# International Conference on Research Reactors:

## Achievements, Experience, and the Way to a Sustainable Future

November 11<sup>th</sup> – 15<sup>th</sup>, 2024

### PROGRAMME

Organized by the International Atomic Energy Agency (IAEA)

IAEA Headquarters Vienna, Austria

#### **Programme Committee:**

- K. Toukan, Jordan
- G. Storr, Australia
- J. Perrotta, Brazil
- S. Kim, Republic of Korea
- K. du Bruyn, South Africa
- L.-W. Hu, USA

#### **IAEA Secretariat:**

Scientific Secretaries:	D. Ridikas P. Chakrov A. Shokr
Event Organizer: Administrative Support:	T. Danaher T. Kornelyuk M. Romero E. Vargas
Location of the Event:	
	International Atomic Energy Agency Vienna International Centre (VIC) Building M, BRB/M1
	Wagramer Strasse 5 A-1400 Vienna, Austria Tel.: (+43 1) 2600 21330
Working Language:	English
Resolutions:	No resolutions may be submitted for consideration on any subject; no votes will be taken.

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#### TIMETABLE

#### Monday, 11 November 2024

Time	Session No.	Session Title / Break	Venue
10:30– 11:00		Conference Opening	Board Room B/M1
11:00– 13:00	1A	Utilization and Applications	Board Room B/M1
13:00– 14:00		Lunch Break	
14:00– 15:30	3A	New Research Reactor Programmes	Board Room B/M1
15:30– 16:00		Coffee/Tea Break and Poster Session A	
16:00– 18:00	2A	Operation and Maintenance	Board Room B/M1
18:00– 19:30		Welcome Reception	M-Building – Ground Floor

#### Tuesday, 12 November 2024

Time	Session No.	Session Title / Break	Venue
08:30– 10:00	4A	Safety of Research Reactors	Board Room B/M1
10:00– 10:30		Coffee/Tea Break and Poster Session A	
10:30– 12:30	4B	Safety of Research Reactors	Board Room B/M1
12:30– 13:30		Lunch Break	
13:30– 15:00	1B	Utilization and Applications	Board Room B/M1
15:00– 15:30		Coffee/Tea Break and Poster Session A	
15:30– 16:00		Poster Session A	M Building Corridor
16:00– 17:30	2B	Operation and Maintenance	Board Room B/M1
17:30– 18:30	Side Event 1	The Role of Research Reactors in Advancing Sustainable Development Goals	Board Room B/M1
17:30– 18:30	Side Event 2	Nuclear Security Considerations for Research Reactors	M Building/M3

Time	Session No.	Session Title / Break	Venue
08:30– 10:00	3B	New Research Reactor Programmes	Board Room B/M1
10:00– 10:30		Coffee/Tea Break and Poster Session B	
10:30– 12:30	5A	Security of Research Reactors	Board Room B/M1
12:30– 13:30		Lunch Break	
13:30– 15:00	4C	Safety of Research Reactors	Board Room B/M1
15:00– 15:30		Coffee/Tea Break and Poster Session B	
15:30– 17:30	6A	Research Reactor Fuel Management	Board Room B/M1
17:30– 18:30	Side Event 3	Capacity Building Based on Research Reactor Centers	Board Room B/M1
17:30– 18:30	Side Event 4	Safety Considerations in Use of Advanced and Innovative Technology in Research Reactors	M Building/M3

#### Wednesday, 13 November 2024

#### Thursday, 14 November 2024

Time	Session No.	Session Title / Break	Venue
08:30– 10:00	4D	Safety of Research Reactors	Board Room B/M1
10:00– 10:30		Coffee/Tea Break and Poster Session B	
10:30– 11:00		Poster Session B	M Building Corridor
11:00– 12:30	7A	Common Management Considerations	Board Room B/M1
12:30– 13:30		Lunch Break	
13:30– 15:00	1C	Utilization and Applications	Board Room B/M1
15:00– 15:30		Coffee/Tea Break and Poster Session B	
15:30– 17:30	2C	Operation and Maintenance	Board Room B/M1
17:30– 18:30	Side Event 5	Women at Research Reactors: Challenges and Opportunities	Board Room B/M1

#### Friday, 15 November 2024

Time	Session No.	Session Title / Break	Venue
08:30– 10:00	1D	Utilization and Applications	Board Room B/M1
10:00– 10:30		Coffee/Tea Break	
10:30– 11:30	7B	Common Management Considerations	Board Room B/M1
11:30– 12:30	Panel Session	Summary Discussion, Conclusions and Recommendations	Board Room B/M1
12:30– 13:00	Closing Session	Conference Closing	Board Room B/M1

#### 10:30-11:00 OPENING SESSION

#### (Board Room B/M1)

Time	Name	Designating Member State/Organization	Title
10:30– 10:45	R. Grossi	Director General, IAEA	Opening Remarks
10:45– 10:50	K. Toukan	Conference Chair, Jordan Atomic Energy Agency (JAEC)	Conference Chair Remarks
10:50– 11:00	D. Ridikas P. Chakrov A. Shokr	Scientific Secretaries, IAEA	Administrative Remarks

11:00–13:00	SESSION 1A:
	Utilization and Applications

(Board Room B/M1)

Chairpersons: G. Bignan, France D. Wisnubroto, Indonesia

Time	Paper No.	Name	Designating Member State/Organization	Title
11:00– 11:25	274	D. Ridikas	IAEA	IAEA Activities in Support of Sustainable Utilization and Applications of Research Reactors
11:25– 11:40	147	M. Kim	Republic of Korea	Current Status of the HANARO Utilization
11:40– 11:55	250	K. Eberhardt	Germany	The Research Reactor TRIGA Mainz – Since More than 58 Years a Strong and Versatile Neutron Source for Science and Education
11:55– 12:10	190	K. Unlu	USA	New Innovative Developments and Sustainable Utilizations of the Penn State Breazeale Reactor
12:10– 12:25	89	S. Bustamante	Chile	Chilean Experience Post IRRUR Mission
12:25– 12:40	35	A. Shaimerdenov	Kazakhstan	R&D Plan for the Development of BNCT at the WWR-K
12:40– 13:00		Q&A		
13:00–14:00 Lunch Break				

14:00–15:30 SESSION 3A: New Research Reactor Programmes (Board Room B/M1)

Chairpersons: K. Tiyapun, Thailand A. Alomari, Saudi Arabia

Time	Pape No.	er Name	Designating Member State/Organization	Title
14:00– 14:20	276	A. Sitnikov	IAEA	IAEA Support for New Research Reactor Programmes: Nuclear Infrastructure and Capacity Building
14:20– 14:40	130	M. Kim	Republic of Korea	Status of KJRR Project in Korea
14:40– 14:55	2	G. Bignan	France	Jules Horowitz Reactor (JHR) Reactor): A Future International Material Test Reactor in Support to Nuclear Industry, Regulators, and R&D Institutes: Status as of MID-2024 Following Major Reassessment of the Project
14:55– 15:10	52	Y. Fetisova	Russia	MBIR – The Most High-Flux Reactor in the World and a Unique Platform for International Scientific Cooperation
15:10– 15:30		Q&A		
15:30–1	6:00	Poster Session A and	d Coffee Break	

16:00-18:00	SESSION 2A:
	Operation and Maintenance

Chairpersons: S. O'Kelly, USA P. Chakrov, IAEA

(Board Room B/M1)

Time	Paper No.	Name	Designating Member State/Organization	Title
16:00– 16:25	277	R. Mazzi	IAEA	Navigating O&M Challenges: IAEA's Strategic Support for Research Reactors
16:25– 16:40	123	J. Perrotta	Brazil	Commissioning Experiments of the New Core of the IPEN/MB-01 Research Reactor with Plate-Type Fuel Elements
16:40– 16:55	257	A. Salvini	Italy	Integrated Management System Applied to a Low Power Research Reactor Facility in Operation: Lesson Learned and Future Perspective
16:55– 17:10	191	K. Tiyapun	Thailand	Ageing Management Experienced in Refurbishment of TRR-1/M1 Reactor Pool
17:10– 17:25	7	D. Stanciu	Romania	Experience with Major Repairs and Refurbishment at TRIGA 14MW Open Pool Reactor
17:25– 17:40	87	M. Ali	Pakistan	Maintenance, Periodic Testing, and In-Service Inspection at Pakistan Research Reactor-1 (PARR- 1)
17:40– 18:00		Q&A		
18:00–19:	30 Rece	ption		

#### 08:30–10:00 SESSION 4A: Safety of Research Reactors

(Board Room B/M1)

Chairpersons: A. Shokr, IAEA R. Abu-Saleem, Jordan

Time	Paper No.	Name	Designating Member State/Organization	Title
08:30– 08:55	278	A. Shokr	IAEA	IAEA Programme on Safety of Research Reactors: Achievements, Experience and Way Forward
08:55– 09:10	41	O. Kukhotskyi	Ukraine	Safety and Current Status of Ukrainian Research Nuclear Reactors
09:10– 09:25	106	R. Amorosi	France	The Specificities of the ITER Reactor (Regulatory Oversight of Research Reactors, including Licensing Process and Inspection Programs)
09:25– 09:40	114	D. Mosbah	AAEA	Challenges of Research Reactors Safety and Optimal Utilization in Arab Countries
09:40– 10:00		Q&A		

10:30-12:30	SESSION 4B:
	Safety of Research Reactors

Chairpersons: E. Grolleau, France S.J. Kim, Republic of Korea (Board Room B/M1)

Time	Paper No.	Name	Designating Member State/Organization	Title
10:30– 10:55	269	S. Kanamori	France	Periodic Safety Review of Research Reactors in France
10:55– 11:10	171	L. Claramonte	Argentina	Best Estimate Deterministic Modeling Approach for Probabilistic Safety Assessment support
11:10– 11:25	244	R. Abu-Saleem	Jordan	EMRC's Review and Assessment of Research Reactor Safety
11:25– 11:40	226	M. Gimenez	Argentina	Safety classification: a methodology based on the internalization of defense in depth concept and a case of study applied to a research reactor
11:40– 11:55	37	J. Kalowski	Poland	Lessons learned from design and implementation of safety classification procedure for Maria Research Reactor
11:55– 12:10	155	D. Merrouche	Algeria	Verification of Safety Improvement of a Research Reactor
12:10– 12:30		Q&A		
12:30-13	:30	Lunch Break		

13:30-15:00	SESSION 1B:
	Utilization and Applications

(Board Room B/M1)

Chairpersons:	N. Bouzerkri, Morocco	
	P. Cantero, Argentina	

Time	Paper No.	Name	Designating Member State/Organization	Title
13:30– 13:55	279	M. Hawari	Jordan	Towards Excellence in Sustainable Operations: Efficient Utilization at the Jordan Research and Training Reactor
13:55- 14:10	53	S. Zhong	China	Progress in Construction of Neutron Stress Diffractometer "Hetu" and Small Neutron Scattering Spectrometer "Luoshu" of Shanghai Jiao Tong University
14:10– 14:25	194	M. Reichenberger	USA	Managing an Analytical Chemistry and Radiation Measurements Laboratory at a Nuclear Reactor, Where Operations and Research Collide
14:25– 14:40	178	M. Dastjerdi	Iran	Recent Developments in ISFAHAN MNSR Applications
14:40– 15:00		Q&A		
15:00-15:3	0 Poster	Session A and Cof	fee Break	
15:30-16:0	0 Poster	Session A – Check	Annex I	

16:00-17:30	SESSION 2B:
	Operation and Maintenance

Chairpersons: A. Pichlmaier, Germany

F. Kungurov, Uzbekistan

(Board Room	B/M1)
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Time	Paper No.	Name	Designating Member State/Organization	Title
16:00– 16:25	281	S. O'Kelly	USA	Major Refurbishment of Advanced Test Reactor
16:25– 16:40	141	T. Said	Algeria	Prognosis and Health Management (PHM) of Electrical rotating equipment in nuclear research reactors: ES- Salam Case Study
16:40– 16:55	5	S. Sriyono	Indonesia	Structure, system, and components integrity detection on the primary system of RSG-GAS based on primary coolant radionuclides measurements
16:55– 17:10	266	A. Pichlmaier	Germany	FRM II: Why is Germany's only reactor with P > 1 MW temporarily shut down, where is it going
17:10– 17:30		Q&A		

17:30–18:30 SIDE EVENT 1: The Role of Research Reactors in Advancing Sustainable Development Goals (Board Room B/M1)

Moderator: E. Vargas, IAEA

Time	Name	Designating Member State/Organization	Title
17:30– 17:35	T. Wheldon	IAEA	Opening Remarks
	J. Antoine	Jamaica	
17:35–	K. Tiyapun	Thailand	Panel Discussion
18:10	B. Ponsard	Belgium	
	F. Deluchi	IAEA	
18:10– 18:25	E. Vargas	IAEA	Q&A
18:25– 18:30	T. Wheldon	IAEA	Summary and Closing

17:30–18:30 SIDE EVENT 2: Nuclear Security Considerations for Research Reactors (M Building/M3)

#### Moderator: H. Looney, IAEA

Time	Name	Designating Member State/Organization	Title
17:30– 17:35			Opening Remarks
17:35– 17:45	A. Acevedo	IAEA	Presentation
	O. Abdelgawad	Egypt	
17:45– 18:15	A. Meliana	Indonesia	Panel Discussion
	Y. Ibrahim	Nigeria	
18:15– 18:25	H. Looney	IAEA	Q&A
18:25– 18:30	E. Buglova	IAEA	Summary and Closing

08:30–10:00 SESSION 3B: New Research Reactor Programmes (Board Room B/M1)

Chairpersons: A.T. Mozagba, South Africa

J. Perrota, Brazil

Time	Paper No.	Name	Designating Member State/Organization	Title
08:30– 08:55	75	P. Oliveira	Brazil	RMB - The New Nuclear Research Centre in Brazil
08:55– 09:10	150	A.T. Mozagba	South Africa	Status Reports on New Research Reactor Programme in Progress, Experience and Lessons Learned - South Africa's MPR Project
09:10– 09:25	78	J. Rataj	Czech Republic	New Research Reactor at Czech Technical University in Prague - Subcritical Assembly VR-2
09:25– 09:40	289	P. Cantero	Argentina	RA-10 Project: Current status and challenges
09:40– 10:00		Q&A		
10:00–10:30	Poster	Session B and Cof	fee Break	

10:30-12:30	SESSION 5A:
	Security of Research Reactors

(Board Room B/M1)

Chairpersons: Z. Camtakan, Türkiye

H. Looney, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title
10:30– 10:55	275	H. Looney	IAEA	Overview of the IAEA Programme on the Security of Research Reactors
10:55– 11:10	272	Z. Camtakan	Türkiye	Security Management Experience of the ITU TRIGA Training and Research Reactor: Insights from IPPAS Mission and the Evolving Regulatory Framework
11:10– 11:25	21	M. El Tokhy	Egypt	Secure Monitoring and Information Transmission Scheme in IoT Environment for Nuclear Facilities
11:25– 11:40	82	M. Husain	Malaysia	The Development Progress of Design Basic Threat Documents for Nuclear Installation and Category One Facilities in Malaysia
11:40– 11:55	84	B. Purnomo	Indonesia	Challenges in the Implementation of Nuclear Security In Old Nuclear Research Reactors
11:55– 12:10	256	A. Nasser	Jordan	Insider Threat Mitigation at Jordan Research and Training Reactor
12:10– 12:30		Q&A		
12:30–13:30	Lunch E	Break		

13:30–15:00 SESSION 4C: Safety of Research Reactors (Board Room B/M1)

#### Chairpersons: H. Cruz, USA

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H. Odoi, Ghana

Time	Paper No.	Name	Designating Member State/Organization	Title
13:30– 13:55	282	S. Malaka	South Africa	Ageing Management and Continued Safe Operation of SAFARI-1
13:55– 14:10	60	F. Batool	Pakistan	PNRA Experience of Periodic Safety Review to Ensure the Continued Safe Operation of Research Reactors and Implementation of Identified Safety Improvements
14:10– 14:25	251	L. Hasa	Netherlands	HFR Ageing Management Program and Continued Safe Operation
14:25– 14:40	65	M. Daniels	USA	From Vacuum Tubes to Solid-State: The Upgraded Control Console for the Idaho State University AGN- 201
14:40– 15:00		Q&A		
15:00–15:30	Poster	Session B and C	offee Break	

15:30-17:30 SESSION 6A:

(Board Room B/M1)

Research Reactor Fuel Management

#### Chairpersons: L. Belinsky, Russia

K. Dunn, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title
15:30– 15:55	284	K. Dunn	IAEA	IAEA Support for Research Reactor Fuel Cycle Programmes
15:55– 16:20	139	L. Belinsky	Russia	Research Reactor Spent Fuel Management in Russia
16:20– 16:35	95	A. Asuku	Nigeria	From High Enriched Uranium to Low Enriched Uranium: Comparison of Fuel Cycle Performance of Accident-Tolerant Fuel for Optimization of Fuel Management of Miniature Neutron Source Reactors
16:35– 16:50	68	T. Sundari	Indonesia	Experiences In Indonesian Wet Storage Of Spent Nuclear Fuels And The Future Challenges
16:50– 17:05	243	F. Genezini	Brazil	Thermal Neutron Flux Profile Characterization On The Iea-R1 Nuclear Safety Monitoring Channel
17:05– 17:20	105	A. Pungercic	Slovenia	Depletion Algorithm for the ON-FLY Nuclide Inventory Determination for Research Reactors in the RAPID Code System
17:20– 17:30		Q&A		

17:30–18:30 SIDE EVENT 3: Capacity Building Based on Research Reactor Centers (Board Room B/M1)

#### Moderator: P. Chakrov, IAEA

Time	Name	Designating Member State/Organization	Title
17:30– 17:35	O. Mykolaichuk	IAEA	Opening Remarks
	M. Villa	Austria	
17:35– 18:10	C. Elyounoussi	Morocco	Panel Discussion
	P. Cantero	Argentina	
	L. Sklenka	Czech Republic	
18:10– 18:25	P. Chakrov	IAEA	Q&A
18:25– 18:30	P. Chakrov	IAEA	Summary and Closing

17:30–18:30 SIDE EVENT 4: Safety Considerations in Use of Advanced and Innovative Technology in Research Reactors

Moderator: J. Christensen, IAEA

Time	Name	Designating Member State/Organization	Title
17:30– 17:35	A. Bradford	IAEA	Opening Remarks
	L. Handsztok	Argentina	
17:35– 18:10	Y. Suh	Republic of Korea	Panel Discussion
	H. Cruz	USA	
18:10– 18:25	J. Christensen	IAEA	Q&A
18:25– 18:30	J. Christensen	IAEA	Summary and Closing

(M Building/M3)

08:30–10:00 SESSION 4D: Safety of Research Reactors (Board Room B/M1)

#### Chairpersons: M. Gaheen, Egypt

J. Mlicak, Czech Republic

Time	Paper No.	Name	Designating Member State/Organization	Title
08:30– 08:50	285	E. Helvenston	USA	Regulatory Oversight of Research Reactors
08:50– 09:05	229	S. Zhao	China	Regulatory Supervision of Research Reactors in China
09:05– 09:20	108	F. Keles	France	ASN's Oversight on Ageing Management and Periodic Safety Review of Research Reactors, and Notably the PSR as a Tool for Handling Ageing Effects on Research Reactors
09:20– 09:35	24	M. Akpanowo	Nigeria	Regulatory Oversight of the Nigeria Research Reactor - 1
09:35– 09:50	51	M. Qayyum	Pakistan	Experience in Application of the IAEA Code of Conduct on the Safety of Research Reactors
09:50– 10:00		Q&A		
10:00–10:30	Poster S	Session B and Coff	fee Break	
10:30-11:00	Poster	Session B – Check	Annex II	

11:00–12:30 SESSION 7A: Common Management Considerations (Board Room B/M1)

Chairpersons: M. Kim, Republic of Korea

E. Vargas, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title
11:00– 11:25	287	P. Chakrov	IAEA	IAEA Cross Cutting Activities on Research Reactors
11:25– 11:40	273	Q. Zhou	China	CIAE Experience of Handling Interface Between Safety and Security for Research Reactors
11:40– 11:55	67	L. Sklenka	Czech Republic	Development of National Strategy for Decommissioning of Research Reactors in the Czech Republic
11:55– 12:10	235	L. Dghaimat	Jordan	Safety Culture Program in the Jordan Research and Training Reactor
12:10– 12:30		Q&A		
12:30–13:30	Lunch E	Break		

13:30–15:00 SESSION 1C: Utilization and Applications (Board Room B/M1)

Chairpersons: M. Hawari, Jordan

V. Semkova, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title
13:30– 13:55	118	J. Matouskova	Czech Republic	Neutron Imaging at Low and Medium Flux Neutron Sources
13:55– 14:10	227	A. Venter	South Africa	Beam Line Facilities at the Safari-1 Research Reactor and their Progression into the New Multi-Purpose Reactor
14:10– 14:25	280	V. Hutanu	Germany	Current Status and Future of Neutron Transmutation Doping Silicon at Research Reactors: Global Challenges and Opportunities
14:25– 14:40	6	D. Khalil	Egypt	Internal Structure Characterization for a Set of Greek-Roman Coins that Discovered in Mediterranean Sea at Egypt Using Neutron Tomography
14:40– 15:00		Q&A		
15:00–15:30	Poster S	Session B and Coff	ee Break	

15:30–17:30 SESSION 2C: Operation and Maintenance (Board Room B/M1)

Chairpersons: A. Salvini, Italy

R. Mazzi, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title
15:30– 15:55	86	L. Stefanini	Netherlands	Condition Based Maintenance for Research Reactors
15:55– 16:10	50	J. Abdul Karim	Malaysia	Managing and Sustaining the Safe Use of the PUSPATI TRIGA Reactor (RTP) in Malaysia: Challenges, Lesson Learned and Good Practices
16:10– 16:25	20	P. Dordoh-Gasu	Ghana	Over Two Decades of Operation of Ghana Research Reactor-1: Maintenance Practices and Lessons Learned
16:25– 16:40	43	F. Kungurov	Uzbekistan	Operation and Maintenance of WWR-SM Research Reactor in Uzbekistan
16:40– 16:55	30	N. Jahan	Bangladesh	Operational Experiences and Ageing Management of BAEC TRIGA Research Reactor
16:55– 17:30		Q&A		

17:30–18:30 SIDE EVENT 5: (Board Room B/M1) Women at Research Reactors: Challenges and Opportunities

Moderator: A. Elrefaei, IAEA

Time	Name	Designating Member State/Organization	Title
17:30– 17:32	A. Elrefaei	IAEA	Introduction
17:32– 17:37	L. Evrard	IAEA	Opening Remarks
17:37– 17:42	L. Holgate	USA	Remarks
17:42– 17:47	I. Biggs	Australia	Remarks
	S. Bustamante	Chile	
17:47–	J. Matouskova	Czech Republic	
18:17	L. Dghaimat	Jordan	Panel Discussion
	A. Mozagba	South Africa	
	L. Hu	USA	
18:17– 18:27	A. Elrefaei	IAEA	Q&A
18:27– 18:30	A. Elrefaei	IAEA	Summary and Closing

08:30-10:00	SESSION 1D:
	Utilization and Applications

(Board Room B/M1)

#### Chairpersons: R. Mikolajczak, Poland B. Ponsard, Belgium

Time	Paper No.	Name	Designating Member State/Organization	Title
08:30– 08:50	288	B. Ponsard	Belgium	Atoms for Health: Challenges and Opportunities in Research Reactor Based Medical Radioisotope Production
08:50- 09:10	283	R. Mikolajczak	Poland	Radioisotope Production in MARIA Research Reactor
09:10– 09:25	197	J. Antoine	Jamaica	The Forensic Science Applications of the JM-1 SLOWPOKE Research Reactor
09:25– 09:40	111	L. Snoj	Slovenia	Towards Optimized Use of Research Reactors in Europe – TOURR project: Strategy for upgrading existing and building new Research Reactors
09:40– 10:00		Q&A		
10:00–10:30	Coffee E	Break		

10:30–11:30 SESSION 7B: Common Management Considerations (Board Room B/M1)

Chairpersons: M. Salhi, Algeria

N. Pessoa Barradas, Portugal

Time	Paper No.	Name	Designating Member State/Organization	Title
10:30– 10:50	286	G. Storr	Australia	Considerations for a Sustainable Future for Research Reactors
10:50– 11:05	230	A. Eisa	Egypt	Assessment Criteria for Reviewing the Knowledge Management Status in Nuclear and Radiological Installations
11:05– 11:20	117	P. Mattar	Brazil	Considerations Regarding the Mission and Challenges of Deployment a New Research Reactor Center
11:20– 11:30		Q&A		

11:30–12:30	PANEL SESSION: Summary, Discussion, Conclusions, and Recommendations	(Board Room B/M1)
Chairpersons:	K. Toukan, Jordan	
	V. Savilov, Russia	
Panelists:	G. Storr, Australia	
	I. Costa, Brazil	
	S. O'Kelly, USA	

Time	Name	Designating Member State/Organization	Title
11:30– 11:35	K. Toukan	Jordan	Address the overall session topic with emphasis on Strategic planning, effective utilization and sustainable operation
11:35– 11:40	G. Storr	Australia	Address the overall session topic with emphasis on Safety and Security and Common Management Practices
11:40– 11:45	S. O'Kelly	USA	Address the overall session topic with emphasis on Operation and Maintenance, Safety and Security, and International Cooperation
11:45– 11:50	V. Savilov	Russia	Address the overall session topic with emphasis on New Research Reactor Programs, Infrastructure Development and International Cooperation
11:50– 12:00	I. Costa	Brazil	Address the overall session topic with emphasis on Capacity Building, New Generation Development, Gender Balance and New Research Reactor Programs
12:00– 12:15	All	All	Summary Discussion
12:15– 12:30	G. Storr	Australia	Conference Conclusions and Recommendations

#### 12:30–13:00 CLOSING SESSION

#### (Board Room B/M1)

Time	Name	Designating Member State/Organization	Title
12:30– 12:40	Young Professional Poster Awards	IAEA	Awards
12:40– 12:45	M. Chudakov	DDG-NE, IAEA	Closing Remarks
12:45 – 12:50	L. Evrard	DDG-NS, IAEA	Closing Remarks
12:50– 12:55	K. Toukan	Conference Chair, JAEC	Closing Remarks
12:50– 13:00	D. Ridikas P. Chakrov A. Shokr	Scientific Secretaries, IAEA	Closing Remarks

#### ANNEX I

#### **Poster Presentations**

#### **TUESDAY, 12 NOVEMBER 2024**

15:00–16:00 POSTER SESSION A: TECHNICAL SESSIONS 1, 2, 3, 7

#### **M Building Corridor**

Session	Designating Member State	Presenters	ld	Title
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## ANNEX II

# **Poster Presentations**

## **THURSDAY, 14 NOVEMBER 2024**

10:00–11:00 POSTER SESSION B: TECHNICAL SESSIONS 4, 5, 6

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interactions in the second sec	4	52.	Ukraine	Andrii Shepitchak	212	Revision Of Ukraine's Safety

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## IAEA PUBLICATIONS RELATED TO THE SUBJECT OF THE EVENT

# Publications relating to Nuclear Technology and Applications

2024

Neutron Activation Analysis Using Short Half-life Radionuclides, (IAEA-TECDOC-2055), 2024

2023

Cold Neutron Sources: Practical Considerations and Modern Research | IAEA, IAEA-TECDOC-2025, IAEA, Vienna (2023)

Integrated Research Reactor Utilisation Review (IRRUR) Guidelines (IAEA Service Series No. 48), 2023

Advances in Boron Neutron Capture Therapy, Non-serial Publications, IAEA, Vienna (2023)

Research Reactor Exercises for Higher Education Programmes | IAEA TECDOC-2024 (2023)

Specific Considerations and Guidance for the Establishment of Ionizing Radiation Facilities (IRF), IAEA Radiation Technology Series No. 7 (2023)

IAEA Bulletin on Research Reactors, 64-4 (Dec. 2023)

2021

Sustainability and Self-Reliance of National Nuclear Institutions (IAEA-TECDOC-1943), 2021

Research Reactors: Addressing Challenges and Opportunities to Ensure Effectiveness and Sustainability | IAEA

Neutron Scattering with Low and Medium Flux Neutron Sources (IAEA-TECDOC-1961), 2021

2020

Modern Neutron Detection (IAEA-TECDOC-1935), 2020

2018

Development of an Integrated Approach to Routine Automation of Neutron Activation Analysis (IAEA-TECDOC-1839), 2018

2017

Strategic Planning for Research Reactors (IAEA Nuclear Energy Series No. NG-T-3.16), 2017

Research Reactors for the Development of Materials and Fuels for Innovative Nuclear Energy Systems (IAEA Nuclear Energy Series NP-T-5.8), 2017

### 2016

History, Development and Future of TRIGA Research Reactors (Technical Reports Series No. 482), 2016

### 2014

Applications of Research Reactors (IAEA Nuclear Energy Series No. NP-T-5.3), 2014

## **Publications relating to Nuclear Energy**

### 2024

Optimization of Research Reactor Availability and Reliability: Recommended Practices (IAEA Nuclear Energy Series No. NP-T-5.4 (Rev.1), 2024

<u>Guidelines for Ageing Management, Modernization and Refurbishment Programmes for Research</u> <u>Reactors, (IAEA Nuclear Energy Series No. NR-G-5.2), 2024</u>

Project Management in Construction of Research Reactors (IAEA Nuclear Energy Series No. NR-G-5.3), 2024

Research Reactor Exercises for Higher Education Programmes (IAEA-TECDOC - 2024), 2023

### 2023

Post-irradiation Examination Techniques for Research Reactor Fuels (IAEA Nuclear Energy Series No. NF-T-2.6), 2023

### 2022

Practices for Interim Storage of Research Reactor Spent Nuclear Fuel (IAEA Nuclear Energy Series No. NF-T-3.10), 2022

Research Reactor Benchmarking Database: Facility Specification and Experimental Data (Revision) (Technical Reports Series No. 480 (Rev.1)), 2022

Benchmarks of Fuel Burnup and Material Activation Computational Tools Against Experimental Data for Research Reactors. Results of a Coordinated Research Project (IAEA TECDOC No. 1992), 2022

### 2021

Specific Considerations in the Assessment of the Status of the National Nuclear Infrastructure for a New Research Reactor Programme (IAEA Nuclear Energy Series No. NR-T-5.9), 2021

Impact of Fuel Density on Performance and Economy of Research Reactors (IAEA Nuclear Energy Series No. NF-T-2.7), 2021

Research Reactor Spent Fuel Management: Options and Support to Decision Making (IAEA Nuclear Energy Series No. NF-T-3.9), 2021

Digital Instrumentation and Control Systems for New and Existing Research Reactors (IAEA Nuclear Energy Series No. NR-G-5.1), 2021

Data Analysis and Collection for Costing of Research Reactor Decommissioning: Final Report of the DACCORD Collaborative Project (IAEA Nuclear Energy Series No. NW-T-2.12), 2021

### 2020

<u>Guidelines for the Operation and Maintenance Assessment for Research Reactors (OMARR) (IAEA</u> <u>Services Series No. 44), 2020</u>

Condition Monitoring and Incipient Failure Detection of Rotating Equipment in Research Reactors (IAEA TECDOC No. 1920), 2020

<u>Material Properties of Unirradiated Uranium–Molybdenum (U–Mo) Fuel for Research</u> <u>Reactors (IAEA TECDOC No. 1923), 2020</u>

### **Publications relating to Nuclear Safety**

### Safety Standards Series:

2023

Ageing Management for Research Reactors | IAEA

Instrumentation and Control Systems and Software Important to Safety for Research Reactors | IAEA

Radiation Protection and Radioactive Waste Management in the Design and Operation of Research Reactors | IAEA

Maintenance, Periodic Testing and Inspection of Research Reactors | IAEA

Core Management and Fuel Handling for Research Reactors | IAEA

Operational Limits and Conditions and Operating Procedures for Research Reactors | IAEA

Use of a Graded Approach in the Application of the Safety Requirements for Research Reactors | IAEA

#### 2022

Safety Assessment for Research Reactors and Preparation of the Safety Analysis Report | IAEA

Safety in the Utilization and Modification of Research Reactors | IAEA

### 2015

Construction for Nuclear Installations | IAEA

### 2016

Safety of Research Reactors | IAEA

### 2008

The Operating Organization and the Recruitment, Training and Qualification of Personnel for Research Reactors | IAEA

## Safety Reports Series:

### 2023

Application of Probabilistic Methods for the Safety Assessment and the Reliable Operation of Research Reactors | IAEA

### 2020

Periodic Safety Review for Research Reactors | IAEA

#### 2019

Approaches to Safety Evaluation of New and Existing Research Reactor Facilities in Relation to External Events | IAEA

### 2014

Safety Reassessment for Research Reactors in the Light of the Accident at the Fukushima Daiichi Nuclear Power Plant | IAEA

### 2008

Safety Analysis for Research Reactors | IAEA

### **IAEA Services Series:**

2018

Guidelines for Self-assessment of Research Reactor Safety | IAEA

### **Training Course Series:**

Safety of Research Reactors - Training Material | IAEA

# **Non-serial Publications:**

2006

Code of Conduct on the Safety of Research Reactors | IAEA

# **TECDOC Series:**

### 2024:

Analysis of Results from Integrated Safety Assessment of Research Reactors (INSARR) Missions | IAEA

Operating Experience from Events Reported to the IAEA Incident Reporting System for Research Reactors | IAEA

#### 2020:

Reliability Data for Research Reactor Probabilistic Safety Assessment | IAEA

### 2016:

Management of the Interface between Nuclear Safety and Security for Research Reactors | IAEA

## **Publications relating to Nuclear Security**

#### 2021

Computer Security Techniques for Nuclear Facilities

Handbook on the Design of Physical Protection Systems for Nuclear Material and Nuclear Facilities

#### 2019

Security during the Lifetime of a Nuclear Facility

#### 2016

Nuclear Security Management for Research Reactors and Related Facilities

Management of the Interface between Nuclear Safety and Security for Research Reactors

#### 2011

Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 5)

Physical Protection of Nuclear Material and Nuclear Facilities (Implementation of INFCIRC/225/Revision 5)

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## PUBLICATIONS

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# FORTHCOMING SCIENTIFIC CONFERENCES SCHEDULED BY THE IAEA

### 2024

Ministerial Conference on Nuclear Science and Technology for Development (CN-328) **26 – 28 November 2024, Vienna, Austria** 

International Conference on Challenges Faced by Technical and Scientific Support Organizations (TSO) in Enhancing Nuclear Safety and Security: Enhancing science and adaptability in a changing world and creating perspective for a young generation (CN-329)

### 2 – 6 December 2024, Vienna, Austria

### 2025

Third International Conference on Applications of Radiation Science and Technology (ICARST-2025) (CN-332)

### 7 – 11 April 2025, Vienna, Austria

IAEA International Conference on Stakeholder Engagement for Nuclear Power Programmes (CN-333)

#### 26 – 30 May 2025, Vienna, Austria

International Conference on International Conference on Advances in Radiation Oncology (ICARO 4) (CN-331)

#### 2 – 5 June 2025, Vienna Austria

30th IAEA Fusion Energy Conference (CN-336) 13 – 18 October 2025, Xian, China

International Conference on Resilience of Nuclear Installations against External Events from Safety Perspective (CN-337)

#### 20 - 24 October 2025, Vienna, Austria

International Conference on Nuclear and Radiological Emergencies: Building the Future in an Evolving World (CN-338)

#### 1 - 4 December 2025, Riyadh, Saudi Arabia

International Conference on Radiation Protection in Medicine: X Ray Vision (CN-339) 8 – 12 December 2025, Vienna, Austria

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