and documentation
- ✓ Coffee breaks and lunches during the event
- ✓ Welcome reception and networking opportunities
- ✓ Access to the exhibition area

For any inquiries regarding registration, please contact the organizers at *info@normxi2025.com*.

Don't miss this opportunity to engage with global experts and advance your knowledge on NORM-related topics!

Grant Application at the IAEA

Application Process

To apply for an IAEA grant, follow these steps:

1. Submit Required Documentation

- Use **FORM B**, available on the official website, to submit your documentation.
- Ensure submission is done via official channels.

2. Complete the Grant Application

- Fill out **FORM C** to formally apply for the grant.

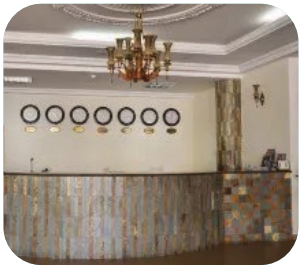
Important Note

Before applying for the IAEA grant, applicants must first complete an abstract submission online.
Use the following link to submit your abstract:

https://normxi2025.com/abstract-information/

Symposium Venue

Mensvic Hotel, Accra - Ghana



SIGHT SEEING

Christiansborg Castle

A historic 17th-century fortress with a rich and complex past. Once a key hub in the transatlantic slave trade and later Ghana's seat of government, it now stands as a powerful symbol of the nation's colonial and post-independence heritage. Explore its timeless stories and historical significance!

Kwame Nkrumah Memorial Park

Park dedicated to the memory of the great Pan-Africanist Osagyefo Dr. Kwame Nkrumah. The park has a museum that hosts rare artefacts relating to Ghana's independence and tours at the park give visitors in-depth history of the Sub-saharan struggle for independence.

Independence Arch

The Independence Arch in Accra, Ghana, is part of the Independence Square which contains monuments to Ghana's independence struggle, including the Independence Arch, Black Star Gate, and the Liberation Day Monument.

General Information

Symposium website: www.normxi2025.com
Symposium location: Mensvic Grand Hotel
Lagos Ave, Accra
http://mensvicgrandhotel.com-accra.com/

Symposium Secretariat:
If you have any questions regarding this symposium please contact:

SECRETARIAT
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Website: www.normxi2025.com

IAEA
International Atomic Energy Agency
Atoms for Peace and Development

Form C
EVT2401864

Grant Application Form

11th International Symposium on Naturally Occurring Radioactive Material (Organized in cooperation with the IAEA)

Accra, Ghana, 13–17 October 2025

To be completed by the applicant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary H.B.Okyar@iaea.org and to the Administrative Secretary E.Panteleymonova@iaea.org.

Deadline for receipt by IAEA through official channels: 16 August 2025

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms:
Mailing address:	Tel.:	
	Fax:	
	Email:	
Date of birth (yy/mm/dd):	Nationality:	

1. Education (post-secondary):

Name and place of institution	Field of study	Diploma or Degree	Years attended from	to

2. Recent employment record (starting with your present post):

Name and place of employer/ organization	Title of your position	Type of work	Years worked from	to

3. Description of work performed over the last three years:

4. Institute's/Member State's programme in field of event:

Date: **Signature of applicant:** _____

Date: **Name, signature and stamp of Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority** _____