

18th IGORR Conference
and
IAEA Workshop on Safety
Reassessment of Research Reactors in
Light of the Lessons Learned from the
Fukushima Daiichi Accident,
J7-TR-54790

International Conference Centre Sydney
Darling Harbour, Sydney, Australia

Sunday 3 – Thursday 7 December 2017

Sunday 3 December

17:00	Registration Reception
	Drinks and canapés
	Register for the Conference

Monday 4 December

08:20	Opening Session		(Room C4.1)
	<i>Chair: ANSTO</i>		
	Welcome to Country		
	Welcome from ANSTO, IGORR & IAEA		
09:00	General Session		(Room C4.1)
	<i>Chairs: David Vittorio & Gilles Bignan</i>		
	Andrea Borio di Tigliole: IAEA activities to support sustainable operation of and access to research reactors		
	Gilles Bignan: The CEA scientific and technical offer as a designated ICERR by the IAEA: First feedback with the prime Affiliates		
	Alexander Tuzov: RIAR as IAEA ICERR: Pilot technical cooperation projects and future prospects		
	Sean O'Kelly: The first 50 years of operation of the ATR at the Idaho National Laboratory		
	Khalid Almarri: A qualitative study for establishing the conditions for the successful implementation of public private partnerships in research reactor project in newcomer countries		
10:40	Morning Tea Break		(Room C4.4)
11:00	IAEA Workshop		(Room C4.1)
	<i>Chair: David Sears</i>		
	David Sears: IAEA Activities on the safety of Research Reactors		
	Alexander Sapozhnikov: New safety requirements addressing feedback from the Fukushima Daiichi accident		
	Mark Summerfield: Some thoughts on operator intervention arising from safety reassessments of research reactors in the light of the Fukushima Daiichi NPP accident		
	Mickael Gandolin: Regulatory aspects of implementation of lessons learned from the Fukushima Daiichi accident on Research Reactor		
	Ken Nakajima: Present status of Kyoto University research reactor, KUR		
12:40	Lunch Break		(Room C4.4)
14:00	New Projects	(Room C4.1)	14:00
	<i>Chair: Mark Summerfield</i>		Utilisation
	Christian Gonner: Experimental devices in Jules Horowitz reactor and first orientations for the experimental programs		<i>Chair: Lin-wen Hu</i>
	Ruben Massi: Research reactor design drivers		Lin-wen Hu: Preliminary results of in-core irradiation tests of fluoride salt and materials at the MIT research reactor
	Claude Pascal: Contributions of previous projects to the design of new research reactors		Matias Marticorena: On-line condition monitoring tool for nuclear research reactors coolant system components
	Khalifeh Abu Saleem: Commissioning of the Jordan Research and Training Reactor (JRTR)		Nir Hazensprung: Ageing management and structures, systems, and components improvements at IRR1
	Soo-Youl Oh: Completion of the Jordan Research and Training Reactor Construction Project		Jason Chakovski: Improvements in the safe availability and reliability of the OPAL Reactor
			Roland Ruiterman: the impact of changes in utilization on human performance
15:40	Afternoon Tea Break		(Room C4.4)

Monday 4 December (cont.)

16:00	Fuel (Room C4.3)	16:00	Safety-Security (Room C4.1)
	<i>Chair: Steven Van Dyck</i>		<i>Chair: Claude Pascal</i>
	Lin-wen Hu: Progress conversion study of the MIT research reactor from highly enriched uranium to low enriched uranium fuel		Kwon-yeong Lee: Study of an integrated passive safety system for a research reactor
	Wade Marcum: Observations on experimental fluid structure interactions of plate-type fuel		Nick Howarth: Secure enterprise integrations for multipurpose research reactors
	Silva Kalcheva: Feasibility studies for simultaneous irradiation of NBSR & MITR fuel elements in channels H3 & H5 of the BR2 reactor		Anton Kastenmuller: First regular PSR of the FRM II
	Zhenping Chen: Modelling and simulation of dispersion particle fuels in Monte Carlo neutron transport calculation		Jin-Won Shin: Status of periodic safety review of HANARO
			Mikolaj Tarchalski: MARIA reactor safety improvements and research capacity update
			Jin Lu: Safety analysis for prototype MNSR HEU core unloading and storage
17:20	End of daily program	18:00	End of daily program
18:30	IGORR Steering Committee Meeting (restricted)		(Boardroom)

Tuesday 5 December

08:30	IAEA Workshop		(Room C4.1)
	<i>Chair: Mark Summerfield</i>		
	Byunghun Hwang: Completion of seismic rehabilitation project at HANARO after the Fukushima Daiichi accident		
	Khalifeh Abu Saleem: Enhancement of the safety of the Jordan Research and Training Reactor (JRTR)		
	Vincent Roux: Findings and results of safety reassessments and safety improvements on the ORPHEE research reactor		
	Katarzyna Niedzwiedz: Safety reassessment of German research reactors in the light of the accident at the Fukushima Daiichi nuclear power plant – current status of the improvements		
	Steven Lynch: Application of lessons learnt from the Fukushima nuclear accident to non-power production or utilization facilities in the United States		
10:10	Morning Tea Break		(Room C4.4)
10:30	New Projects	(Room C4.1)	10:30 Radio-isotopes Production (Room C4.3)
	<i>Chair: Soo-Youl Oh</i>		<i>Chair: Christopher Heysel</i>
	Pablo Cantero: The construction stage in the RA-10 reactor project		Muriel Antony: Moly production in the Jules Horowitz Reactor: capacity and status of the development
	Stephane Gaillot: JHR project. Irradiation devices. In-service inspection of nuclear pressure equipment. Investigation of non destructive examinations for inspection purposes		Tzach Makmal: MTR-type core elements improvements for optimization of radioisotopes production
	Masaji Arai: Thermal-hydraulic conceptual design of the new multipurpose research reactor succeeding to JRR-3		Heiko Gerstenberg: Production of medical isotopes at the FRM II research reactor
	Simon Nicolas: Monte-Carlo coupled depletion codes efficiency for research reactor design		Michal Gryzinski: Reactor laboratory for nuclear and biomedical research
	John Bumgardner: INL transient reactor restart progress		11:50 Lunch Break (Room C4.4)
12:10	Lunch Break		(Room C4.4)
13:30	Poster Session		(Room C4.4)
14:50	General Session		(Room C4.1)
	<i>Chair: Alexander Tuzov</i>		
	Ruben Massi: Training of the First Operation Team		
	Alexey Izhutov: Current and prospective tests in reactor MIR		
	Sudi Ariyanto: Competence development of research reactors personnel in Indonesia		
15:50	Afternoon Tea Break		(Room C4.4)

Tuesday 5 December (cont.)

16:10	IAEA Workshop (Room C4.1)	16:10	Utilization and Education & Training (Room C4.3)
	<i>Chair: Steven Lynch</i>		<i>Chair: John Bumgardner</i>
	Moussa Othman: ETRR-2 safety reassessment after Fukushima accident		Mario Carta: TAPIRO fast spectrum research reactor characteristics for neutron radiation damage analyses
	Gabor Petofi: Post Fukushima safety assessments of Hungarian research reactors		Oscar Peire: the nuclear technology and it's development in the National University of Rosario, Argentina
	Pankaj Bhuse: Safety enhancement of Dhruva Reactor through periodic safety		John Bus: Radiation safety training at the Open Pool Australian Light-water (OPAL) multi-purpose reactor
	Azizul Khakim: Safety Re-evaluation of Indonesia research reactors	17:30	End of daily program
	Murat: Tulegenov: Modernization of WWR-K		
17:50	End of daily program		
18:45	Dinner Sydney Harbour Cruise and Best Poster Awards		
	18:45 boarding for 19:00 departure		
	Depart from No. 1 King Street Wharf, Darling Harbour		

Wednesday 6 December

08:30	IAEA Workshop		(Room C4.1)
	<i>Chair: Khalifeh Abu Saleem</i>		
	Piotr Lesny: Lessons learned from the Fukushima Daiichi accident – Polish experience		
	Said Kashif Shah: Actions taken at Pakistani Research Reactors in response to Fukushima accident		
	Samson Malaka: SAFARI-1 safety reassessment and modifications following the F-D accident		
	Songtao Ji: Thermal hydraulic analysis of 49-2 swimming pool reactor with a passive siphon breaker		
10:10	Morning Tea Break		(Room C4.4)
10:30	IAEA Workshop		(Room C4.1)
	<i>Chair: Ram Sharma</i>		
	Ahmad Lashkari: Safety assessment of Tehran Research Reactor		
	Gilbert Rouviere: Identification and implementation of a hardened core in a research reactor in light of the lessons learned from the Fukushima Daiichi accident. The JHR case		
	JinWon Shin: Safety reassessments and actions taken in HANARO since Fukushima Daiichi accident		
	Xiao Zhi: Introduction of nation wide inspection and reassessment of research reactors of Fukushima accident		
	Tomaz Nemec: Experience with safety review of Slovenian Research Reactor (PSR, INSARR) and stress tests for NPP		
12:10	Lunch Break		(Room C4.4)
13:30	New Projects	(Room C4.1)	13:30 Innovative Methods
	<i>Chair: Jason Chakovski</i>		<i>Chair: Ayman Hawari</i>
	Claude Pascal: RCC-MRx 2015 Code: context, overview and ongoing developments		Ezra Elias: Analysis of a hypothetical LOCA in an open pool type research reactor
	Kyoungwoo Seo: Commissioning experience for reactor and primary cooling system of Jordan Research and Training Reactor (JRTR)		Tzach Makmal: Validation of the stable period method against analytic solution
	Sebastien Gay: Jules Horowitz Reactor: RCC-MRX applicability for the design phase of experimental devices		James Yagapin: Hydraulic design and validated calculation tool of the Jules Horowitz Reactor (JHR) reflector
	Xueming Shi: Progress in conceptual research on Fusion Fission Hybrid Reactor for energy		Daeseong Jo: Onset of flow instability in a rectangular channel under transversely uniform and non-uniform heating
	Daniel Parrat: Networking advanced experimental capacities in operating European materials testing reactors for qualification of innovative nuclear fuel and materials: the FIJHOP R&D program proposal		Maurice Mashau: Application of the next generation of the OSCAR code system to the ETRR-2 multi-cycle depletion benchmark

Wednesday 6 December (cont.)

15:30	Afternoon Tea Break		(Room C4.4)
15:50	Ageing-Modernization-CNS (Room C4.1)	15:50	Utilisation and Education & Training (Room C4.3)
	<i>Chair: Andrea Borio Di Tigliole</i>		<i>Chair: Heiko Gerstenberg</i>
	Ram Sharma: IAEA activities in support of operation and maintenance of research reactors		Pablo Cantero: the IAEA internet reactor laboratory project: status, feedback from recent broadcasting and future expansion
	Andrew Eltoaj: ANSTO OPAL Reactor CNS replacement		Robert Schickler: Installation of a second CLICIT irradiation facility at the Oregon State Triga Reactor
	Steven Van Dyck: the new irradiation infrastructure at the BR2 reactor		Christian Gonnier: Post irradiation testing capabilities of experimental reactor components at the LECl facility for service life assessment
	Alfio Arcidiacono: Cold neutron source helium injection logic modification at OPAL		A Eshcherkin: Power ramping and cycling testing of VVER fuel rods in the MIR Reactor
	Weijian Lu: OPAL cold neutron source moderator performance		A Alekseev: Experimental study of the VVER fuel rods behavior under the design basis RIA and LOCA in the MIR Reactor
	Jianlong Li: The cold neutron source is a key experimental facility of CARR Reactor in China		
17:50	End of daily program		
18:00	Session Chairs' Meeting (restricted)		(RoomC4.1)

Thursday 7 December

08:30	IAEA Workshop	(Room C4.1)
	<i>Chair: Ken Nakajima</i>	
	Tuncay Tuna: Modifications on TR-2 Reactor against an expected earthquake	
	Andril Shepitchak: Safety Reassessment of Ukrainian research reactors in the light of the lessons learned from the Fukushima Daiichi accident	
09:10	General Session	(Room C4.1)
	<i>Chairs: Gilles Bignan and Mark Summerfield</i>	
	Christina Van Drunen: Filling the neutron gap at the Canadian Nuclear Laboratories after shutdown of the National Research Universal (NRU) Reactor	
	Mohamed Al Jaber: A study of the impact of cultural diversity on the technological innovation process in the nuclear energy corporations	
	Daniel Wachs: Development of transient testing capability to support the TREAT Facility	
	Sudi Ariyanto: Public education and outreach for supporting nuclear program in Indonesia	
	Ayman Hawari: Multidisciplinary engagement at research reactors: The NCSU PULSTAR	
10:50	Morning Tea Break	(Room C4.4)
11:10	Concluding Panel Closure of the 18th IGORR Conference	(Room C4.1)
	<i>Chairs: Gilles Bignan, David Sears and Mark Summerfield</i>	
12:00	Depart to ANSTO, Lucas Heights for lunch and the technical tour	
	Buses depart from Iron Wharf Place, off Darling Drive, Darling Harbour	
16:00	Buses depart from ANSTO to Darling Harbour. One of the buses will return via Sydney International Airport	

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