International Conference on Accelerators for Research and Sustainable Development

From Good Practices Towards Socioeconomic Impact

23-27 May 2022

PROGRAMME

Organized by the International Atomic Energy Agency (IAEA)

IAEA Headquarters Vienna, Austria

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Scientific Secretaries, NAPC:	S. Charisopoulos V. Starovoitova D. Ridikas C. Horak
Event Organizer, MTCD: Administrative Support, NAPC:	J. Zellinger E. Nazarova T. Kornelyuk O. Bilous

Location of the Event:	
	International Atomic Energy Agency Vienna International Centre (VIC) Building M, Board Rooms A, B/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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Participate in voting during sessions



Raise questions to speakers during session



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TIMETABLE – Sessions Overview

wonday, 25	way 2022		
Time	Session No.	Session Title / Break	Venue
10:00 – 10:30		Opening Session	M Plenary
10:30 – 11:15	Session 1 Plenary Session	Accelerators for the Environment	M Plenary
11:15 – 12:45	Session 2 Plenary Session	Accelerators for Medical Radioisotopes, Energy Production and Nuclear Research	M Plenary
12:45 – 14:00		Lunch Break	
14:00 – 15:30	Session 3.A Parallel Session	Advances in Accelerator Technologies	Board Room A
14:00 – 15:30	Session 3.B Parallel Session	Accelerators for Medical Applications - 1	M Plenary
15:30 – 16:00		Coffee / Tea Break	
16:00 – 17:30	Session 4.A Parallel Session	Accelerators for Environmental Monitoring	Board Room A
16:00 – 17:30	Session 4.B Parallel Session	Accelerators for Medical Applications - 2	M Plenary
18:00 – 20:00		Welcome Reception	M-Building

Monday, 23 May 2022

Tuesday, 24 May 2022

Time	Session No.	Session Title / Break	Venue
09:00 – 10:30	Session 5 Plenary Session	Accelerators for Neutron Therapy, Cultural Heritage, Innovation and Education	M Plenary
10:30 – 11:00		Coffee / Tea Break	
11:00 – 12:30	Session 6.A Parallel Session	Accelerators for BNCT and Cultural Heritage	Board Room A
11:00 – 12:30	Session 6.B Parallel Session	Best Practices in Using Accelerators for R&D, Education, Environmental and Industrial Applications	M Plenary
12:30 – 14:00		Lunch Break	
14:00 – 15:30	<u>Side Event 1</u>	Accelerator-Based Sources of Radiation: Recent Developments	Board Room A
14:00 – 15:30	<u>Poster</u> Session 1	All posters (see separate page)	M-Building 2nd Floor
15:30 – 16:00		Coffee / Tea Break	
16:00 – 17:30	Session 7.A Parallel Session	IBA Facilities and their R&D Program	Board Room A
16:00 – 17:30	Session 7.B Parallel Session	Regulatory Aspects of Accelerator Facilities	M Plenary

Wednesday, 25 May 2022

Time	Session No.	Session Title / Break	Venue
09:00 – 10:30	Session 8 Plenary Session	Accelerators for Nuclear Data and Materials Research	M Plenary
10:30 – 11:00		Coffee / Tea Break	
11:00 – 12:30	Session 9.A Parallel Session	Accelerators for Nuclear Data	Board Room A
11:00 – 12:30	Session 9.B Parallel Session	Radiation Technologies and their Applications	M Plenary
12:30 – 14:00		Lunch Break	
14:00 – 15:30	Side Event 2	Collaborating Centres of IAEA	Board Room A
14:00 – 15:30	Side Event 3	Women in Accelerator-based Science	M-Building 2nd Floor
15:30 – 16:00		Coffee / Tea Break	
16:00 – 17:30	Session 10.A Parallel Session	Applications of Heavy Ion Beams	Board Room A
16:00 – 17:30	Session 10.B Parallel Session	Societal Applications of Accelerators and Sustainable Development	M Plenary

Thursday, 26 May 2022

Time	Session No.	Session Title / Break	Venue
09:00 – 10:30	Session 11	Emerging Accelerator Technologies –	M Plenary
	Plenary Session	Accelerator Technologies for Food Safety	,
10:30 – 11:00		Coffee / Tea Break	
11:00 – 12:30	Session 12.A	Future Accelerator-based Neutron Sources	Board Room A
11.00 12.30	Parallel Session	Tutare Accelerator based Neutron Sources	
11:00 – 12:30	Session 12.B	Electron Beams and Applications	M Plenary
11.00 - 12.50	Parallel Session	Lieuton beams and Applications	w Fiendry
12:30 – 14:00		Lunch Break	
		Promoting Self-Reliance and Sustainability	
14:00 – 15:30	Side Event 4	of National Nuclear Institutions Operating	Board Room A
		Accelerator Facilities	
14.00 15.20	Poster		M-Building
14:00 – 15:30	Session 2	All posters (see separate page)	2nd Floor
15:30 – 16:00		Coffee / Tea Break	
16:00 – 17:30	Session 13.A	Selected Applications of Accelerator-based	Board Room A
	Parallel Session	Analytical Techniques	Board Room A
16.00 17.20	Session 13.B	Accelerators for Energy and other	M Plopany
16:00 – 17:30	Parallel Session	Applications	M Plenary

Friday, 27 May 2022

Time	Session No.	Session Title / Break	Venue
09:00 – 10:30	Session 14	Accelerators and Multidisciplinary	M Plenary
09:00 - 10:30	Plenary Session	Research and Applications	w Plendry
10:30 – 11:00		Coffee / Tea Break	
11:00 – 11:30	Session 15 Plenary Session	Conference Summary and Highlights	M Plenary
11:30 – 12:00	Session 16 Plenary Session	Conference Closing and Award Ceremony	M Plenary

MONDAY, 23 May 2022

10:00 - 10:30	OPENING SES	OPENING SESSION			
Time	Name	Affiliation & Designating Member State			
10:00–10:05	M. Denecke	Director NAPC, IAEA	Welcome Address		
10:05-10:15	R. M. Grossi	Director General, IAEA	Opening Statement		
10:15-10:25	N. Mokhtar M. Chudakov H. Liu	DDG-NA, IAEA DDG-NE, IAEA DDG-TC, IAEA	Opening Remarks		

10:30 – 11:15	or the Environment M Plenary I C. Horak (IAEA)			
Time	Abstract No.	t Name	Affiliation & Designating Member State	Title
11:15–11:45	224	D. Cohen	ANSTO, Australia	Accelerators for Environmental Monitoring and Climate Change Related Studies
	207	A. Chmielewsi	INCT, Poland	Electron Accelerator-Based Systems for Air, Water and Soil Pollution Control Studies

10:00 – 10:30Plenary Session 2: Accelerators for Medical Radioisotopes,M PlenaryEnergy Production and Nuclear Research
Chairpersons: D. Ridikas (IAEA) and C. Horak (IAEA)M Plenary

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
11:15–11:45	209	C. S. Cutler	BNL, USA	50 Years of Isotope Production via High Energy Accelerators at Brookhaven National Laboratory
11:45–12:15	223	H. Ait Abderrahim	SCK CEN, Belgium	Realization of a new Research Infrastructure in Belgium: MYRRHA - Present Status and Focus on Latest Developments of MYRRHA ADS Accelerator
12:15–12:45	208	B. Sharkov	JINR, Russian Federation	Large Scale Accelerator Facilities for Nuclear Research and Practical Applications
12:45–14:00)	Lunch Break		

14:00 – 15:30 Parallel Session 3.A: Advances in Accelerator Technologies

	Cł	nairpersons: N. Ala	manos (CEA, Fi	rance) and S. Charisopoulos (IAEA) Room A
Time	Abstract No.	Name	Affiliation & Designating Member State	Title
14:00–14:15	204	J. G. Weisend II	ESS, Sweden	The European Spallation Source Accelerator: Overview and Status
14:15–14:30	49	B. Hornberger	Lyncean Technologies USA	Recent Developments in Compact X-ray and Gamma-ray Sources Based on Inverse Compton Scattering
14:30–14:45	5 101	S. Lauber	GSI, Germany	Alternating Phase Focusing Beam Dynamics for Drift Tube Linacs
14:45–15:00) 190	M. Fedurin	BNL, USA	Novel Accelerator Concept Utilizing Cyclotron Resonance (eCRA)
15:00-15:15	177	I. Strydom	iThemba LABS, South Africa	An Overview of the South African Isotope Facility (SAIF)
15:15-15:30		Questions and Ar	nswers	
12:45–14:00)	Coffee / Tea Bre	eak	

Board

14:00 – 15:	30 P	arallel Session 3.	B: Accelerator	s for Medical Applications -1	M Plenary
	С	hairpersons: C. S. (Cutler (BNL, US	A) and V. Starovoitova (IAEA)	
Time	Abstract No.	Name	Affiliation & Designating Member State	Title	
14:00–14:15	44	N. van der Meulen	PSI, Switzerland	The Use of PSI's High Intensity Proto Accelerator (HIPA) Complex Towards Medical-Radionuclide Development	

		Medien	Switzenanu	Medical-Radionuclide Development
14:15–14:30	183	A. Gerbershagen	University of Groningen, Netherlands	The New Particle Therapy Research Center (PARTREC) at Univ. Medical Center Groningen
14:30–14:45	73	G. Pupillo	INFN-LNL, Italy	Activities on the Cyclotron-based Production of Innovative Radionuclides: Experience at the Legnaro National Laboratories of INFN
14:45–15:00	124	P. Fernandes Costa Jobim	Federal Univ. Rio Grande do Sul, Brazil	IBA Techniques & Neuroscience: What's Next?
15:00-15:15	136	C. N. Coleman	Int. Cancer Expert Corps, USA	Treatment, not Terror: A Unique Cancer Treatment for Developing Novel Linear Accelerators for Resource-limited Settings
15:15-15:30		Questions and Ar	nswers	
12:45–14:00		Coffee / Tea Bre	eak	

16:00 – 17:30 Parallel Session 4.A: Accelerators for Environmental Monitoring

Chairpersons: S. Merchel (VERA, Austria) and R. Padilla Alvarez (IAEA) Room A Affiliation & Abstract Name Title Time Designating No. Member State University Accelerator Mass Spectrometry: An Analytical 16:00-16:15 186 W. E. Kieser of Ottawa, **Tool with Applications for Sustainable Society** Canada BATAN, **Characteristics of Fine Particulates of Two** 16:15-16:30 70 M. Santoso Indonesia Largest Cities in Indonesia Using IBA Ion beam Usage in Environmental 16:30-16:45 147 L. Popa-Simil LAAS, USA Characterization **Elemental Characterization of PM2.5 Aerosol** LAEC/CNRS, M. Roumie Samples in Four Mideastern Cities and Source 16:45-17:00 45 Lebanon **Apportionment Investigation** Elettra A Combined XRF and XANES Study on Bottom S. Pollastri 17:00-17:15 86 Sincrotrone, Ashes from Municipal Solid Waste Incinerator Italy 17:15-17:30 **Questions and Answers**

Board

16:00 – 17:30 Parallel Session 4.B: Accelerators for Medical Applications -2 M Plenary Chairpersons: C. Hoehr (TRIUMF, Canada) and A. Jalilian (IAEA)

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
16:00–16:15	125	E. Punzón- Quijorna	JSI, Slovenia	PIXE Reveals Crucial Information in Hip Endoprostheses Failures. MeV Ion Beams for Improving Medical Diagnostics
16:15–16:30	158	T. Pinheiro	IST/Univ. de Lisboa, Portugal	Metallacarboranes for Proton Therapy Using Research Accelerators
16:30–16:45	95	R. Khatun	BAEC, Bangladesh	Dosimetric Verification of Radiotherapy Treatment Planning System Using Thorax Phantom
16:45–17:00	52	D. Kottuparamban	Molecular Cyclotrons, India	Socioeconomic Impact of a Medical Cyclotron in Kerala, India
17:00-17:15	29	S. M. de Carvalho	NCNE, Brazil	Current Status and Perspectives of Cyclotron Facilities in Brazil and the Socioeconomic Impact.
17:15-17:30		Questions and A	nswers	
18:00-20:00)	WELCOME REC	CEPTION	M-building Ground Floor

TUESDAY, 24 May 2022

9:00 – 10:30 Plenary Session 5: Accelerators for Neutron Therapy, M Plenary Cultural Heritage, Innovation and Education Chairpersons: G. Aquilanti (Elettra, Italy) and I. Swainson (IAEA)

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
9:00–9:30	210	H. Kumada	University of Tsukuba, Japan	Current Status of Compact Accelerator-based Neutron Sources for Boron Neutron Capture Therapy in the World
9:30–10:00	212	L. Beck	CEA, France	Use of Accelerators to Preserve Cultural Heritage Objects and Detect Forgeries
10:00–10:30	205	A. Strasser	Aerial-CRT, France	Best Practices in Establishing and Running Accelerator Facilities to Support Research, Education, and Commercial Uses
10:30–11:00		Coffee / Tea Bre	eak	

11:00 – 12:30		Parallel Session 6.	rs for Boron Neutron-Capture	Board	
		Therapy (BNCT) a	nd Cultural He	eritage	Room A
		Chairpersons: G. Ac	uilanti (Elettra,	Italy) and I. Swainson (IAEA)	
Time	Abstra No.	^{ct} Name	Affiliation & Designating Member State	Title	
11:00–11:15	131	A. Kreiner	CNEA, Argentina	Review of the Different Accelerator-b BNCT Facilities Worldwide and an Ass According to the Alara Criterion	
11:15–11:30	140	S. Taskaev	Budker Inst., Russian Federation	Accelerator-based Neutron Source fo Neutron Capture Therapy & other Ap	
11:30–11:45	5 94	I. Carlomagno	Elettra Sincrotrone, Italy	X-ray Investigations on Ancient Gold Synchrotron Radiation Contribution t and Numismatics	
11:45–12:00) 10	D. M. Atwa Khalil	NILES, Egypt	Synchrotron based Investigations of Layers, Binding Materials and Resins of Ptah-Sokar-Osiris Wooden Statuette Back to 26th Pharaonic Dynasty	of the God
12:00-12:15	5 121	<u>V. Corregidor</u>	Univ. de Lisboa, Portugal	Characterization of Cultural Heritage Micro-beam	Using a
12:15-12:30)	Questions and A	Questions and Answers		
12:30-14:00)	Lunch Break			

11:00 – 12:30 Parallel Session 6.B: Best Practices in using Accelerators for R&D, Education, Environmental & Industrial Applications Chairpersons: D. Cohen (ANSTO, Australia) and N. Skukan (IAEA)

M Plenary

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
11:00–11:15	24	O. Riabukhin	Ural Fed. Univ, Russian Federation	The Practice of Electron and Proton Accelerators Utilizing for Industry, Education and Science
11:15–11:30	181	S. H. Park	Korea Univ. Sejong, Rep. of Korea	Use of Accelerators for Research and Training in the University Environment
11:30–11:45	60	P. Foka	GSI, Greece	Heady Ion Therapy MasterClass School and Capacity Building for Future Ion Research and Therapy Facilities
11:45–12:00	230	M. Pivi	MedAustron, Austria	The MedAustron Particle Therapy Center
12:00-12:15	116	F. Zanini	Elettra Sincrotrone, Italy	Life Cycle Assessment
12:15-12:30		Questions and Ar	nswers	
12:30–14:00)	Lunch Break		

14:00 – 15:30Side Event 1: Accelerator-based Sources of Radiation:M PlenaryRecent Developments

Time	Abstract No.	Name	Affiliation & Designating Member State	Title	
14:00-14:10		S. Norris	DOE/NNSA, USA	Opening Remarks	
14:10–14:30	236	J. Schwindling	CEA, France	Compact Accelerator-based Neutron Sources: recent developments	
14:30–14:50	237	AL. Lamure	RadiaBeam Technologies USA	Electron Beams for research and industrial applications	
14:50–15:10	238	A. Pierard	IBA, Belgium	The new generation of sustainable X-ray irradiators	
15:10–15:30		Round Table Discussion - Questions and Answers			
15:30–16:00		Coffee / Tea Break			

16:00 – 17:30 Parallel Session 7.A: IBA Facilities and their R&D Programmes Board Room A Chairpersons: E. Da Costa Alves (U. de Lisboa, Portugal) & N. Skukan (IAEA)

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
16:00–16:15	108	V. Rigato	LNL/INFN, Italy	Multidisciplinary Physics with MeV Ion Beams at the Laboratori Nazionali di Legnaro
16:15–16:30	229	S. Charisopoulos	IAEA	The IAEA Ion Beam Facility (IBF) project
16:30–16:45	5 118	I. Bogdanovic Radovic	RBI, Croatia	Development and Applications of the Secondary Ion Mass Spectrometry with MeV Ions (MeV SIMS) Technique at RBI Accelerator
16:45–17:00) 151	A. Karydas	NCSR Demokritos, Greece	Applications of Proton-induced X-rays at the Tandem Accelerator Lab. of NCSR "Demokritos"
17:00-17:15	19	R. O. Barrachina	CNEA, Argentina	Six Decades of R&D with Accelerators in the Dept. of Interaction of Radiation with Matter of the Bariloche Atomic Center
17:15-17:30		Questions and Ar	nswers	

16:00 – 17:30Parallel Session 7.B: Regulatory Aspects of accelerator facilitiesM PlenaryChairpersons: R. P. Jimenez (IAEA) & N. Ramamoorthy (Indep. Consultant, India)

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
16:00–16:15	5 47	M. Heimann	CNSC-CCSN, Canada	Agile Regulatory Oversight: Adapting Regulations to Accommodate Rapidly Changing Accelerator Technology
16:15–16:30) 98	F. Schmitz	Bel V, Belgium	Licensing Unconventional Accelerator Projects: A Quest for the Safest Compromise
16:30–16:4	5 56	G. Rabi	Autoridad Regulatoria Nuclear, Argentina	Regulatory Control at the Construction Stage of a Radiopharmaceuticals Production Facility with Cyclotron in the Context of Covid-19 Pandemic
16:45–17:00	0 78	G. Garcia- Fernandez	Universidad Politecnica de Madrid, Spain	Commissioning of Operational Radiation Protection in Compact Proton Therapy Centers (CPTC) with Small Accelerators
17:00-17:30)	Questions and Ar	nswers	

WEDNESDAY, 25 May 2022

9:00 – 10:30 Plenary Session 8: Accelerators for Nuclear Data M Plenary and Materials Research Chairpersons: F. Ott (CEA, France) and A. Koning (IAEA)

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
9:00–9:30	213	M. Rubel	Royal Inst. of Technology, Sweden	Accelerator Techniques and Nuclear Data needs for IBA of wall Materials for Fusion reactors
9:30–10:00	218	Y. Wang	Los Alamos National Lab, USA	Application of Accelerators in Nanomaterials Research
10:00–10:30	220	Z. Siketic	Ruđer Bošković Institute, Croatia	Sustainability of the Tandem Accelerator Facility at the Ruđer Bošković Institute
10:30–11:00		Coffee / Tea Bre	eak	

11:00 – 12:30Parallel Session 9.A: Accelerators for Nuclear DataBoard Room AChairpersons: M. Rubel (Royal Inst. of Technology, Sweden) & A. Koning (IAEA)

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
11:00–11:15	232	J.C. Sublet	IAEA	Radiation Damages Bohr' s Metrics: Accelerator & Elemental Landscapes
11:15–11:30	154	N. Patronis	Univ. of Ioannina, Greece	Status Report of the n_TOF Facility after the 2nd CERN long Shutdown Period
11:30–11:45	157	R. Vlastou-Zanni	National Technical Univ. Athens, Greece	The Neutron Facility at NCSR "Demokritos" and Neutron Activation Research Activities of NTUA
11:45–12:00	109	P. Ström	Uppsala University, Sweden	Ion Accelerators for Modification and Analysis of Materials: Present Status and an Outlook Towards the Future
12:00-12:15	132	A. Widdowson	UKAEA, United Kingdom	Determination of Fuel Retention in Tokamaks by Accelerator-based Methods
12:15-12:30		Questions and An	iswers	
12:30–14:00)	Lunch Break		

11:00 – 12:30Parallel Session 9.B: Radiation Technologies
and their applications.

	Cł	nairpersons: A. Chr	nielewski (INC	Γ, Poland) and V. Starovoitova (IAEA)	
Time	Abstract No.	Name	Affiliation & Designating Member State	Title	
11:00–11:15	92	K. Howie	Texas A&M University, USA	Electron Beam Technology for Preserving Quality Attributes of Mandarins for Enhancing Export Potential	
11:15–11:30	159	D. Kaoumi	North Carolina State Univ., USA	The Use of In-situ Transmission Electron Microscopy to Investigate Microstructure Evolution under Ion Irradiation	
11:30–11:45	198	R. Schwarz	Pacific Northwest Nat. Lab., USA	Penelope-based User-Friendly Fast Interface for Calculating Distribution in Irradiated Products	
11:45–12:00	32	D. Chmielewska- Śmietanko	Inst. of Nucl. Chemistry & Technology, Poland	Application of Electron Beam Accelerator for Preservation Biodeteriorated Cultural Heritage Paper-Based Objects: Multiparametric Analysis	
12:00-12:15	163	S. Ramarad	Heriot-Watt University, Malaysia	Rubber Recycling: Compatibilization of Waste Tire Rubber/Poly(ethylene-co-vinyl acetate) Blends Using Liquid Rubber and Electron Beam Irradiation	
12:15-12:30		Questions and Ar	nswers		
12:30-14:00		Lunch Break			
11:45–12:00 12:00-12:15 12:15-12:30	32	D. Chmielewska- Śmietanko S. Ramarad Questions and Ar	USA Pacific Northwest Nat. Lab., USA Inst. of Nucl. Chemistry & Technology, Poland Heriot-Watt University, Malaysia	Penelope-based User-Friendly Fast Interface Calculating Distribution in Irradiated Product Application of Electron Beam Accelerator for Preservation Biodeteriorated Cultural Heritag Paper-Based Objects: Multiparametric Analys Rubber Recycling: Compatibilization of Wast Tire Rubber/Poly(ethylene-co-vinyl acetate) Blends Using Liquid Rubber and Electron Bea	

M Plenary

	Cr	nairpersons: A. Sim	ion (IAEA) and	B. S. Han (IAEA)
Time	Abstract No.	Name	Affiliation & Designating Member State	Title
14:00-14:15	240	S. Hollins	ANSTO, Australia	New and Advanced Techniques and Applications of Nuclear Science & Technology towards a Sustainable Environment
14:15–14:30	241	M. Kiskinova	Elettra Sincrotrone, Italy	The IAEA-Elettra Collaborating Center
14:30–14:45	5 243	L. Bertrand	ENS Paris-Saclay, France	Implementation of the IAEA Collaborating Center "Atoms for Heritage" at the Université Paris-Saclay
14:45–15:00) 242	R. Nchodu	iThemba LABS, South Africa	iThemba LABS: The IAEA Collaborating Centre for Accelerator Based Scientific Research and Applications
15:00–15:15	244	S. Pillai	Texas A&M University, USA	The National Center for Electron Beam Research at Texas A&M University - Two Decades of Advancing Electron Beam and X-ray Technologies Around the World
15:15–15:30		Round Table Disc	cussion - Quest	ions and Answers
15:30–16:00)	Coffee / Tea Break		

Board Room A

14:00 – 15:30 Side Event 2: Collaborating Centres of IAEA Chairpersons: A. Simon (IAEA) and B. S. Han (IAEA)

14:00 – 15:30Side Event 3: Women in Accelerator-based ScienceM PlenaryChairpersons: C. S. Cutler (BNL, USA) and A. Peeva (IAEA)

	C	lairpersons: C. S. C	Lutier (DINL, US/	A) and A. Peeva (IAEA)	
Time	Abstract No.	Name	Affiliation & Designating Member State	Title	
14:00-14:10)	C.S. Cutler	BNL, USA	New and Advanced Techniques and Applications of Nuclear Science & Technology towards a Sustainable Environment	
14:10–14:20)	J. Donner	SGIM, IAEA	The IAEA-Elettra Collaborating Center	
14:20–15:20)	Panel Discussion	Moderator: A. Peeva (IAEA) Participants: D. Cohen (ANSTO, Australia), N. Alamanos (CEA, France), S. Carvalho (NCNE, Brazil), C. Gutierrez (Elettra, Italy; recipient of the Marie Curie Fellowship Programme)		
15:20–15:30)	Round Table Dise	able Discussion - Questions and Answers		
15:30–16:00)	Coffee / Tea Bro	a Break		

16:00 – 17:30Parallel Session 10.A: Applications of heavy ion beamsBoard Room AChairpersons: B. Sharkov (JINR, Russian Federation) and R. Padilla Alvarez (IAEA)

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
16:00–16:15	179	P. Kluth	ANU, Australia	Swift Heavy Ion Modified Materials: Applications and Characterisation Using Synchrotron Small Angle X-ray Scattering
16:15–16:30	69	M. Wagner	GSI, Germany	3D Nanochannel Networks Fabricated with Ion Track-Etch Technology and Their Applications
16:30–16:45	5 233	N. Pessoa Barradas	IAEA	Specific Considerations and Guidance for the Establishment of Ionizing Radiation Facilities
16:45–17:00) 195	M. Lang	Univ. of Tennessee, USA	Investigating Radiation Effects in Materials Using State-of-the-Art Particle Accelerators
17:00-17:15	165	C. Vyas	MSU (USA)/India	Isotope Harvesting Project: from White Paper to Implementation
17:15-17:30		Questions and Ar	nswers	

16:00 – 17:30Parallel Session 10.B: Societal Applications of AcceleratorsM Plenaryand Sustainable Development

Chairpersons: F. Zanini (Elettra Sincrotrone, Italy) and K. Kanaki (IAEA)

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
16:00–16:15	189	S. Norris	DOE/NNSA, USA	How Support for Machine-Based Sources of Radiation Contributes to Sustainable Development
16:15–16:30	58	B. Nsouli	LAEC, Lebanon	On the Use of Ion and Cluster Beams Analysis at LAEC for Forensic Sciences: Infrastructure and Applications
16:30–16:45	5 106	A. Magazinik	CERN, Switzerland	Societal Impact of the Compact Linear Collider Study
16:45–17:00) 74	T. Edgecock	University of Huddersfield, U.K.	IFAST Accelerators for Societal Application
17:00-17:15	54	B. List	DESY, Germany	Sustainability Studies for Linear Colliders
17:00-17:30		Questions and An	swers	

THURSDAY, 26 May 2022

9:00 – 10:30 Plenary Session 11: Emerging Accelerator Technologies – M Plenary Accelerators for Food Safety and Security. Chairpersons: T. Gutberlet (FZ Jülich, Germany) and S. Charisopoulos (IAEA)

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
9:00–9:30	219	Y. Otake	RIKEN, Japan	RIKEN Accelerator-driven Compact Neutron Systems and RANS Project
9:30–10:00	214	M. Roth	IKP, TU Darmstadt, Germany	Laser-driven Ion Accelerators: Unique Beams and Compact Neutron Sources
10:00–10:30	217	S. Pillai	Texas A&M University, USA	Accelerator Technologies for Food Safety and Food quality: Response of Microbial Populations to Ionizing Technologies
10:30–11:00		Coffee / Tea Bre	eak	

11:00 – 12:30Parallel Session 12.A: Future Accelerator-based Neutron SourcesBoardChairpersons: A. Kreiner (CNEA, Argentina) & H. Ben Abdelouahed (IAEA)Room A

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
11:00–11:15	129	N. Mayordomo	HZ Dresden- Rossendorf, Germany	CANS Production of Technetium-99m and Technetium-101
11:15–11:30	27	R. Frost	Lund University, Sweden	A Compact Accelerator Driven Neutron Source at the Nuclear-Applications Laboratory, Lund University
11:30–11:45	221	F. Ott	CEA, France	The SONATE Project, a New Neutron Scattering Platform for Materials Science Research
11:45–12:00) 77	A. Maffini	Politecnico di Milano, Italy	Towards Compact Laser-Driven Accelerators: Exploring the Potential of Advanced Double- Layer Targets
12:00-12:15	227	I. Swainson	IAEA	IAEA activities in support of Compact Accelerator based Neutron Sources
12:15-12:30		Questions and Ar	nswers	
12:30–14:00)	Lunch Break		

11:00 – 12:30Parallel Session 12.B: Electron beams and Applications
Chairpersons: S. Pillai (Texas A&M Univ., USA) and B. S. Han (IAEA)

M Plenary

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
11:00–11:15	139	A. Bryazgin	Budker Inst., Russian Federation	ILU RF Electron Accelerators for E-beam and X-ray Applications
11:15–11:30	174	W.A.P. Calvo	IPEN / CNEN / SP, Brazil	Electron Beam Processing to Improve Biodegradable Polymers and for Industrial Wastewater Treatment and Recycling
11:30–11:45	15	S. Jebri	NCNST, Tunisia	Effect of E-beam Irradiation on the Microbial Quality of Minimally Processed Products: a Case of a Commercialized Ready to Eat Salad
11:45–12:00	8	P.A.S. Vasquez	IPEN / CNEN / SP, Brazil	Preservation of Photographic and Cinemato- graphic Films by Electron-Beam Irradiation
12:00-12:15	235	A. Jalilian	IAEA	IAEA support for accelerator-based radio- isotopes and radiopharmaceuticals production
12:15-12:30		Questions and Ar	nswers	
12:30–14:00		Lunch Break		

14:00 – 15:30	Side Event 4: Promoting Self-Reliance and	Board Room A
	Sustainability of National Nuclear Institutions	
	Chairpersons: N. Ramamoorthy (Indep. Consultant, India), N	N. Pessoa Barradas (IAEA)

Time	Abstract No.	Name	Affiliation & Designating Member State	Title
14:00-14:10		N. Pessoa Barradas	IAEA	Opening remarks
14:10–14:25	248	F. A. Deluchi	CNEA, Argentina	Research and Industrial Applications Electron Beam Accelerator Project
14:25–14:4() 249	C. Arcilla	PNRI, Philippines	The new Nuclear Medicine Research and Innovation Center
14:40–14:55	5 250	S. A. Hashim	WiN,Promoting Application of Electron AccelerMalaysiaand Radiation Processing in Malaysia	
15:00–15:15	251	S. Rugmai	SLRI, Thailand	The synchrotron projects of Thailand
15:15–15:30		Round Table Discussion - Questions and Answers		
15:30–16:00)	Coffee / Tea Break		

14:00 – 15:	30	Poster Session 2	All posters (se	ee separate page)	M-Building (2nd Floor)
16:00 – 17:30		Parallel Session 13.A: Selected Applications of of Accelerator-based Analytical Techniques			Board Room A
			•	ia) and A. Migliori (IAEA)	
Time	Abstra No.		Affiliation & Designating Member State	Title	
16:00–16:15	191	M. Chiari	INFN, Italy	PIGE Analysis of Fluoring for the Circular Economy	
16:15–16:30	115	C. E. lochims dos Santos	Federal Univ. Rio Grande, Brazil	Study of Silver Nanopar Helianthus annuus Crop	
16:30–16:45	5 111	P. Pongrac	JSI, Slovenia	Using Micro-PIXE to Eva of Edible Parts of Plants	
16:45–17:00) 104	S. Möller	FZ Jülich, Germany	Lithium Depth Profiling by Nuclear Reaction Ana	•
17:00-17:15	119	G. Provatas	RBI, Croatia	Study of charge Transpo by Ion Beam Induced Ch	
17:15-17:30		Questions and A	nswers		

16:00 – 17:30 Parallel Session 13.B: Accelerators & Interdisciplinary Applications M Plenary Chairpersons: L. Beck (CEA, France) and N. Pessoa Barradas (IAEA)

lysis of anthropogenic long-lived n the environment with AMS
on of Nuclear Waste by ass Spectrometry
in Support of Sustainable lectrostatic Accelerator Facilities
and Experimental Tool for culations in High Energy X-rays cess
nent of Special High-Protein J Low Energy Beams from res

FRIDAY, 27 May 2022

(Independent Consultant, India)

	Cr	hairpersons: T. Osh	ima (NIQRST, J	Japan) and A. Simon (IAEA)
Time	Abstract No.	Name	Affiliation & Designating Member State	Title
9:00–9:30	216	O. Girshevitz	BINA, Israel	Implementation of Ion Beam Analysis for Forensic applications: The way to Global Forensic Database through the unification of different analytical techniques
9:30–10:00	206	A. A. Bettiol	Nat. Univ. Singapore, Singapore	Accelerators and Ion Beams for Quantum Technologies
10:00–10:30) 222	T. Stora	CERN, Switzerland	Radioactive Ion Beams: from Large Scale Facilities to Nuclear Medicine Applications
10:30–11:00		Coffee / Tea Bre	ak	

9:00 - 10:30	Plenary Session 14: Accelerator and emerging applications	M Plenary
	Chairpersons: T. Oshima (NIORST, Japan) and A. Simon (JAFA)	

11:00 – 12:00	Plenary Session 15: Conference Summary and Highlights M Plena Chairpersons: D. Ridikas (IAEA) and C. Horak (IAEA)		
Time	Name - Affiliation	Title	
9:00–9:30	N. Alamanos (CEA, France)	Conference Summary and High	lights
9:30–10:00	N. Ramamoorthy	Conference Summary and High	•

Focus on Applications and the IAEA support

Plenary Session 16: Conference Closing and Award Ceremony M Plenary		
Name - Affiliation		
C. Horak, V. Starovoitova D. Ridikas, S. Charisopoulos (Scientific Secretaries, IAEA)	Award Ceremony	
N. Mokhtar (DDG-NA, IAEA)	Closing Remarks	
	Name - Affiliation C. Horak, V. Starovoitova D. Ridikas, S. Charisopoulos (Scientific Secretaries, IAEA) N. Mokhtar	Name - Affiliation C. Horak, V. Starovoitova D. Ridikas, S. Charisopoulos (Scientific Secretaries, IAEA) N. Mokhtar Closing Remarks

Technical tour to VERA and MEDAUSTRON accelerator facilities 12:30-17:00

TUESDAY, 24 May 2022 and THURSDAY, 26 May 2022

Poster Sessions

Time: 14:00 – 15:30

Venue: M-Building, 2nd Floor

Abstract No.	Authors	Designating Member State / Organization	Poster Title
5	A. Zaouak Ep Ammar	Tunisia	Removal of Hydroxychloroquine and Acid Red 51 Aqueous Solutions by the Electron Beam Process
7	L. Yu	Thailand	Ion Beams & Ion-accelerators for Biology- oriented Applications and Research – CMU Practices
11	<u>I. Vujcic</u> , S. Masic	Serbia	Possibility of Using Sludge from Drinking Water Treatment Plant as Fertilizer in Agriculture after E-beam Treatment: Effects of aging
12	S. Ghosh	India	Low and High Energy Ion Irradiation on Structural and other Properties of Cubic Zirconia and Ceria: from the Perspective of Nuclear Energy Material
13	A. Coulibaly	Mali	Shielding Considerations of a Bunker to be taken into Account by the Regulatory Body for Authorization Purposes: Case Study of Radiotherapy Center in MALI
14	G. Stankunas	Lithuania	Concrete and stainless-steel activation/decay heat data for the IFMIF-DONES Test Cell components
16	<u>S. Petrović,</u> N. Starčević, M. Ćosić	Serbia	The Rainbow Ion-Solid Interaction Potential
17	<u>A. Mejri,</u> H. Trabelsi, J. Chatti, Z. Trabelsi, M. Kraiem	Tunisia	Developing Radiation Treatment Methodologies for Decontamination for First Use of Personal Protective Equipment (PPE) using Tunisian Electron Beam Accelerator
21	<u>S. Mejri</u> , I. Hemissi, C. Brinsi, A. Asmi, M. Saidi, Y. Mabrouk	Tunisia	Radiosensitivity of Two Lens Culinaris Medikus Subsp. Culinaris Varieties to Electron Beam Irradiation
22	A. Akhavan Agh Ghaleh	Iran	Electron Beam Crosslinking of PE/NG Nanocomposite for Solar Collector Applications

Abstract No.	Authors	Designating Member State / Organization	Poster Title
26	S. Rimjaem	Thailand	Establishment of the First Accelerator- based Infrared Free-electron Laser Facility in SE Asia
28	I. Aljammaz	Saudi Arabia	Socioeconomic Impact of Cyclotrons in King Faisal Specialist Hospitals & Research Centre in Saudi Arabia
30	U. Gryczka	Poland	Determination of the Effectiveness and Control of Food Irradiation Process with a Low-energy Electron Beam
34	J. Červenák, O. Lebeda	Czech Republic	Measurement of Excitation Functions of Proton- Induced Nuclear Reactions on Dy- nat.
36	M. A. Khan	Pakistan	Low Energy S–band Electron Linear Accelerator(s) Development for Research and Applications Having Socio–economic Impact
39	H. Kumada	Japan	Current Development Status of the Linac-based BNCT Device of the iBNCT Tsukuba Project
41	E. Mora-Ramirez, E. Corrales-Corrales	Costa Rica	Ventilation Air System Issue at the University of Costa Rica's Cyclotron Facility
46	L. F. Salas Tapia	Colombia	Preliminary Design for a Cyclotron Extraction Beam Line and External Target for Producing Gallium-68 & Technetium- 99m Isotopes: a Developing Countries Scenario
48	<u>F. Kuntz,</u> A. Nasreddine, N. Ludwig, A. Strasser	France	Feerix, a novel Irradiation Platform for R&D, Education and Training
51	I. Churkin, V. Bukhtiyarov N. Krasnikov, P. Logachev, E. Levichev	Russian Federation	Siberian circular source of photons
53	<u>D. Kottuparamban,</u> A. Muhammed	India	An Optimized Periodic Maintenance Planner for a Commercial Medical Cyclotron Facility

Abstract No.	Authors	Designating Member State / Organization	Poster Title
55	<u>A. Maggiolo,</u> G. Rabi, M. Espósito	Argentina	Development and Application of Indicators for the Assessment of Radiation Safety Systems in Radiopharmaceuticals Production Facilities with Cyclotron
57	<u>G. Rabi</u> , L. Martiri	Argentina	Regulatory Framework Adopted by the Nuclear Regulatory Authority of Argentina for the Licensing of the Argentine Center of Proton Therapy and Progress Achieved
61	Hassan Abd El Rehim	Egypt	The Potential Use of Electron Beam Irradiation to Preserve Micro-biologically Infected Egyptian Papyrus
62	<u>A. Mamaras,</u> P. Foka, A. Ioannidou,	Greece	Concepts and Methodology of the Particle Therapy Masterclass (PTMC) for Capacity Building – PTMC in Greece as a Case Study
63	<u>A. Sagatova</u> , M. Fulop, M. Pavlovic, S. Kotorova	Slovakia	Multipurpose Electron Beam Facility in Slovakia for Research and Industrial Applications
64	<u>A. Lausi</u> , M. Attal, A. A. Elkadime	SESAME, Jordan	SESAME, a Synchrotron Radiation Facility in the Cradle of History
66	<u>M. Fulop</u> , J. Ruzicka, P. Ragan, A. Sagatova	Slovakia	Method for detection of illegal cigarette boxes in iron ore cargo
68	E. Stancu	Romania	Radiation ISODOSE Measurements Inside Interaction Chamber During the Commissioning Experiments of CETAL Facility. Gas Target Case
71	N. Bergans	Belgium	How Induced Activated Accelerator Parts Have an Impact on the Radiation Safety of a Proton Therapy Facility
75	P. Thongjerm	Thailand	The Development of an External Beam Irradiation System for Material Analysis at the Cyclotron Facility in Thailand
79	<u>C. da Costa,</u> E. F. da Silveira	Brazil	Degradation of Amino Acids by MeV lons

Abstract No.	Authors	Designating Member State / Organization	Poster Title
81	G. García	Spain	Impact Pathways for Research Infrastructures: The Case of CMAM-UAM
83	Md. N. Hossain	Bangladesh	Establishment of the Cyclotron Facilities in Bangladesh – Present Status and Experiences
87	A. Gopalakrishna, A. Kumar, P. Maletha, K. Kamaldeep, S.V. Suryanarayana, H. Naik, B.K. Nayak, S.P. Kulkarni, P. Mukherjee	India	Developmental Work on Economic Production of High and Low Specific Activity 64Cu – Suitable for Preclinical Studies Using Accelerator Neutrons
89	<u>L. Dittrich</u> , P. Petersson, S. Moon, M. Rubel, A. Widdowson	Sweden	Accelerator-based Quantification and Depth Profiling of Hydrogen Isotopes and Impurity Atoms in Wall Materials from Controlled Fusion Devices
90	P. R. Oliveira	Brazil	Cluster Ion Emission from C 2 H 2 and C 2 H 6 Ices induced by 252 CF Fission Fragments
91	R. Martinez	Brazil	Glycine Bombardment by Alpha Particle – destruction Cross Section Dependence with KeV Energy and Temperature
97	M. Dias	Portugal	Synthesis and Irradiation Effects on CrNbTaVWx High Entropy Alloys
99	<u>N. Catarino</u> , E. Alves, R. Mateus, J. Cruz	Portugal	Measurement of 9Be(3He,p _i)11B Nuclear Reaction Cross Sections at Energy Range 0.5–2.35 MeV
100	J. J. Mboukam	Cameroon	Effect of Swift Heavy Ion Irradiation on the Optical Properties of Ion Implanted Polyethylene Terephthalate
103	<u>E. Alves</u> , J. Borges, N. Catarino, M. Dias, M. Peres, A. Ribeiro, F. Vaz	Portugal	Formation of Au Nanoparticles in TIO2 by Ion Implantation
112	S. Chattopadhyay, <u>P. Mukherjee</u>	India	Utilization of 30MeV DAE Medical Cyclotron for Production of Medically Useful Radioisotopes and Corresponding Radiopharmaceuticals

Abstract No.	Authors	Designating Member State / Organization	Poster Title
113	R. Mateus	Portugal	Ion Beam Studies of Deuterium Retention in High Entropy Alloys and W Targets in the PF-1000U Facility
120	T. Dunatov	Croatia	Development and Applications of the Dual- beam Ion Irradiation Faciility for Fusion Materials (DiFU) at RBI, Zagreb
122	<u>V. Corregidor</u> , L. Alves, T. Pinheiro, R. C. da Silva, M. Furtado	Portugal	Artificial Neural Networks and Ion Beams for 3D Imaging
128	J. M. Lopez-Gutierrez	Spain	CNA: User-oriented Accelerator Facility Dedicated to Interdisciplinary Research in Spain
137	I. Ahmad	Pakistan	Effects of lons Irradiation on TiO2 Nanoparticles: A Review
143	L. Popa-Simil	United States	Review of 20 Years of Industrial Applications of Ion Beam and Radiation Techniques
144	M. Nasef	Malaysia	Progress in Electron Beam Induced Grafting for Development of Ion Conducting Membranes for Polymer Electrolyte Fuel Cells in Malaysia
146	L. Popa-Simil	United States	Accelerators Use to Engineer Nano- Materials for Energy
152	<u>T. S. Lee</u> , K. H. Loo, S. T. Bee, C. T. Ratnam	Malaysia	Photodegradation Effect of the Electron Beam Irradiated Devulcanized Natural Rubber/ polypropylene Compound under Natural Weathering Condition
153	D. Oliveira de Souza	Italy	Organic Carbon Cycling and Stabilization in Paddy Soils Probed by Fe K-edge X- ray Absorption Spectroscopy
156	V. Gostilo	Latvia	Mobile Facility for Gamma-activation Analysis of Gold Ores
161	V. Michalopoulou	Greece	Neutron Induced Fission Studies at NCSR "Demokritos" by the NTUA

Abstract No.	Authors	Designating Member State / Organization	Poster Title
164	Z. Eleme	Greece	Neutron induced fission cross section measurement of 241-Americium at the n_TOF facility
167	V. Sharapova	Russian Federation	The Effects of Sterilization Irradiation on Properties of Commercially Available Pet Materials Used in the Production of Vacuum Tubes for Blood Sampling
168	M. Diakaki	Greece	Neutron Induced Fission Studies at the CERN n_TOF Facility
170	H. Sa'adeh	Jordan	Towards Detection and Identification of Lead in Aerosol Samples Collected in an Urban Area in Amman, Jordan
172	B. Gonsalves	Finland	Performance Comparison of Methods for the Detection of 10be at the Helsinki AMS Facility
173	S. N. Mohd Janib	Malaysia	Accelerator Application in Malaysia to Close the Gap in Realizing SDG3
175	<u>J. Mira</u> , H. Barnard, L. R. Strydom, H. Anderson, J. Abrahams, J. Broodryk	South Africa	Design of the Sweeper Magnets for the High- Power Bombardment Station for Radioisotope Production at iThemba LABS
178	<u>A. H. Barnard,</u> L. R. Strydom, J. Broodryk, G. Steyn, P. Beukes	South Africa	Modelling of the Radiation and Shielding at the South African Isotope Facility Using FLUKA
188	<u>E. Stamati</u> , N. Colonna, A. Mengoni, N. Patronis, R. Vlastou	Greece	NEAR at n_TOF/CERN: The First Multi-foil Activation Measurement
192	<u>R. Hasan</u> , H. Sa'adeh	Jordan	A Comprehensive Overview of the University of Jordan Van de Graaff Accelerator (JUVAC)
200	<u>T. Torims,</u> A. G. Chmielewski, Y. Sun, A. Pawelec, G. Mattausch, M. Vretenar, Z. Zimek, G. Pikurs	Latvia	The Proof-of-concept Results: Development of Hybrid Electron Accelerator System for the Treatment of Marine Diesel Exhaust Gases

Abstract No.	Authors	Designating Member State / Organization	Poster Title
201	<u>M. Etoom</u> , O. Natsheh	Jordan	Switching Irradiation Facility in Jordan from Co- 60 to E-beam X-ray
202	<u>S. Utermann,</u> A. Jungstand, A. Thielmann, M. Gastrow	Germany	Comparative Analysis of Socio-economic Impact in Two Particle Accelerator Case Studies
225	I. Steblevska	Canada	Supervisor Watchdog Circuit for Monitoring Accelerator Beam Properties and Controlling the Safety Interlock System
228	Marcia Almeida Rizzutto	Brazil	Amazon Ceramics and their Color Palette - the Use of Ion Beam Analysis to Determine the Pigments
234	H. Ahiamadjie	Ghana	Environmental applications of PIXE at the accelerator facility of Ghana Atomic Energy Commission

IAEA PUBLICATIONS RELATED TO THE SUBJECT OF THE EVENT

INTERNATIONAL ATOMIC ENERGY AGENCY, Guidelines for Determination of Standardized Semiconductor Radiation Hardness Parameters, Technical Reports Series 490, IAEA, Vienna (2022)

INTERNATIONAL ATOMIC ENERGY AGENCY, Specific Considerations and Guidance for the Establishment of Ionizing Radiation Facilities, Radiation Technology Series No. 7, IAEA, Vienna (2022).

INTERNATIONAL ATOMIC ENERGY AGENCY, Considerations of Safety and Utilization of Subcritical Assemblies, IAEA-TECDOC-1976, IAEA, Vienna (2021)

INTERNATIONAL ATOMIC ENERGY AGENCY, Alternative Radionuclide Production with a Cyclotron, IAEA Radioisotopes and Radiopharmaceuticals Reports No. 4, IAEA, Vienna (2021)

INTERNATIONAL ATOMIC ENERGY AGENCY, Production of Emerging Radionuclides towards Theranostic Applications: Copper-61, Scandium-43 and -44, and Yttrium-86, IAEA-TECDOC-1955, IAEA, Vienna (2021)

INTERNATIONAL ATOMIC ENERGY AGENCY, Therapeutic Radiopharmaceuticals Labelled with Copper-67, Rhenium-186 and Scandium-47, IAEA-TECDOC-1945, IAEA, Vienna (2021)

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INTERNATIONAL ATOMIC ENERGY AGENCY, Decommissioning of Particle Accelerators, IAEA Nuclear Energy Series No. NW-T-2.9, IAEA, Vienna (2020)

INTERNATIONAL ATOMIC ENERGY AGENCY, Radiation Safety of Accelerator Based Radioisotope Production Facilities, IAEA Safety Standards Series No. SSG-59, IAEA, Vienna (2020)

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INTERNATIONAL ATOMIC ENERGY AGENCY, Methodologies for Assessing the Induced Activation Source Term for Use in Decommissioning Applications, Safety Reports Series No. 95, IAEA, Vienna (2019)

INTERNATIONAL ATOMIC ENERGY AGENCY, Accelerator Simulation and Theoretical Modelling of Radiation Effects in Structural Materials, IAEA Nuclear Energy Series No. NF-T-2.2, IAEA, Vienna (2018)

INTERNATIONAL ATOMIC ENERGY AGENCY, Uses of Ionizing Radiation for Tangible Cultural Heritage Conservation, IAEA Radiation Technology Series No. 6, IAEA, Vienna (2017)

INTERNATIONAL ATOMIC ENERGY AGENCY, Trends of Synchrotron Radiation Applications in Cultural Heritage, Forensics and Materials Science, IAEA-TECDOC-1803, IAEA, Vienna (2016)

INTERNATIONAL ATOMIC ENERGY AGENCY, Development of a Reference Database for Ion Beam Analysis, IAEA-TECDOC-1780, IAEA, Vienna (2015)

INTERNATIONAL ATOMIC ENERGY AGENCY, Compendium of Neutron Beam Facilities for High Precision Nuclear Data Measurements, IAEA-TECDOC-1743, IAEA, Vienna (2014)

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INTERNATIONAL ATOMIC ENERGY AGENCY, Dosimetry for Food Irradiation, Technical Reports Series No. 409, IAEA, Vienna (2002)

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2022

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International Symposium on Managing Land and Water for Climate-Smart Agriculture (CN-305) 25-29 July, Vienna, Austria

Second International Conference on Applications of Radiation Science and Technology (ICARST-2022) (CN-290) 22-26 August, Vienna, Austria

International Conference on Occupational Radiation Protection: Strengthening Radiation Protection of Workers – Twenty Years of Progress and the Way Forward (CN-300) 5-9 September, Geneva, Switzerland

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 Creating Perspective for a Young Generation (CN-307) 10-13 October, St Petersburg, Russia

International Conference on Topical Issues in Nuclear Installation Safety: Strengthening Safety of Evolutionary and Innovative Reactors Designs (CN-308) 18-21 October, Vienna, Austria

International Ministerial Conference on Nuclear Power in the 21st Century (CN-296) 26-28 October, Washington D.C. United States of America

Symposium on International Safeguards: Reflecting on the Past and Anticipating the Future (CN-303) 31 October-4 November, Vienna, Austria Fifth International Conference on Nuclear Power Plant Life Management (CN-297) 28 November-2 December 2022, Vienna, Austria

International Conference on Integrated Medical Imaging in Cardiovascular Diseases (IMIC-2022) (CN-304) 13-16 December, Vienna, Austria

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