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Message from the President of World Council on Isotopes (WCI)

It is my pleasure and honor to welcome the isotope community to attend the 10th International Conference on Isotopes (10ICI) to be held in Kuala Lumpur, Malaysia on 3rd to 7th February 2020.

We expect to have more than 300 scientific and technical presentations, as well as posters on show. Please check the topics, and consider presenting your work. There will also be an accompanying exhibition showcasing organisations engaging in isotope production, measurement, and various applications.

Dr. Nigel R. Stevenson, President, WCI



Message from the 10ICI Conference Chair

Dear colleagues,

It is my great pleasure to welcome you to the 10ICI conference in Kuala Lumpur. This is going to be the first time for the conference to make its way to the Southeast Asia. The conference will provide a platform for the world's leaders and best researchers in isotope technology and applications to interact and discuss the latest research in the field. Looking forward to welcoming you in Kuala Lumpur in 2020.

Dato' Dr. Zulkifli Mohamed Hashim, Chairman, Local Organising Committee of 10ICI

The Organisers

World Council on Isotopes (WCI)

World Council on Isotopes (WCI) is an international organization that aims to facilitate interactions and exchange of information among all role-players in the global isotope community, specifically those that would not normally come into contact within the usual activities of the R&D, business, industrial and governmental sectors. As a primary aim, WCI continues to support initiatives to train and assist groups that are in need or are in the early stages of setting up their isotope technology systems. Based in Seoul, Republic of Korea, WCI provides a platform where members benefit from unrivalled networking opportunities within the industry. Also, WCI develops and maintains close relationships with other industry associations allowing members to connect with a wide array industry leaders and key stakeholders. As part of this, since 1995, WCI has organised the International conference on Isotopes (ICI) that taking place every three years, gathering scientists involved in isotopes from all over the world. Organized by a regional host under the auspices of the World Council on Isotopes, the ICI cycle offers a unique informationsharing educational and networking event but simultaneously highlights the crucial role played by nuclear science and technology and nuclear medicine for human health and environment protection.

Please visit us at http://wci-ici.org/

Malaysian Radiation Protection Association (MARPA)

Malaysian Radiation Protection Association (MARPA) is a non-governmental organization that was established on 15 September 2002. It represents a pool of professionals of highest skill in radiation protection and safety. MARPA aims at advancing scientific and technical knowledge and skill in the field of radiation through education, research and the compilation and dissemination of information useful to members and beneficial to the general public. The establishment of MARPA also is intended to establish linkages with other technical, safety and scientific organizations in the dissemination and exchange of information to enhance the promotion, advancement and recognition of radiation safety practices in Malaysia. MARPA is the 46th member of the International Radiation Protection Association and 7th member of the Asian and Oceanic Association of Radiation Protection (AOARP).

Please visit us at http://www.marpa.org.my/

International Advisors

1	Prof. Anuradha Prakash	USA	Chapman University, California,
2	Mr. Carlo R. Chemaly	Belgium	Chair of Publication of the World Council of Isotopes (WCI)
3	Dr. Daud Mohamad	Saudi Arabia	King Abdulaziz University
4	Dr. Hiroyuki Hoshina	Japan	National Institutes for Quantum and Radiological Science and Technology (QST)
5	Prof. Ilham Al-Qaradawi	Qatar	Qatar Physics Society
6	Prof. Jong Kyung Kim	Korea	President-Elect of the World Council of Isotopes (WCI) Hanyang University
7	Dr. Lei Cao (Raymond)	USA	The Ohio State University
8	Dr. Meera Venkatesh	India	Chair of the Education and Training of the World Council of Isotopes (WCI)
9	Dr. Md. Azizul Haque	Bangladesh	Atomic Energy Research Establishment, (AERE) Bangladesh Atomic Energy Commission, (BAEC)
10	Dr. Myung Jae Song	Korea	
11	Dr. Nigel R. Stevenson	USA	President of World Council of Isotopes (WCI) Serene, LLC
12	Mr. Paul Dickman	USA	Chair of ICI Coordination Argonne National Laboratory
13	Dr. Ramzi Jammal	Canada	Canadian Nuclear Safety Commission
14	Mr. Shri P. J. Chandy	India	National Association for Application of Radioisotopes and Radiation in Industry (NAARRI)
15	Mr. Sunil Sabharwal	India	
16	Prof. Dr. Syed M. Qaim	Germany	Forschungszentrum Juelich Gmbh
17	Dr. Tim Payne	Australia	Chair of the Environmental Applications Committee of the World Council of Isotopes (WCI) Adjunct Professor (Southern Cross University) Adjunct Associate Professor (University of NSW) Australian Nuclear Science and Technology Organisation Australia (ANSTO)
18	Dr. Van Zyl de Villiers	Austria	Immediate Past President of WCI International Atomic Energy Agency (IAEA)
19	Mr. Woo-Geun Song	Korea	Director of the Secretariat of World Council of Isotopes (WCI)

Conference Officials

1	Dr. Zulkifli Mohamed Hashim	Conference Chairman	President Malaysian Radiation Protection Association (MARPA)
2	Assoc. Prof. Dr. Faizal Mohamed	Vice Chairman	Universiti Kebangsaan Malaysia (UKM)
3	Dr. Mohd Abd Wahab Yusof	Advisor	Director General Malaysian Nuclear Agency
4	Mr. Paul Dickman	Advisor	Chair of ICI Coordination Argonne National Laboratory, USA
5	Ms. Wan Syazlin Wan Yunoh	Secretary	Malaysian Nuclear Agency
6	Mr. Iberahim Ali	Treasurer	Malaysian Radiation Protection Association (MARPA)
7	Dr. Nigel R. Stevenson	WCI President	World Council on Isotopes (WCI)
8	Dr. Van Zyl de Villiers	WCI Immediate Past President	World Council on Isotopes (WCI)
9	Prof. Jong Kyung Kim	WCI President- Elect	World Council on Isotopes (WCI)
10	Mr. Woo-Geun Song	WCI Director of the Secretariat	World Council on Isotopes (WCI)

Local Organising Sub-Committee

SCIENTIFIC PROGRAMME
Dr. Kuan Ying KokMARKETING & PROMOTION
Dr. Bashillah BaharuddinSPONSORSHIP & EXHIBITION
Dr. Husaini SallehSOCIAL FUNCTION & MC, PRESS CONFERENCE
Mrs. Rohaizah AhmadSOCIAL & TECHNICAL TOUR
Ms. Habibah AdnanSTUDENTS PROGRAMME
Dr. Mohd Rodzi AliLOGISTICS & ACCOMMODATIONS
Mr. Mohd Fazlie Abdul RashidLOGISTICS & ACCOMMODATIONS
Mr. Mohd Fazlie Abdul Rashid

Conference General Information

Name Badges

Registered delegates are to wear their name badges at all times during the **Conference** for identification and security purposes.

Admission to all **Conference** sessions and official functions are based on identification badges.

Starting time for sessions

All the sessions will begin strictly on time, following the Programme Timetable on the pages 9 - 12 of this book. Please be punctual if you wish to follow the session.

Refreshment Breaks

Venue: Conference Hall 1, Level 3, Kuala Lumpur Convention Centre.

Lunch

Venue: Conference Hall 2, Level 3, Kuala Lumpur Convention Centre.

Internet Access

Free Wi-Fi is available throughout the venue. Select "ConventionCtrFreeWIFI" Network to access the internet.

Mobile Phones

We would greatly appreciate your co-operation to switch off or place your **mobile** phones on silent mode when you are in the presentation hall.

Car Park

First 3 Hours - RM2.00 Subsequent 1 Hour or part thereof - RM1.00 Exceeding 7 Hours and more - RM6.00 Overnight Parking (more than 24 Hours) - RM20.00

Prayer Room

The Prayer Room is located at the Mosque Mosque (for Friday Prayer)

Social Events

Opening Ceremony Date: 5 February 2020 Time: 0900 - 1030 hrs Venue: Conference Hall 3, Level 3, Kuala Lumpur Convention Centre Dress code: Business Attire Note: Complimentary access for all registered participants

Conference Dinner Venue: Love @ MaTIC Date: 5 February 2020, Wednesday Time: 1900 - 2100 hrs Dress code: Smart Casual Note: Gather at Centre Core, Level G, Kuala Lumpur Convention Centre (KLCC) Park Entrance

Closing Ceremony

Date: 7 February 2020, Friday Time: 1030 – 1200 hrs Venue: Conference Hall 3, Level 3, Kuala Lumpur Convention Centre Note: Complimentary access for all registered participants

Invited Speakers

Plenary Session 1



Dr. Jean-Pierre Fleurial NASA Jet Propulsion Laboratory / California Institute of Technology United States of America



Adjunct Prof. Dr. Timothy Payne Australian Nuclear Science and Technology Organisation (ANSTO) Australia



Prof. Kwan Hoong Ng University of Malaya Malaysia

Plenary Session 2



Dr. Hiromitsu Haba RIKEN Japan



Prof Jong-Seo Chai Sungkyunkwan University Korea



Mr. Ahmad Farish Ahmad Nazeri Astaka Engineering Sdn Bhd Malaysia

Plenary Session 3



Prof. Dr. Syed M. Qaim Forschungszentrum Juelich Gmbh Germany



Datuk Dr. Daud Mohamad King Abdulaziz University Saudi Arabia



Universiti Teknologi Malaysia (UTM) Malaysia

Invited Speakers

WCI President's Forum



Dr. Jin Du China Isotope & Radiation Corporation P.R. China



Dr. Boris Zhuikov Institute for Nuclear Research Russian Federation



Dr. Cathy Cutler Brookhaven National Laboratory United States of America Panel 4 Dr. Caterina Ramogida TRIUMF Canada

Forum on "Harnessing Isotopes for Improved Quality of Life"



Adjunct Prof. Dr. Timothy Payne

Australian Nuclear Science and Technology Organisation (ANSTO) Australia



Prof. Jong Kyung Kim WCI / Hanyang University Korea



Dr. Nigel Stevenson WCI / Exubrion Therapeutics, Inc. United States of America

Closing Plenary



Dr. Rita Baranwal U.S. Department of Energy United States of America

Invited Speakers

Session Speakers



Dr. Caroline Nesaraja Oak Ridge National Laboratory United States



Dr. Yuichi Nagame Japan Atomic Energy Agency (JAEA) Japan



Prof. Christoph Emanuel Düllmann Johannes Gutenberg University Mainz Germany



Prof. Dr. Meera Venkatesh Elsevier Journals Netherlands



Prof. Sandip Basu Bhabha Atomic Research Centre India

Conference Venue Layout

Venue: West Wing, Level 3, Kuala Lumpur Convention Centre



Technical Programme (Day 1)

PROGRAMME: DAY 1 | Tuesday, 4th February 2020

Time	Day 1 Tuesday, 4th February 2020									
09:00 - 09:05	Welcoming Remarks by Dato' Dr. Zulki	fli Mohamed Hashim, <i>Malaysian Radiatio</i>	n Protection Association (MARPA), Malaysi	а	Conference Hall 3 (CH3)					
09:05 – 09:10	Congratulatory Speech by Dr. Nigel R.	Stevenson, World Council on Isotopes (WC	CI) / Exubrion Therapeutics, Inc., United Stat	tes	Conference Hall 3 (CH3)					
09:10 — 09:55	5 Theme Speech by Ms. Najat Mokhtar, Deputy Director General, Department of Nuclear Sciences and Applications, IAEA, Austria Scientific Speech by Mr. Joao Alberto Osso Junior, Head, Radioisotope Products and Radiation Technology Section, IAEA, Austria Session Chairs: Mr. Paul Dickman, Argonne National Laboratory, United States & Prof. Dr. Meera Venkatesh, Elsevier Journals, Netherlands Conference Hall 3 (CH3))									
09:55 – 10:30	Refreshment Break [Conference Hall 1 (CH1)]									
	Plenary Session 1									
	Session Chair: Prof Dr. Meera Ventakes	h, Elsevier Journals, Netherlands			Conference Hall 3 (CH3)					
10:30 – 11:15	PLN 1-1: NASA's research in radioisotopes Dr. Jean-Pierre Fleurial, <i>Jet Propulsion I</i>	, power systems Laboratory / California Institute of Technolo	gy, United States	•						
11:15 – 12:00	PLN 1-2: Application of isotope techniques Adjunct Prof. Dr. Timothy Payne, Austra	in collaborative environmental science alian Nuclear Science and Technology Organ	nisation (ANSTO), Australia	•						
12:00 - 12:45	PLN 1-3: A review of radioisotopes used in Prof Dr. Kwan Hoong Ng. University of	medicine Malava Malavsia								
12:45 - 14:00	Lunch Break and Poster Viewing				Conference Hall 2 (CH2)					
	Parallel Session 1									
	Session A1: Medicine	Session B1: Industry	Session C1: Environment & Agriculture	Session D1: Ma	nufacturing					
	Chair: Mr. Ira N. Goldman, Lantheus Medical Imaging, United States	Chair: Mr. Joao Alberto Osso Junior, International Atomic Energy Agency (IAEA), Austria	hair: Ir. Joao Alberto Osso Junior, iternational Atomic Energy Agency AEA), Austria Chairs: 1. Adjunct Prof. Dr. Timothy Payne, Australian Nuclear Science and Technology Organisation (ANSTO), Australia 2. Assoc. Prof. Dr. Faizal Mohamed, Universiti Kebangsaan Malaysia (UKM), Malausia							
	Conference Hall 3 (CH3)	Meeting Room 304 (MK3U4)J	Meeting Room 305 (MK305)J	L	leeting Room 306 (MK306)J					
14:00 – 14:25	A1-1 The Laramed project at LNL: Cu-67 and Sc-47 production for theranostic applications Gaia Pupillo, <i>Italy</i>	B1-1 C1-1 D1-1 Research on scatter impact between two Cs biosorption study by using Cs-137 Production of SN-11 Cobalt-60 radiation sources in a dual- projection radiography system tracer for radiocesium decontamination high flux reactor Xiaojing Guo, China Triyono Basuki, Japan Bernard Ponsard,		117M in the BR2 d, <i>Belgium</i>						
14:25 – 14:50	A1-2 B1-2 C1-2 D1-2 Impact of 177Lu-DOTATATE PRRT Production of novel radiotracers to in the management of Assessment of natural radioactivity in the unsaturated soil profile of Malwa region, nuclear fuel D1-2 Neuroendocrine tumors unclear fuel South-West Punjab, India and DGA extractivity produced Sc-47 Sandip Basu, India Ross Allen, United Kingdom Ritu Bala, India Renata Mikolajc		dioisotopic impurities on methods for reactor zzak, <i>Poland</i>							
14:50 – 15:15	A1-3 Ensuring a robust supply of Mo-99 for the global nuclear medicine market Roy Brown, United States	B1-3 Measurement of excitation functions for the natW(d,x) reactions based on new half-lives of Rhenium isotopes Yukiko Komori, Japan	C1-3 D1-3 tions for Analysis of stable isotopes in Thai Clean production of 67Cu using the new polished rice by elemental analyzer 70Zn(d,x)67Cu reaction routes isotope ratio mass spectrometer Arnaud Guertin, France Supalak Kongsri, Thailand		of 67Cu using the action routes <i>France</i>					
15:15 – 15:40	0 A1-4 B1-4 C1-4 D1-4 Cascade gamma correlations in beta minus decays for a novel modality of medical imaging - Simulations B1-4 Study on reproductive performance of indigenous cows by using isotopes B1-4 Byoung Gun Choi, South Korea MAS Khan, Bangladesh Hyunjin Lee, South Korea				nanagement of arch <i>uth Korea</i>					
15:40 – 16:05	05 A1-5 Molybdenum-99 for medical imaging Henry Royal, United States B1-5 Experimental investigation of bed size effects on the hydrodynamics of gas-solid fluidized bed reactor via advance non-invasive measurement techniques (CT and RPT) Abdelsalam Efhaima, United Arab Emirates C1-5 D1-5 Rapid and semiautomated production sensor to measure radioactivity from the contaminated soil Jaewook Kim, South D1-5		itomated production of dium fluoride, on a fluidic Juan C Manrique, <i>Mexico</i>							
16:05 – 16:30	A1-6 Excitation function measurements for MN-52 production by deuteron beams irradiation for theranostic applications Flavia Groppi, <i>italy</i>	B1-6 High rate true random number generator using beta radiation Kyung H Park, South Korea	C1-6 Food irradiation scenario in India Anil Kumar Kohli, <i>India</i>	D1-6 Production of radi RFT-30 cyclotron Jeong-Hoon Pa	iometal ZR-89 with rk, <i>South Korea</i>					
16:30 – 16:55	A1-7 Radioisotopes production in Jordan Ala' Khwaj, <i>Jordan</i>	B1-7 In-house re-calibration method of Plutonium-236 by radiochemical analysis and alpha spectrometry Aishah Alboloushi, <i>Kuwait</i>	C1-7 Elemental comparison for PM 10 and PM 2.5 by neutron activation analysis Jiseok Kim, South Korea	D1-7 ESCORT: Energy S Cycling Hadron Th Kwee Wah Leo,	Sweep Compact Rapid herapy <i>Malaysia</i>					
16:55 – 17:30	Refreshment Break				Conference Hall 1 (CH1)					

Technical Programme (Day 2)

PROGRAMME: DAY 2 | Wednesday, 5th February 2020

Time	Day 2 Wednesday, 5th February 2020							
	Opening Ceremony							
08:00 - 09:00	Arrival of Participants and Guests Conference Hall 3 (CH3)							
09:00 - 09:30	Poster Viewing Foyer, Conference Hall 2 (CH2)							
09:30 - 09:40	National Anthem: "Negaraku" and "N	lalaysia Bersih"		Conference Hall 3 (CH3)				
09:40 - 10:00	Opening Speech by Deputy Minister of <i>YB. Isnaraissah Munirah Majilis</i>	MESTECC		Conference Hall 3 (CH3)				
10:00 - 10:30	Montage Show							
	Token of Appreciation Group Photo Session			Conference Hall 3 (CH3)				
	Exhibition Booth Tour		,	Conference Hall 1 (CH1)				
10:30 - 10:45	Refreshment Break			Conference Hall 1 (CH1)				
	Plenary Session 2 Session Chair: Mr. Ira N. Goldman, Lanth	eus Medical Imaging United States		Conference Hall 3 (CH3)				
10:45 - 11:30	PLN 2-1: Production and applications of rad	lioisotopes at RIKEN RI beam factory - Sear	ch for new elements through diagnosis and	therapy of cancer				
44.00 40.45	Prof. Hiromitsu Haba, <i>RIKEN, Japan</i>							
11:30 - 12:15	PLN 2-2: Strategy of cyclotron and radioisto Prof Jong-Seo Chai, <i>Sungkyunkwan Univ</i>	ope R&D for developing countries versity, South Korea						
12:15 - 13:00	PLN 2-3: Quality assurance in radioanalytic Mr. Ahmad Farish Ahmad Nazeri, Astak	al and radiopharmaceutical chemistry						
13:00 - 14:00	Lunch Break	a Engineering can bha, malaysia		Foyer, Conference Hall 2 (CH2)				
	Parallel Session 2							
	Session A2: Medicine	Session B2: Industry / Manufacturing	Session C2: Environment & Agriculture	Session D2: Marie Curie Session				
	Chair: Dr. Anuar Jonet, <i>Malaysian Radiation</i>	Chair: Mr. Bernard Ponsard, Belgian Nuclear	Chair: Dr. Khairuddin Abdul Rahim, <i>Technical</i>	1. Dr. Siti A'iasah Hashim, <i>Malaysian</i>				
	Protection Association (MARPA) / Malaysia Genome Institute (MGI), Malaysia	Research Centre, Belgium	Advisor in Soil and Environmental	Nuclear Agency, Malaysia 2. Prof Dr. Meera Venkatesh. Elsevier				
		Martine Dates 204 (MD204)	Maatian Daam 205 (MD205)	Journals, Netherlands				
14.00 – 14.25	Lonference Hall 3 (LH3) A2-1	R2-1	(<u>Meeting Room 305 (MR305)</u>) C2-1	Liveeting Room 306 (MR306) J				
11.00 11.20	Coordinated international industry efforts	Continuous radioactive iodine monitor	Environmental fate of radionuclides	Nuclear decay data for isotopes in				
	for a reliable supply of medical radioisotopes	development for radioactive iodine	following disposal in trenches at the Little Forest legacy site. Australia	applications and basic research Caroline Nesaraia, United States				
	Ira N. Goldman, United States	Fu Shen, <i>China</i>	Timothy Payne, Australia					
14:25 - 14:50	A2-2 A new radioisotone-based treatment	B2-2 Cross sections obtained by analytical	C2-2 Current situation and prospect of radioisotope	D2-2 Accelerator production of				
	for veterinary and human arthritis	separation method for two isotopes 67CU and	preparation technology in China	radionuclides				
14-50 15-15	Nigel Stevenson, United States	67GA Jun Kue Park, Souh Korea	Sun Xi, China	Cathy Cutler, United States				
14.00 - 10.10	The accuracy of positron	Proposed Malaysian national accelerator	Study on advection-dispersion behavior for	Approach to reverse generator system using				
	radiopharmaceutical delivery automatic	facility: multipurpose cyclotron	simulation of important radionuclide transport	novel extraction chromatographic resins selective for technetium-99m				
	Hanan Aldousari, <i>Kuwait</i>		Chuan-Pin Lee, <i>China</i>	Izabela Cieszykowska, <i>Poland</i>				
15:15 - 15:40	A2-4	B2-4	C2-4 RE 7 as tracer for size distribution of	D2-4 Public accontance of radiation technology				
	protein-membrane for overcoming immune-	of non-standard positron emitters 61Cu and	particulate at different locations and under	& nuclear power: A historical perspective				
	barrier and tumor targeting Jun Young Lee, South Korea	64CU Md Shuza Uddin, Bangladesh	different meterological conditions Flavia Groppi, <i>Italy</i>	Swapnesh Kumar Malhotra, <i>India</i>				
15:40 - 16:05	A2-5	B2-5	C2-5	D2-5				
	HER2 immuno-PET imaging of Zr89-Pertuzumab	212Pb production and investigation of	Quality control on sodium iodine I-131	Reactor produced radioisotopes for non-				
	Jong II Shin, South Korea	therapy of neuroendocrine tumors	Malaysia	Meera Venkatesh, <i>India</i>				
16:05 - 16:30	Δ2-6	Konstantin Kokov, <i>Hussian Federation</i> B2-6	Abdul Kahim Kahimah, <i>Malaysia</i>	D2-6				
10.00 10.00	Molecular imaging of chronic pain	Advanced radioimmunoassay based	Geographical origin of Thai rice using stable	Chemical experimental program of study				
	Wan Hamirul Bahrin Wan Kamal, <i>Malavsia</i>	on microfluidic platform Jin-Hee Kim, <i>South Korea</i>	isotopes Chunyanuk Kukusamude Thailand	of superheavy elements at the new accelerator complex at FI NR				
				Nikolay Aksenov, Russia Federation				
16:30 - 16:55	A2-7 Cost benefit analysis and prescribing natterns	B2-7 Current status and future plan on	C2-7	D2-7 BTD modelling using radiotracer technique				
	of 177Lu-n.c.a-PSMA at selected tertiary	radioisotope production in Bangladesh	radionuclides within the surface sediments of	in porous media for reservoir				
	hospitals in South Africa Nomaswazi Gabela, <i>South Africa</i>	Abdus Sattar Mollah, Bangladesh	the Juru River, Penang Mei-Wo Yii, <i>Malaysia</i>	characterization Noraishah Othman, <i>Malaysia</i>				
16:55 – 17:30	Refreshment Break		·	Conference Hall 1 (CH1)				
13:00 - 14:00	Conference Dinner			Love @ MATIC				

The information is updated as at 31 January 2020. The info may be subjected to change at the organisers' discretion.

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Technical Programme (Day 3)

PROGRAMME: DAY 3 | Thursday, 6th February 2020

Time	Day 3 Thursday, 6th February 2020								
	Plenary Session 3 Session Chair: Prof. Dr. Kwan Hoong Ng, University of Malaya, Malaysia								
08:30 – 09:15	PLN 3-1: Theranostic approach in nuclear medicine: Development of relevant radionuclides Prof. Dr. Syed M. Qaim, <i>Forschungszentrum Juelich, Germany</i>								
09:15 - 10:00	PLN 3-2: Nuclear science and technology fo Datuk Dr. Daud Mohamad, <i>King Abdulaz</i>	or socio-economic development iz University, Saudi Arabia							
10:00 – 10:45	PLN 3-3: Radiation technology in tracer ind Prof. Dr. Nahrul Khair Alang Md Rashid	ustry I, Universiti Teknologi Malaysia (UTM), Mal	aysia						
10:45 - 11:15	Refreshment Break			Conference Hall 1 (CH1)					
11:00 – 13:00	WCI President's Forum: Recent Advance Chairman: Dr. Nigel Stevenson, World Co Co-Chairman: Prof. Jong Kyung Kim, Wo Panel 1: Dr. Jin Du, China Isotope & R Panel 2: Dr. Boris Zhuikov, Institute for Panel 3: Mr. Carlo R. Chemaly, World Panel 4: Adjust Prof. Dr.Timothy Payne	es in Isotopes Production and Utilisati ouncil on Isotopes (WCI) / Exubrion Theraped rld Council on Isotopes (WCI) / Hanyang Uni adiation Corporation, China • Nuclear Research of Russian Academ Council on Isotopes (WCI), Belgium e, Australian Nuclear Science and Tech	on utics, Inc., United States iversity, South Korea y of Science, Moscow inology Organisation (ANSTO), Australi	a Conference Hall 3 (CH3)					
13:00 - 14:00	Lunch Break and Poster Viewing			Conference Hall 2 (CH2)					
	Parallel Session 3			.					
	Session A3: Medicine Chair: Dr. Nor Salita Ali, <i>National Cancer</i> Institute, Malaysia	Session B3: Medicine/ Environment Chair: Prof. Dr. Nahrul Khair Alang Md Rashid, Universiti Teknologi Malaysia (UTM), Malaysia	 Session C3: Environment & Agriculture Chairs: Mr. Paul Dickman, Argonne National Laboratory, United States Mr. Masaki Nakagawa, Nuclear Damage Compensation and Decommissioning Facilitation Corporation (NDF), Japan 	 Special Session: Super Heavy Elements Chairs: Dr. Yuichiro Nagame, Japan Atomic Energy Agency (JAEA), Japan Prof. Dr. Christoph Emanuel Düllmann, Johannes Gutenberg University Mainz, Germany 					
	Conference Hall 3 (CH3)	Meeting Room 304 (MR304)	Meeting Room 305 (MR305)	Meeting Room 306 (MR306)					
14:00 – 14:25	A3-1 46Sc labelled hydroxyapatite composite and its in-vitro stability as a candidate for in-vivo evaluation of bone graft material Muhamad Basit Febrian, <i>Indonesia</i>	B3-1 The production and supply of cobalt 60 radioactive sources in China Yin Yuji, <i>China</i>	C3-1 Fukushima reconstruction and decommissioning of Fukushima Tatsuya Shinkawa, <i>Japan</i>	D3-1 The heavy actinides and transactinides – The radioelements at the end of the periodic table Christoph Emanuel Düllmann, <i>Germany</i>					
14:25 – 14:50	A3-2 Labeling of phenolic compounds with technetium 99-m: Towards development of new natural based radiopharmaceutical agents Zainah Adam, Malaysia	B3-2 Application of environmental isotopes in water resources management Kamarudin Samuding, <i>Malaysia</i>	C3-2 Fukushima Daiichi decontamination and decommissioning: Current status and challenges Shiro Takahira, Japan	D3-2 First ionization potentials of heavy actinides Yuichiro Nagame , <i>Japan</i>					
14:50 – 15:15	A3-3 The nuclear forensics international technical working group: 25 years of research, development and application of isotope science to nuclear security Vitaly Fedchenkol, Sweden	B3-3 Determination of the geographical origin of Malaysian edible bird's nest by carbon, nitrogen and sulphur (CNS) stable isotopes analysis Mohd Noor Hidayat Adenan , <i>Malaysia</i>	C3-3 Monitoring radioactive materials in fish from the Fukushima Dai-ichi nuclear power plant accident Shizuho Miki, Japan	D3-3 Present status and perspectives of superheavy element chemistry at RIKEN Hiromitsu Haba, <i>Japan</i>					
15:15 – 15:40	A3-4 The application of 13/14C-urea breath test on the diagnosis of helicobacter pylori infection Suifu Shen , <i>China</i> Teo Ming Ting , <i>Malaysia</i>		C3-4 Groundwater quality patterns and spatiotemporal change in depletion in the regions of the Arabian shield and Arabian shelf Othman Fallatah, Saudi Arabia	D3-4 Laser spectroscopy studies of the heaviest actinides Michael Block, <i>Germany</i>					
15:40 – 16:05	A3-5 I-125 Medical Isotope within Criminal Investigation Andrei Apostol, Sweden	B3-5 Sediment distribution of Ra-226 and Ra-228 In the east coast of Peninsular Malaysia Nooradilah Abdullah , <i>Malaysia</i>	C3-5 Gamma radiation synthesis of silver kaolinite nanoparticles for agricultural application Salmah Moosa, <i>Malaysia</i>	D3-5 Chemistry beyond plutonium: How relativity alters electronic structure in heavy elements Thomas Albrecht-Schmitt, <i>United States</i>					
16:05 - 16:30	A3-6 Co-60 induced graft copolymerisation of acrylic acid-co-2-hydroxyethyl methacrylate onto ePTFE for medical application Nur Ain Mohd Radzali, <i>Malaysia</i>	B3-6 The need for individual monitoring of internal exposure for nuclear medicine workers in Malaysia: A proposal Suzilawati Muhd Sarowi, <i>Malaysia</i>	C3-6 Gamma-ray computed tomography for scanning of agarwood tree. Data analysis and comparison Mohd Fitri Abdul Rahman, <i>Malaysia</i>	D3-6 Towards the bohrium carbonyl complexes Zhi Qin, <i>China</i>					
16:30 - 17:30	Refreshment Break			Conference Hall 1 (CH1)					

The information is updated as at 31 January 2020. The info may be subjected to change at the organisers' discretion.

11

Technical Programme (Day 4)

PROGRAMME: DAY 4 | Friday, 7th February 2020

Time	Day 4 Friday, 7th February 2020	
08:30 – 10:00	Forum on "Harnessing isotopes for improved quality of life" Chairman: Datuk Dr. Daud Mohamad, King Abdulaziz University, Saudi Arabia Panel 1: Adjunct Prof. Dr. Timothy Payne, Australian Nuclear Science and Technology Organisation (ANSTO), Australia Panel 2: Prof. Jong Kyung Kim, World Council on Isotopes (WCI) / Hanyang University, South Korea Panel 3: Dr. Nigel Stevenson, World Council on Isotopes (WCI) / Exubrion Therapeutics, Inc., United States <u>Conference Hall 3 (C</u>	<u>CH3)</u>
10:00 - 10:30	Refreshment Break Conference Hall 1 (Conference Hal	<u>;H1)</u>
10:30 – 11:30	Closing Plenary: U.S. Department of Energy Nuclear Science and Technology Applications - Current and future status Dr. Rita Baranwal, U.S. Department of Energy, United States Conference Hall 3 (Conference Hall 3 (Conferenc	<u>CH3)</u>
11:30 – 12:00	Closing Speech: 1. Prof. Jong Kyung Kim, World Council on Isotopes (WCI) / Hanyang University, South Korea 2. Representative of Malaysia Convention & Exhibition Bureau (MyCEB) Conference Hall 3 (Conference Hall 3 (Conferen	<u>CH3)</u>
12:00 - 14:30	Lunch Break and Friday Prayer Conference Hall 2 (Conference Hall 2 (Co	:H2)
14:30 - 17:00	Technical Visit to Malaysian Nuclear Agency	
17:00	End of Conference	

Student Mini Conference

Wednesday, 5th February 2020 Meeting Room 3030 (MR303)

Time	Student Mini Conference				
09:00 - 09:15	Opening Ceremony YBhg. Dr. Mohd Nor Azman Hassan, TKSU, STI ME	STECC			
09:15 – 10:00	Keynote Speaker: Nurturing STEM awareness in Nuclear Isotopes: CYG Perspective Datuk Dr. Daud Mohamad, King Abdulaziz University, Saudi Arabia				
10:00 - 10:30	Break				
10:30 – 10:50	OP-01: Baicalein-rich fraction as a potential radiosensitizer or radioprotective for HDR brachytherapy: A preliminary study Noor Nabilah Talik Sisin, Malaysia	Poster / Student Creativity, Invention and Innovation			
10:50 – 11:10	OP-02: The effects of external beam radiotherapy (EBRT) in combination with high dose rate (HDR) brachytherapy to the cancer cell Emirah Zain, Malaysia	Competition (Judging session: 10.00am - 1.00pm)			
11:10 – 11:30	OP-03: Potential combination of AuNPs with kilovoltage synchrotron beam: radiobiological evaluation Raizulnasuha Ab Rashid, Malaysia				
11:30 – 11:50	OP-04: Breeding new rice variety with bacterial leaf blight (BLB) resistance using ion beam irradiation Nor'Aishah Hasan, Malaysia				
11:50 – 12:10	OP-05: The formation of radioactive gold nanoparticles and bimetallic gold nanoparticles by neutron capture from various sizes of gold nanoparticles for cancer therapeutic application Fazizulafizi bin Madin, Malaysia				
12:10 – 12:30	OP-06: Effect of nanoparticle size on radiosensitization effect and ROS generation in human colon carcinoma cell (HCT-116) after irradiated with 150 MeV proton beam Noor Nabilah Talik Sisin, Malaysia				
13:00 - 14:00	Lunch Break and Poster Viewing				

Student Mini Conference (Cont'd)

Wednesday, 5th February 2020 Meeting Room 3030 (MR303)

14:00 – 14:20	OP-07: The effect of bismuth oxide nanoparticles on radiation-induced bystander effect (RIBE) in MCF-7 cells after acute and fractionated dose irradiated with high dose rate (HDR) brachytherapy Ir-192 source Nur Hamizah Mohd Zainudin, Malaysia	Poster / Student Creativity, Invention and Innovation Competition (Judging session:
14:20 – 14:50	OP-08: Development of new rice variety with bacterial leaf blight (BLB) resistance by using gamma irradiation Aliif Ihsaan Akmal Shukri, Malaysia	10.00am - 1.00pm)
14:50 – 15:10	OP-09: Nanostructured lipid carrier co-loaded with thymoquinone as diagnostic agent: radiolabelling with Tc99m and in vivo biodistribution in normal rats Fatin Hannani Zakarial Ansar, Malaysia	
15:10 – 15:30	OP-10: Radioactive Samarium-153 polystyrene microspheres for transarterial radioembolization of primary and secondary hepatic malignancies Hun Yee Tan, Malaysia	
15:30 - 16:00	Break	
16:00 – 16:20	OP-11: In vitro CT imaging of cancer cells with gold nanoparticles Amirah Jamil, Malaysia	Poster / Student Creativity, Invention and
16:20 – 16:50	OP-12: Nutrient allocation in tropical seaweed: dual stable isotope analysis Natasha Arina, Malaysia	Innovation Competition (Judging session:
16:50 – 17:00	 Closing Ceremony & Prize Giving Best Oral Presentation Awards Best Poster, Creativity, Invention and Innovation Awards President of MARPA 	10.00am - 1.00pm)

Poster Listing

POSTER BOARD #	Organization	Presenting Auhtor	Country	Abstract Theme	Abstract Topic
MP-01	Malaysian Nuclear Agency	Kuan-ying Kok	Malaysia	Agriculture & Environment Environmental Fate and Identification of Radionuclides	ASSESSMENT OF URANIUM IN SOILS OF KOTA SAMARAHAN, SARAWAK
MP-02	Ulsan National Institute Of Science And Technology	Si Hyung Seong	South Korea	Agriculture & Environment Environmental Fate and Identification of Radionuclides	COMPARISON OF RESOLUTION FOR AIRBORNE ALPHA DETECTION SYSTEM ACCORDING TO PIPS DETECTOR ACTIVE AREA
MP-03	KAIST , Daejeon , South Korea	Pei Jia Pok	South Korea	Agriculture & Environment Environmental Fate and Identification of Radionuclides	EXAMINATION OF THE POSSIBILITY OF NUCLEAR- RENEWABLE HYBRID ENERGY SYSTEMS IN MALAYSIA
MP-04	INFN-LNL	Gaia Pupillo	Italy	Industry Accelerator Production of Radionuclides	HIGH ENERGY VIBRATIONAL POWDER PLATING FOR ISOTOPICALLY ENRICHED TARGET PREPARATION
MP-05	University Of Birmingham	Ross Allen	United Kingdom	Industry Accelerator Production of Radionuclides	PRODUCTION OF NOVEL RADIOTRACERS TO CHARACTERISE TECHNETIUM-99 IN SPENT NUCLEAR FUEL.
MP-06	Yonsei University	MinKyu Baek	South Korea	Industry Application of Nuclear Techniques to National Security and Treaty Monitoring	DESIGN OF RADIATION MONITORING SYSTEM FOR NUCLEAR MATERIAL STORAGE : MONTE CARLO STUDY
MP-07	Malaysian Nuclear Agency	Hishamud din Husain	Malaysia	Industry Application of Nuclear Techniques to National Security and Treaty Monitoring	DEVELOPMENT OF NUCLEAR FORENSICS CAPABILITY IN MALAYSIA
MP-08	Nrc "kurchatov Institute"	Tatiana Udalova	Russian Federation	Manufacturing Manufacturing and Production of Isotopes	MANUFACTURING OF 99MO BASED ON THE SZILARD – CHALMERS EFFECT
MP-09	China Isotope & Radiation Corporation	Hou Yanni	China	Manufacturing Manufacturing and Production of Isotopes	OPTIMAZATION OF IODINE- 123 ISOTOPE TECHNOLOGY
MP-10	Malaysian Nuclear Agency	Siti Selina Abdul Hamid	Malaysia	Manufacturing Manufacturing and Production of Isotopes	PREPARATION FOR THE PRODUCTION OF SODIUM- IODIDE I-131 CAPSULE IN MALAYSIA

POSTER BOARD #	Organization	Presenting Author	Country	Abstract Theme	Abstract Topic
MP-11	Malaysian Nuclear Agency	Siti Selina Abdul Hamid	South Korea	Manufacturing Manufacturing and Production of Isotopes	PREPARATION FOR THE PRODUCTION OF SODIUM- IODIDE I-131 CAPSULE IN MALAYSIA
MP-12	Ulsan National Institute of Science and Technology	Woo Nyun Choi	Taiwan	Manufacturing Manufacturing and Production of Isotopes	THE SEPARATION OF 14C BY USING SPENT RESIN MIXTURE TREATMENT DEVICE
MP-13	Shu-zen Junior College of Medicine and Management	Chien Yi Ting	Malaysia	Medicine Alternative methods (other than reactor and cyclotron) for production of medical isotopes	EVALUATION PHOTON AND NEUTRON RADIATION DOSE OF SELF-SHIELD CYCLOTRON USING OPTICALLY STIMULATED LUMINESCENCE DOSIMETER
MP-14	Agensi Nuklear Malaysia	ABDUL RAHIM RAHIMAH	South Korea	Medicine Alternative methods (other than reactor and cyclotron) for production of medical isotopes	QUALITY CONTROL ON SODIUM IODINE I-131 CAPSULE PRODUCED BY AGENSI NUKLEAR MALAYSIA
MP-15	Korea Atomic Energy Research Institute	Jun Young Lee	Malaysia	Medicine Application in Nuclear Medicine	89ZR INCORPORATED SPINDLE- SHAPED NANOCLUSTER WITHOUT CHELATOR FOR IN VIVO BEHAVIOR
MP-16	MALAYSIAN NUCLEAR AGENCY	KHEI CHOONG KHONG	South Korea	Medicine Application in Nuclear Medicine	A SURVEY ON CURRENT USAGE AND FUTURE DEMAND OF MEDICAL RADIOISOTOPES AND RADIOPHARMACEUTICALS IN MALAYSIA
MP-17	Kyung Hee University	Kwang Pyo Kim	Malaysia	Medicine Application in Nuclear Medicine	ANALYSIS OF DIAGNOSTIC NUCLAER MEDICINE UASGE IN KOREA
MP-18	Malaysian Nuclear Agency	Noraisyah Mohd Yusof	South Korea	Medicine Application in Nuclear Medicine	BACTERIAL ENDOTOXIN LIMIT TEST ON EDTMP KIT USING DIFFERENT DILUTION FACTOR OF SAMPLES
MP-19	Yonsei Univ.	Hyun Joon Choi	China	Medicine Application in Nuclear Medicine	EXPERIMENTAL FEASIBILITY STUDY OF INTEGRATED PROMPT GAMMA IMAGING AND POSITRON EMISSION TOMOGRAPHY SYSTEM FOR IN VIVO PROTON DOSE VERIFICATION
MP-20	China Isotope & Radiation Corporation	chao Liu	China	Medicine Application in Nuclear Medicine	PRELIMINARY BIODISTRIBUTION STUDY OF 177LU-DOTATATE IN NORMAL MICE

POSTER BOARD #	Organization	Presenting Author	Country	Abstract Theme	Abstract Topic
MP-21	China Isotope & Radiation Corporation	Jin Du	China	Medicine Application in Nuclear Medicine	PREPARATION AND PRELIMINARY BIODISTRIBUTION STUDY OF 64CU- NODAGA-NOC
MP-22	Batan Indonesia	Teguh Hafiz Ambar Wibawa	Indonesia	Medicine Application in Nuclear Medicine	PREPARATION OF 131I-APIGENIN AS RADIOTRACER CANDIDATE IN THE DEVELOPMENT OF CANCER DRUGS FROM NATURAL COMPOUND
MP-23	SPIC Central Research Institute	Jing Fu	China	Medicine Application in Nuclear Medicine	PRESENT STATUS OF NUCLEAR MEDICINE IN CHINA
MP-24	Shu-zen Junior College of Medicine and Management	Chien Yi Ting	Taiwan	Medicine Application in Nuclear Medicine	THE EVALUATION OF HIGHLY SUSPECTED CARDIOVASCULAR DISEASE PATIENTS IN TC-99M MIBI DYNAMIC SPECT/CT
MP-25	World Council on Isotopes (WCI) / Exubrion Therapeutics, Inc.	Nigel Stevenson	United States	Medicine Application of Isotopes in Therapeutic Nuclear Medicine	ELECTRON THERAPY HORMESIS IN INFLAMMATORY VASCULAR DISEASE
MP-26	Malaysian Nuclear Agency	Khei Choong Khong	Malaysia	Medicine Application of Isotopes in Therapeutic Nuclear Medicine	FORMULATION AND QUALITY CONTROL STUDIES OF EDTMP FREEZE-DRIED KIT FOR THE PREPARATION OF 153SM-EDTMP
MP-27	The Catholic University Of Korea	Sang-won Kang	South Korea	Medicine Application of Isotopes in Therapeutic Nuclear Medicine	INDEPENDENT DOSE CALCULATION TOOL FOR IMAGE-GUIDED HIGH- DOSE-RATE BRACHYTHERAPY
MP-28	Elim-global Inc.	Dukwon Kang	South Korea	Medicine Production of PET Radionuclides	F-18 CAPTURE EFFICIENCY AND CONCENTRATION MEASUREMENT METHOD BY ACTIVATED CARBON FIBER(ACF) FILTER
MP-29	Horia Hulubei National Institute for Physics and Nuclear Engineering	Dana Niculae	Romania	Medicine Production of PET Radionuclides	FULLY-AUTOMATED PRODUCTION OF COPPER RADIOISOTOPES IN A VARIABLE ENERGY CYCLOTRON
MP-30	Korea Institute Radiological and Medical Sciences	Sang Jin Han	South Korea	Medicine Production of PET Radionuclides	MASS PRODUCTION STUDY OF ZR- 89 BY DEUTERON BEAM OF 50 MEV CYCLOTRON

POSTER BOARD #	Organization	Presenting Author	Country	Abstract Theme	Abstract Topic
MP-31	Korea Atomic Energy Research Institute	Yeong Su Ha	South Korea	Medicine Production of PET Radionuclides	OPTIMIZATION OF 82SR PURIFICATION PROCEDURE TO ESTABLISH THE MOST SUITABLE PROCEDURE FOR OUR FACILITY
MP-32	CIRC	Yang Wenbin	China	Medicine Production of PET Radionuclides	TECHNOLOGY OPTIMIZATION OF CYCLOTRON RADIONUCLIDE CU-64
MP-33	Sungkyunkwan University	Mitra Ghergherehc hi	South Korea	Medicine Production of PET Radionuclides	VANADIUM-48 PRODUCTION YIELD INVESTIGATION USING TIO2 NANOPARTICLES PRODUCED BY LASER ABLATION
MP-34	KAERI	Sang Hyun Park	South Korea	Medicine Radioisotopes in Molecular Imaging and Personalized Medicine	A NOVEL AND EFFICIENT RADIOLABELING OF BIOMOLECULES USING A CYCLOADDITION REACTION
MP-35	Shu-zen Junior College of Medicine and Management	Chien Yi Ting	Taiwan	Medicine Radioisotopes in Molecular Imaging and Personalized Medicine	A NOVEL FEATURE DESCRIPTION FOR IDENTIFICATION OF TC-99M MDP WHOLE BODY BONE SCAN METASTASIS IMAGES BY COMPUTER AIDED DIAGNOSIS (CAD) SYSTEM
MP-36	Kirams	Tae Sup Lee	South Korea	Medicine Radioisotopes in Molecular Imaging and Personalized Medicine	HER2 PET IMAGING BIOMARKER FOR 17-DMAG TREATMENT IN BREAST CANCER MODEL
MP-37	King Faisal Specialist Hospital And Research Center	Ibrahim Aljammaz	Saudi Arabia	Medicine Radioisotopes in Molecular Imaging and Personalized Medicine	RADIOISOTOPES IN THE ERA OF PRECISION MEDICINE: SAUDI ARABIA EXPERIENCE
MP-38	Malaysian Nuclear Agency	Yen Ng	Malaysia	Medicine Radioisotopes in Molecular Imaging and Personalized Medicine	RADIOLABELLING, QUALITY CONTROL AND BIODISTRIBUTION STUDIES OF NOVEL RADIOLABELED BIPHOSPHANATE AGENT FOR DETECTION OF BONE METASTASES
MP-39	Korea Atomic Energy Research Institute	Won-je Cho	South Korea	Medicine Radioisotopes in Molecular Imaging and Personalized Medicine	THE SYNTHESIS METHOD OF NANOPARTICLES USING RADIO- ISOTOPES FOR PET-MRI CONTRAST AGENT
MP-40	Kaeri	Seung-kon Lee	South Korea	Medicine Reactor Production of Medical Isotopes	PROGRESS OF FISSION MO-99 PRODUCTION TECHNOLOGY DEVELOPMENT FOR THE NEW RESEARCH REACTOR OF KOREA

POSTER BOARD #	Organization	Presenting Author	Country	Abstract Theme	Abstract Topic
MP-41	Malaysian Nuclear Agency	Azahari Kasbollah	Malaysia	Medicine Reactor Production of Medical Isotopes	SAMARIUM-153 PRODUCTION USING (N, GAMMA) REACTION AT PUSPATI TRIGA RESEARCH REACTOR
MP-42	Malaysian Nuclear Agency	Mohamed Zaffar Ali Mohamed Amiroudine	Malaysia	Poster - Industry	IRIDIUM-192: THE NUKLEAR MALAYSIA EXPERIENCE
MP-43	Yonsei University	Hankyeol Song	South Korea	Poster - Medical	DEVELOPMENT OF PULSE RECONSTRUCTION METHOD FOR FAST TIMING PICKOFF OF SMALL ANIMAL PET SYSTEM
MP-44	Korea Institute Of Nuclear Safety	Young Sub Lee	South Korea	Poster - Medical	REGULATORY ANALYSIS OF LU-177 IN RADIONUCLIDE THERAPY IN REPULIC OF KOREA
MP-45	Università Degli Studi Di Milano & Infn, L.a.s.a. Laboratory	Flavia Groppi	Italy		HEALTH PHYSICS AND DISSEMINATION OF SCIENTIFIC CULTURE AT MILANO UNIVERSITY AND INFN, ITALY
MP-46	Vicente Sotto Memorial Medical Center (VSMMC)	Henry Canizares	Philippines		RADIATION EMISSION RATE OF PET ACQUISITION IN ROUTINE WHOLE- BODY 18F-FDG PET-CT PROCEDURES

Poster Listing (Student Mini Conference)

POSTER BOARD #	Organization	Presenting Author Names	Country	Abstract Topic
SCP-01	Taylor's University	Mr Adam Effendi Ashaari	Malaysia	FABRICATION OF BISMUTH MICROPARTICLES-LOADED POLYMER COMPOSITE FOR ADDITIVE MANUFACTURING OF RADIATION SHIELDING
SCP-02	Universiti Kebangsaan Malaysia	Mr Ahmad Daniel Ahmad	Malaysia	APPLICATION OF TIN SLAG AND CATHODE-RAY TUBE GLASS IN THE MIXTURE OF ROAD
SCP-03	Universiti Kebangsaan Malaysia	Ms Ahmad Idham	Malaysia	USES OF ZEOLITE AS RADIONUCLIDE ABSORBENT IN LOW LEVEL EFFLUENT TREATMENT PLANT
SCP-04	Universiti Kebangsaan Malaysia	Ms Ahmad Idham	Malaysia	INFLUENCE OF GAMMA IRRADIATION ON VOLATILE FLAVOUR PROFILES AND PHYSICOCHEMICAL ATTRIBUTES OF NAVEL ORANGES (CITRUS SINESIS L.) UNDER POSTIRRADIATION STORAGE
SCP-05	Universiti Kebangsaan Malaysia	Ms Farah Arissa Halim	Malaysia	MEASUREMENT OF THE URANIUM AND THORIUM IN BLOOD STREAM BY IN VITRO METHOD. THE DATA WILL BE STIMULATED BY USING SAAM II BIOKINETIC MODELLING
SCP-06	Universiti Kebangsaan Malaysia	Ms Husna Nabeela	Malaysia	QUANTIFICATION ANALYSIS OF GAMMA SPECT/CT SCAN IMAGING USING RADIONUCLIDE TC-99M, LU-177 AND I-131
SCP-07	Universiti Kebangsaan Malaysia	Mr Haziq Hassan	Malaysia	APPLICATIONS OF NUCLEAR SECURITY METHODOLOGY IN DEVELOPMENT OF PHYSICAL PROTECTION SYSTEM
SCP-08	Universiti Kebangsaan Malaysia	Ms Jayasuria Ravinthiran	Malaysia	RADIATION EFFECT TOWARDS BIODEGRADATION OF LOW-DENSITY POLYETHYLENE (LDPE) PLASTIC
SCP-09	Universiti Kebangsaan Malaysia	Ms Kavipriya Asokan	Malaysia	THE EFFECTS OF GAMMA RADIATION ON CHEMICAL PROPERTIES OF CURCUMIN AT DOSES OVER 100 GY
SCP-10	Universiti Kebangsaan Malaysia	Ms Nur Hanani Zulkifli	Malaysia	RADIATION TERRITORY USING FIBRE OPTIC AT CYCLOTRON FACILITIES

Poster Listing (Student Mini Conference)

POSTER BOARD #	Organization	Presenting Author Names	Country	Abstract Topic
SCP-11	Universiti Kebangsaan Malaysia	Mr Mohamad Shatifi	Malaysia	THE EFFECT OF TEMPERATURE AND PH TO THE MODIFIED EXPANDED TETRAFLUOROETHYLENE-G-AAC-CO- HEMA
SCP-12	Universiti Teknologi Malaysia	Mr Mohd Shahrul Nizam Salleh	Malaysia	RADIATION INDUCED SYNTHESIS AND FUNDAMENTALS CHARACTERIZATION OF SILVER NANOPARTICLES ON PULLULAN
SCP-13	Universiti Putra Malaysia	Ms Fatin Hannani Zakarial Ansar	Malaysia	NANOSTRUCTURED LIPID CARRIER CO- LOADED WITH THYMOQUINONE AS DIAGNOSTIC AGENT: RADIOLABELLING WITH TC99M AND IN VIVO BIODISTRIBUTION IN NORMAL RATS
SCP-14	Universiti Kebangsaan Malaysia	Ms Natasha Arina	Malaysia	NUTRIENT ALLOCATION IN TROPICAL SEAWEED: DUAL STABLE ISOTOPE ANALYSIS
SCP-15	Mjiit Utm Kl	Mrs Zatil Izzah Ahmad Tarmizi	Malaysia	THERMAL AND DEGRADATION ANALYSIS OF ELECTROSPUN BASED POLYURETHANE PREPARED USING RIG PROCESS
SCP-16	Universiti Teknologi Mara Cawangan Negeri Sembilan (Kampus Kuala Pilah)	Mr Aliif Ihsaan Akmal Shukri	Malaysia	DEVELOPMENT OF NEW RICE VARIETY WITH BACTERIAL LEAF BLIGHT (BLB) RESISTANCE BY USING GAMMA IRRADIATION
SCP-17	UiTM	Mr Luqmanulhakim Suhaimi	Malaysia	BREEDING NEW TARO VARIETY WITH HIGH YIELD AND REDUCED OXALATE CONTENT USING CHRONIC GAMMA IRRADIATION
SCP-18	Universiti Kebangsaan Malaysia	Ms Siti Nurdiyana Yusof	Malaysia	IDENTIFICATION OF BLAST RESISTANCE RESPONSIVE GENES IN MAHSURI MUTANT

Exhibition Layout and Exhibitor Listing

TH INTERNATIONAL CONFERENCE

03 - 07 February 2020

ON ISOTOPES

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Kuala Lumpur Convention Centre **(KLCC)**

Venue: Conference Hall 1 (CH1), Level 3



Company	Booth No.
ACSI	12
Center of Molecular Research	06
CGN Dasheng Technology Co., Ltd.	05
China Isotope & Radiation Association	04
China Isotope & Radiation Corporation	03
Esco Micro (M) Sdn Bhd	14
HG Solution Sdn Bhd	02
ITM	16
JSC Isotope ROSATOM	17
Malaysian Nuclear Agency	18 & 19
Radioisotope Centre POLATOM	15
RCA	13
SEC Co. Ltd.	07
STERIS	01
Tracerco Asia Sdn Bhd	11
Volten International	10
World Council on Isotopes (WCI)	20

Exhibitor Information



Advanced Cyclotron Systems Inc. (ACSI) Booth No. 12

Advanced Cyclotron Systems, Inc. (ACSI) is a world leader in the design and manufacturing of cyclotron systems, with over 25 years of experience and more than 60 cyclotron systems installed worldwide. ACSI offers a full spectrum of cyclotron systems ranging from PET cyclotrons to medium and high energy accelerators. All ACSI manufactured cyclotrons have variable energy and employ external ion source technology, offering the highest beam current output available on the market.

The versatility, high beam current and exceptional quality of ACSI cyclotrons are the reasons why many of the world's most prestigious universities and research centres, as well as some of the most successful commercial radioisotope producers have chosen ACSI cyclotrons to meet their radioisotope production needs.

Website : www.advancedcyclotron.com Email : info@advancedcyclotron.com Phone No. : +1-604-276-1493



Center of Molecular Research Booth No. 06

Center of Molecular Research or CMR is a Russian isotope production company founded in 1993 and being one of the world's largest manufacturers and suppliers of GMP certified Oxygen-18 water and other enriched stable isotopes such as Xenon-124, Tellurium-124, Nickel-64, Thallim-203, Heavy Water D2O, Zn-64 (used in industry) and others. There are on the list radioactive isotopes as well including the very demanded now Lutetium-177 n.c.a, lodine-125, lodine-131, Samarium-153 and others. Moreover, we supply a wide range of reagent kits, chemicals for PET-tomography and PET- precursors.

For more than twenty years Center of Molecular Research has been a reliable supplier of isotopes for our customers in different industries basically nuclear medicine, science and industry.

Since 2019 CMR together with Portuguese company Fluidomica first in the world has announced turn-key THERANOSTIC COMPLEX for in-house production of Ga-68 / Lu- 177 Radiopharmaceuticals. We succeeded to build manufacturing chain for all components starting from enriched stable isotopes and ending with module synthesis, kits and peptides.

Website : http://isotope-cmr.com/ Email : info@isotope-cmr.com Phone No. : +74956629492



China Isotope & Radiation Association (CIRA) Booth No. 04

China Isotope & Radiation Association (CIRA) is China's most influential professional industry organization specializing in isotope and radiation application, who was founded in 1988. CIRA is the national first class association and is composed of enterprises, universities, research institutions and end users, which engaged in production, manufacture and supply in the isotope and radiation industry.

The mission of CIRA is to promote the safe and beneficial use of isotope and radiation and to contribute to development and commercialization of isotope and radiation technology. Its aim is to promote development and technological progress, and maintain the rights and interests of the whole isotope and radiation industry and its members.

The association consists of Isotope Professional Committee, Radiation Processing Professional Committee, Radiation Medicine and Radiation Protection Committee, Radiation Safety Professional Committee, Consultant Committee and Standardization Committee.

Website : www.cira.net.cn Email : ciraoffice@126.com Phone No. : +86 10 68512630



China Isotope & Radiation Corporation (CIRC) Booth No. 03

China Isotope & Radiation Corporation (CIRC) is the holding subsidiary of China National Nuclear Corporation (CNNC) and the largest nuclear enterprise in the aspects of research and development, manufacture, distribution and service of nuclear products in China. CIRC is mainly engaged in research and application of radioisotope and radiation technology, covering radioisotope preparation by nuclear reactor and cyclotron, radiopharmaceuticals, radioactive source, radiation engineering and processing etc. There are more than 50 production lines capable of supplying over 70 nuclides and 300 kinds of products all together.

CIRC have three radiopharmaceutical manufacturing and research bases located in Beijing, Chengdu and Shenzhen. While in approximate twenty cities, radiopharmacies have been built up developing a nationwide marketing and technical support network.

CIRC expanded its business in recent years by the means of mergers and acquisition and became a listed company in HK stock market on July 6th ,2018.

Website : www.circ.com.cn Email : yangwenbin@circ.com.cn Phone No. : +86 10 68516768

Exhibitor Information (Cont'd)



Esco Micro (M) Sdn Bhd Booth No. 14

The Esco Group of Companies has three main divisions, namely – Esco Life Sciences, Esco Healthcare, and Esco Medical.

Esco Life Sciences is a market leader for laboratory equipment technology, with products for sample preparation, cultivation, analysis, storage, and protection solutions. It also offers chemical research equipment and laboratory thermostatic products.

Esco Healthcare, on the other hand, provides high-quality and dedicated services, equipment packages, and process solutions to support healthcare companies. It has three subdivisions – Esco Pharma, TaPestle Rx, and Esco VacciXcell, all of which aims to provide equipment solutions from discovery to delivery, thereby directly and indirectly progressing occupational safety and healthcare.

Esco Medical is a fertility technologies provider, aiming to help IVF centers to achieve better clinical outcomes.

Website : http://my.escoglobal.com/ Email : malaysia@escoglobal.com Phone No. : +603 5103 8480

Colution

HG Solution Sdn Bhd Booth No. 02

"Providing Solution to Contaminants"

HG SOLUTION SDN BHD, a PETRONAS license company was established on 8th August 2005., HG Solution was formed to specifically provide solution to Contaminants in Oil and Gas and Petrochemical Industries. Managed by highly skilled and experienced professional in upstream and downstream Oils and Gas activities, HG Solution became among the first Malaysian company formed to specializing in providing solution to mercury and other contaminants produced along at upstream and downstream Oil and Gas processing facilities.

HG Solution key activities were designed to provide complete solutions to contaminants to client. The "cradle to grave" solution will give high advantage to Hg Solution as one of the main players worldwide.

Website : http://www.hgsolution.com.my/ Email : info@hgsolution.com.my Phone No. : +603 8926 7102



ITM Isotopen Technologien München AG Booth No. 16

ITM Isotopen Technologien München AG is a privately held biotechnology and radiopharmaceutical group of companies dedicated to the development, production and global supply of targeted diagnostic and therapeutic radiopharmaceuticals and radionuclides for use in cancer treatment. Furthermore, ITM is developing a proprietary portfolio and growing pipeline. ITM's main objectives are to significantly improve outcomes and quality of life for cancer patients while at the same time reducing side effects and improving health economics through a new generation of Targeted Radionuclide Therapies in Precision Oncology.

Website : www.itm.ag Email : info@itm.ag Phone No. : +49 89 329 898 660 0



JSC Isotope / ROSATOM Booth No. 17

Located in Moscow, JSC Isotope is a subsidiary of Rosatom State Atomic Energy Corporation, responsible for distribution and marketing of isotope products, produced by Rosatom manufacturers. For more than 60 years JSC Isotope has been delivering radioactive and stable isotopes for all major applications. Rosatom enterprises are equipped with fission, cyclotron, electromagnetic and gas centrifuge technologies that allow to produce a broad product range. We offer our customers isotope-based products including radiopharmaceuticals, medical generators, industrial sealed radioactive sources as well as raw material. We supply isotope products all over the world by air, sea and land.

Website : http://www.isotop.ru/en/ Email : Isotop@isotop.ru Phone No. : + 7 (495) 981-96-16

Exhibitor Information (Cont'd)



Malaysian Nuclear Agency Booth No. 18 & 19

Agensi Nuklear Malaysia (Nuklear Malaysia), as a premier research and development (R&D) organisation in nuclear science and technology, continues to play an active role and contributes to the implementation and realisation of national science and technology (S&T) policies to ensure it remains a relevant public research institute for the country. With more than three decades operational, Nuklear Malaysia is mature and capable to face the challenges and manage the change efficiently. In line with the current needs and development, a strategic action plan and its implementation has developed to meet the set targets. Nuklear Malaysia has emphasis on building the human capital potential and also ensuring that all activities fits the mainstream S&T and national interest.

Website : https://www.nuclearmalaysia.gov.my/new/index.php Email : ukk@nm.gov.my Phone No. : +603 8911 2000



Radioisotope Centre POLATOM Booth No. 15

POLATOM is a world famous manufacturer and distributor of the radioisotopes applied in medicine, research and development and industry.

POLATOM offers:

- radiopharmaceuticals for diagnosis and therapy
- wide range of radiochemicals
- products for research purposes GMP grade
- sealed radiation sources

The company is engaged in scientific research and development programs in application of radioisotopes in nuclear medicine.

Our products are exported to more than 70 countries all over the world.

The medical production is certified for compliance with (GMP), the area of manufacturing, sales, dispatching and transport of radioactive materials is certified according to PN-EN ISO 9001:2015.

Website : www.polatom.pl Email : polatom@polatom.pl Phone No. : +48 22 2731820

Exhibitor Information (Cont'd)



RCA Booth No. 13

The RCA (Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology for Asia and the Pacific) is an intergovernmental agreement among the International Atomic Energy Agency (IAEA) Member States in the Asia-Pacific region.

Established in 1972, the RCA provides its 22 Government Parties with a framework for collaborative activities to promote the transfer and peaceful application of nuclear science and technology that can contribute to the enhancement of the living conditions and environmental preservation in the region.

Website : www.rcaro.org Email : rcaro@rcaro.org Phone No. : +82 42 866 4154



SEC Co., Ltd. Booth No. 07

SEC is the best inspection system company manufacturing & selling 3D AXI, SEM and LINAC.

Website : https://www.seceng.co.kr/ Email : barobee94@seceng.co.kr Phone No. : +82 31-215-7341



STERIS Booth No. 01

Applied Sterilization Technologies

STERIS Applied Sterilization Technologies (AST) has been committed to providing contract sterilization and laboratory services to the medical device, pharmaceutical, consumer, and industrial communities for over 40 years. Blending industry-advanced technology with a team approach to Customer service, we offer the industry's most comprehensive advantage, encompassing radiation, ethylene oxide sterilization and laboratory services.

Through our global network of 59 global sterilization facilities and laboratories we deliver leading technology to meet our Customers' needs. With customized programs built around client satisfaction, Customers receive can-do solutions at every possible touch point, maximizing their return on investment.

Website : https://www.steris-ast.com Email : ast_info@steris.com Phone No. : +603 4415 2111



Tracerco Asia Sdn Bhd Booth No. 11

The clear choice for radiation safety

Tracerco offers a wide range of radiation monitors to measure radiation dose rate or monitor process and environmental contaminants in a number of applications. These include Oil & Gas, NDT, nuclear, CBRNe, industrial research and educational sectors, medical and life sciences, and environmental and waste management industries.

Our intrinsically safe radiation monitors function safely in the presence of explosive gas mixtures. We also provide non-Intrinsically safe versions with the same functionality, for use in less-challenging environments.

Website : https://www.tracerco.com Email : tracerco.asia@tracerco.com Phone No. : +603-7803 4622

Exhibitor Information (Cont'd)



Volten International Booth No. 10

Volten International is a 100% Bumiputra Company and operate at Puchong Selangor and in March will move to its own building at Wisma Volten Shah Alam. Volten International imported high technology Extract 10:1 black ginger with its active ingredients METHOXYFLAVONE & BIOFLAVONAIDS and it's role in manufacturing and producing products based on black ginger namely DR4 capsule, DR\$ liquid and Vcafe which is Best Seller Products and Quality in Malaysia.

Fast growing company for consumer based products with vast market penetrate in Cambodia and will expend to Thailand and Indonesia very soon and the whole of ASIAN country in the near future.

WE DELIVER THE BEST.

Website : https://www.asiaemall.com Email : yem_ibm@yahoo.com Phone No. : +6013 3945 682



World Council on Isotopes (WCI) Booth No. 20

The World Council on Isotopes (WCI) was founded in 2008 and has a fast-growing and highly diverse membership, representing a broad range of interest and perspectives of the R&D, business, industrial and governmental sector.

Since it was established, WCI responded to the identified need to improve interactions among the diversity of role-players within the global isotope community.

Website : http://www.wci-ici.org/ Email : secretary@wci-ici.org Phone No. : +82-3490-7122

ACKNOWLEDGEMENT







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Harnessing Isotopes for Improved Quality of Life