

1st Sunway-Asian/Oceania Radiation Physics Networking Workshop

and International Radiation Physics Society 5th International Forum on Advances in Radiation Physics (IFARP-5)

Updates on the recent radiation physics developments in healthcare and industry

Committee: Distinguished Prof. David A. Bradley, *Chair*
Prof. Mayeen U. Khandaker, Dr. Chew Ming Tsuey, Dr. Lam Siok Ee

Date: 27 Nov. 2022
Time: 3 pm – 7 pm
Venue: Sunway Resort

Date: 28 – 29 Nov. 2022
Time: 8 am – 5 pm
Venue: GC Hall 1, Sunway University

Programme

27 November 2022, Sunday, hybrid presentation

3:00 p.m. – 3:30 p.m.	Prof. Mohammed Alkhorayef, King Saud University, Saudi Arabia
3:30 p.m. – 4:00 p.m.	Prof. Meshari Al-Nuaimi, Kuwait Cancer Control Centre, Kuwait
4:00 p.m. – 4:30 p.m.	Assoc. Prof. Saad Abdulaziz Saad Aldawood, King Saud University, Saudi Arabia
4:30 p.m. – 5:00 p.m.	Prof. Abdelmoneim Adam Sulieman, Prince Sattam bin Abdulaziz University, Saudi Arabia
5:00 p.m. – 5:30 p.m.	Asst. Prof. Shyma M. Alkhateeb, King Abdulaziz University, Saudi Arabia
5:30 p.m. – 6:00 p.m.	Dr. Majdi Alnowaimi, King Abdulaziz University, Saudi Arabia
6:00 p.m. – 6:30 p.m.	Asst. Prof. Amal Alqahtani, University of Imam Abdulrahman Bin Faisal, Saudi Arabia
6:30 p.m. – 7:00 p.m.	Asst. Prof. Amjad Alyahyawi, University of Ha'il, Saudi Arabia

28 November 2022, Monday, hybrid presentation

8:30 a.m. – 9:00 a.m.	Registration and Breakfast
9:00 a.m. – 9:30 a.m.	Opening Remarks by Distinguished Prof. David Andrew Bradley, Sunway University
9:30 a.m. – 10:00 a.m.	Prof. Christopher Chantler, University of Melbourne, Australia
10:00 a.m. – 10:30 a.m.	Prof. Wahyu Srigutomo, Bandung Institute of Technology, Indonesia
10:30 a.m. – 10:45 a.m.	Tea break
10:45 a.m. – 11:15 a.m.	Prof. Suhairul Hashim, Universiti Teknologi Malaysia, Malaysia
11:15 a.m. – 11:45 a.m.	Assoc. Prof. Ung Ngie Min, University of Malaya, Malaysia
11:45 a.m. – 12:15 p.m.	Dr. Chanh Tran, La Trobe University, Australia
12:15 p.m. – 12:45 p.m.	Asst. Prof. Phannee Saengkaew, Chulalongkorn University, Thailand
12:45 p.m. – 2:00 p.m.	Lunch
2:00 p.m. – 2:30 p.m.	Welcoming Remarks by CEO of Sunway Education Group, Dato' Prof. Elizabeth Lee, President of Sunway University, Prof. Sibrandes Poppema, Provost of Sunway University, Prof. Abhimanyu Veerakumarasivam, Dean, School of Engineering and Technology, Prof. Serge Demidenko, Director of Nuclear Security IAEA (ret.), Y.M. Raja Dato' Abdul Aziz Raja Adnan
2:30 p.m. – 3:00 p.m.	Dr. Hoang Sy Minh Tuan, Thu Dau Mot University, Vietnam
3:00 p.m. – 3:30 p.m.	Dr. Freddy Haryanto, Bandung Institute of Technology, Indonesia
3:30 p.m. – 3:45 p.m.	Tea break
3:45 p.m. – 4:15 p.m.	Prof. Bledwyn Jones, University of Oxford, United Kingdom
4:15 p.m. – 4:45 p.m.	Prof. Andy Nisbet, University College London, United Kingdom
6:00 p.m. – 8:00 p.m.	Dinner at Sunway Resort Hotel

29 November 2022, Tuesday, hybrid presentation

8:30 a.m. – 9:00 a.m.	Breakfast
9:00 a.m. – 9:30 a.m.	Prof. Md. Moazzem Hossain Miah, University of Chittagong, Bangladesh
9:30 a.m. – 10:00 a.m.	Mr. Delmar Arzabal, Rizal Medical Centre & De La Salle University, Philippines
10:00 a.m. – 10:30 a.m.	Prof. Ir. Hairul Azhar Abdul Rashid, Multimedia University, Malaysia
10:30 a.m. – 10:45 a.m.	Tea break
10:45 a.m. – 11:15 a.m.	Prof. Mayeen Uddin Khandaker, Sunway University
11:15 a.m. – 11:45 a.m.	Dr. Mohammad Khalis Abdul Karim, Universiti Kebangsaan Malaysia, Malaysia
11:45 a.m. – 12:15 p.m.	Mr. Lee Hee Siang, Cancer Centre, Sunway Medical Centre, Malaysia
12:15 p.m. – 12:45 p.m.	Assoc. Prof. Noramaliza Mohd Noor, Universiti Putra Malaysia, Malaysia
12:45 p.m. – 1:00 p.m.	Dr. Mohd Hafiz Mohd Zin, Universiti Sains Malaysia, Malaysia
1:00 p.m. – 2:00 p.m.	Lunch
2:00 p.m. – 2:15 p.m.	Assoc. Prof. Rafidah Zainon, Universiti Sains Malaysia, Malaysia
2:15 p.m. – 2:45 p.m.	Dr. Siti Fairus Abdul Sani, University of Malaya, Malaysia
2:45 p.m. – 3:15 p.m.	Prof. Ts. Faizal K.P. Kunchi Mohamed, Universiti Kebangsaan Malaysia, Malaysia
3:15 p.m. – 3:30 p.m.	Tea break
3:30 p.m. – 4:00 p.m.	Prof. Ahmad Taufek Abdul Rahman, Universiti Teknologi MARA, Malaysia
4:00 p.m. – 4:15 p.m.	Closing Remarks by Distinguished Prof. David Andrew Bradley

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Programme Details

27 November 2022, Sunday

3:00 p.m. – 3:30 p.m.	Prof. Mohammed Alkhorayef, King Saud University, Saudi Arabia Assessment of occupational exposure and radiation risks in nuclear medicine departments
3:30 p.m. – 4:00 p.m.	Prof. Meshari Al-Nuaimi, Kuwait Cancer Control Centre, Kuwait
4:00 p.m. – 4:30 p.m.	Assoc. Prof. Saad Abdulaziz Saad Aldawood, King Saud University, Saudi Arabia Novel gamma rays detection technique based on micromechanical system
4:30 p.m. – 5:00 p.m.	Prof. Abdelmoneim Adam Sulieman, Prince Sattam bin Abdulaziz University, Saudi Arabia Evaluation of COVID-19 patient radiation doses from recurrent computed tomography examination
5:00 p.m. – 5:30 p.m.	Asst. Prof. Shyma M. Alkhateeb, King Abdulaziz University, Saudi Arabia Digital radiography retake rates and effect on patient dose
5:30 p.m. – 6:00 p.m.	Dr. Majdi Alnowaimi, King Abdulaziz University, Saudi Arabia
6:00 p.m. – 6:30 p.m.	Asst. Prof. Amal Alqahtani, University of Imam Abdulrahman Bin Faisal, Saudi Arabia Development of borosilicate glass media for neutron sensing
6:30 p.m. – 7:00 p.m.	Asst. Prof. Amjad Alyahyawi, University of Ha'il, Saudi Arabia Thermoluminescence dosimetry in medical diagnostic applications

28 November 2022, Monday

8:30 a.m. – 9:00 a.m.	Registration and Breakfast
9:00 a.m. – 9:30 a.m.	Opening Remarks by Distinguished Prof. David Andrew Bradley, Sunway University A brief overview of CAPRT national and international collaborations
9:30 a.m. – 10:00 a.m.	Prof. Christopher Chantler, University of Melbourne, Australia The debut of the new Hybrid method for the acquisition and analysis of X-ray Absorption Spectra at the Australian Synchrotron, and Australian and Regional opportunities for Joint Research
10:00 a.m. – 10:30 a.m.	Prof. Wahyu Srigutomo, Bandung Institute of Technology, Indonesia Human Resources and Infrastructure in FMIPA ITB to Strengthen the Asian-Oceania Radiation Physics Networking
10:30 a.m. – 10:45 a.m.	Tea break
10:45 a.m. – 11:15 a.m.	Prof. Suhairul Hashim, Universiti Teknologi Malaysia, Malaysia Radiological Dose Assessment to Members of the Public Using Consumer Products Containing Naturally Occurring Radioactive Materials in Malaysia
11:15 a.m. – 11:45 a.m.	Assoc. Prof. Ung Ngie Min, University of Malaya, Malaysia

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11:45 a.m. – 12:15 p.m.	Applications of novel detectors for in vivo dosimetry: UMMC experience Dr. Chanh Tran, La Trobe University, Australia
12:15 p.m. – 12:45 p.m.	Complex Atomic Fine Structure (CAFS)– New Technology at Advanced Synchrotrons Asst. Prof. Phannee Saengkaew, Chulalongkorn University, Thailand
12:45 p.m. – 2:00 p.m.	Development and Synthesis of Materials for Radiation Detection Lunch
2:00 p.m. – 2:30 p.m.	Welcoming Remarks by President of Sunway University, Prof. Sibrandes Poppema, Dean, School of Engineering and Technology, Prof. Serge Demidenko, Director of Nuclear Security IAEA (retd.), Y.M. Raja Dato' Abdul Aziz Raja Adnan
2:30 p.m. – 3:00 p.m.	Dr. Hoang Sy Minh Tuan, Thu Dau Mot University, Vietnam The status of applying irradiation food in Vietnam and the applying 10 MeV e-Beams to Process Textile Dyeing Wastewater from Industry Park
3:00 p.m. – 3:30 p.m.	Dr. Freddy Haryanto, Bandung Institute of Technology, Indonesia Exploring of Transport Particle in Medical LINAC Based on Monte Carlo Simulation
3:30 p.m. – 3:45 p.m.	Tea break
3:45 p.m. – 4:15 p.m.	Prof. Bledwyn Jones, University of Oxford, United Kingdom From Very Low to Ultra-High (FLASH) Dose-Rate BED Estimations
4:15 p.m. – 4:45 p.m.	Prof. Andy Nisbet, University College London, United Kingdom Developments in Medical Radiation Physics at University College London
6:00 p.m. – 8:00 p.m.	Dinner at Sunway Resort Hotel

29 November 2022, Tuesday

8:30 a.m. – 9:00 a.m.	Breakfast
9:00 a.m. – 9:30 a.m.	Prof. Md. Moazzem Hossain Miah, University of Chittagong, Bangladesh Measurement of naturally occurring radioactivity in various samples at Chittagong region of Bangladesh
9:30 a.m. – 10:00 a.m.	Mr. Delmar Arzabal, Rizal Medical Centre & De La Salle University, Philippines Radiation Physics in the Philippine Clinical Setting: Present and Beyond
10:00 a.m. – 10:30 a.m.	Prof. Ir. Hairul Azhar Abdul Rashid, Multimedia University, Malaysia Concept for a real-time distributed optical fiber radiation dosimetry
10:30 a.m. – 10:45 a.m.	Tea break
10:45 a.m. – 11:15 a.m.	Prof. Mayeen Uddin Khandaker, Sunway University

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11:15 a.m. – 11:45 a.m.	Studies of charged particle induced nuclear reactions for production theranostic radionuclides Dr. Mohammad Khalis Abdul Karim, Universiti Kebangsaan Malaysia, Malaysia
11:45 a.m. – 12:15 p.m.	Atmospheric dispersion and dose assessment of Cs-137 from simulated nuclear power plant explosions in South-East Asia Mr. Lee Hee Siang, Cancer Centre, Sunway Medical Centre, Malaysia
12:15 p.m. – 12:45 p.m.	Digital vs Conventional PETCT: Boon and Bane Assoc. Prof. Noramaliza Mohd Noor, Universiti Putra Malaysia, Malaysia
12:45 p.m. – 1:00 p.m.	From Kibo, ISS to Scientists: The return of EVA & IVA SOFPADS Dr. Mohd Hafiz Mohd Zin, Universiti Sains Malaysia, Malaysia
1:00 p.m. – 2:00 p.m.	Digital data in Image Guided-Intensity Modulated Radiotherapy (IG-IMRT): towards automation of Quality Assurance for improved safety and accuracy
2:00 p.m. – 2:15 p.m.	Lunch
2:15 p.m. – 2:45 p.m.	Assoc. Prof. Rafidah Zainon, Universiti Sains Malaysia, Malaysia Evaluation of radiation dose to extremities by using automatic dispenser in dispensing high dose radioiodine
2:45 p.m. – 3:15 p.m.	Dr. Siti Fairus Abdul Sani, University of Malaya, Malaysia Radioimaging of Nanoparticle Contrast Agent Conjugated Iohexol
3:15 p.m. – 3:30 p.m.	Prof. Ts. Faizal K.P. Kunchi Mohamed, Universiti Kebangsaan Malaysia, Malaysia Nano-radiosensitizer delivery system
3:30 p.m. – 4:00 p.m.	Tea break
4:00 p.m. – 4:15 p.m.	Prof. Ahmad Taufek Abdul Rahman, Universiti Teknologi MARA, Malaysia Addressing the dosimetry needs of advanced radiotherapy using 3D radiochromic dosimeters and anthropomorphic phantom Closing Remarks by Distinguished Prof. David Andrew Bradley