



IUPESM World Congress on Medical Physics and Biomedical Engineering 2025
29 September – 4 October 2025
Adelaide Convention Centre

Monday 29 September 2025

08:00	Opening Ceremony										08:00	
10:30	Morning Tea										10:30	
11:00	Headlining Plenary Presentations Dr Lars Juhl Jensen, ZS Discovery, Denmark Prof Anthony Burkitt, University of Melbourne, Australia										11:00	
12:30	Lunch										12:30	
12:45							Sponsored Special Symposium: Elekta				12:45	
13:15											13:15	
14:00	1.1 3D Printing in RO	11.1 Digital Health – Integrity and Security	IUPESM Awardee Presentation Session	Special Symposium: Male mentors working with women in Clinical/Biomedical Engineering	13.8 AI in Biomedical Engineering 1	16.4 Rehabilitation	1.2 QA in Radiation Therapy	9.5 Dosimetry, Calibration and Computational analysis	4.1 MRI Technology and Safety	10.3 Radiation Protection Communication		14:00
14:45									4.2 Alternative Imaging			14:45
15:30	Afternoon Tea										15:30	
16:00	1.23 Detectors in RO 1	11.2 Digital Health – Clinical and Management Systems	IOMP Awardee Presentation Session	22.1 Medical Device Innovation and Regulation	13.9 AI in Biomedical Engineering 2	16.5 Joint Biomechanics	2.5 Patient Dosimetry in Diagnostic Radiology	27.1 Diversity and Inclusion	3.2 Radiomics and Quantification	1.8 Patient Dosimetry, PSQA + Techniques 1	6.3 Treatment Planning and Delivery Optimisation	16:00
16:45										1.10 Patient Dosimetry, PSQA + Techniques 3		16:45
17:30	IOMP Teaching Lecture 1										17:30	
18:30	Break										18:30	
19:00	Welcome Reception										19:00	
20:30	End of Day 1										20:30	

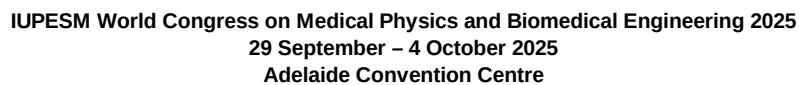
07:00	Morning Run Club													07:00
07:30			Special Symposium: Bio-resilience and BME innovation		Special Symposium: Sustainability of the World Congress on Medical Physics and Biomedical Engineering		Special Symposium: Rehabilitation engineering contributions in public health: Present and future		Special Symposium: Strength in numbers: The power of global medical physics collaborations		AAPM Professional Symposium: On the global impact of the AAPM (American Association of Physicists in Medicine) Task Group reports and technical documents			
08:00											IOMP Teaching Lecture 2		08:00	
08:30													08:30	
09:00	Plenary Presentation Dr Fiona Adshead, Sustainable Healthcare Coalition, United Kingdom													09:00
10:30	Morning Tea													10:30
11:00	1.11 Novel Techniques in Radiation Oncology	13.7 AI/ML In Treatment Planning for Oncology	Special Symposium: High patient radiation doses through imaging and likelihood of new cancers	Special Symposium: A Career in medical physics	IFMBE Young Investigators Award Session - Session 1	6.4 Clinical Applications and Comparative Effectiveness	19.1 Micro/Nano Systems, Active Implants and Biosensors	13.3 AI Large Language Models and Workflow	1.3 Audits 1	5.4 NM: Clinical	7.1 Precision / Functional Treatment Planning and Outcome Prediction		11:00	
11:45							12.2 Virtual and Augmented Reality	13.1 AI in Imaging			7.2 Advanced Imaging and Biomarkers		11:45	
12:30	Lunch												12:30	
12:45							Sponsored Special Symposium: Sun Nuclear						12:45	
13:15													13:15	
14:00	1.16 MR Linac	9.3 Shielding, Monitoring and Environmental Protection	Presidential Symposium: AI and you: How our professional life is changing	26.2B Capacity and Capability for Global Health	IFMBE Young Investigators Award Session - Session 2	10.2 System and Risk Management	22.3 Innovative Medical Devices for Oncology	2.4 Dose Audits in Diagnostic Imaging	13.11 AI in Biomedical Engineering 4	9.5 Dosimetry, Calibration and Computational Analysis	13.6 AI in Radiation Oncology Dose Prediction	7.3 Nanotechnology and Localised Delivery	14:00	
14:45				26.2C Capacity and Capability for Global Health									14:45	
15:30	Afternoon Tea													15:30
16:00	1.5 Imaging in Radiation Therapy 1	1.4 Audits 2	Special Symposium: Health technology assessment in radiotheranostics: Gaps and priorities	Special Symposium: Resilience in radiation oncology: The role of medical physics in times of war and crisis	IFMBE Scientific Challenge	24.1 Education in Radiation Safety and Quality Assurance	Special Symposium: Innovations in medical engineering: From device life cycle to digital intelligence	8.2 Advanced Beam and Particle Therapy	17.1 Endoscopy and Robotic Surgery	9.4 Radiation - Safety Policy, Risk and Health Effects	6.2 Radiobiology and Emerging Particle Models	24.5 BME Education	IUPESM 2031	16:00
17:30	IOMP Teaching Lecture 3													17:30
18:30														18:30
19:00	End of Day 2													19:00

Wednesday 1 October 2025													
07:00	Morning Run Club											07:00	
07:30												07:30	
07:45												07:45	
08:00		Special Symposium: Novel sensors and analysis methods for mobile electroencephalography	Special Symposium: Soft wearable robotics for rehabilitation	Special Symposium: Celebrating innovation and excellence: The CE Division Trajectory Award	Special Symposium: Global partnerships in medical physics: Driving diversity and sustainability through science diplomacy	Sponsored Special Symposium: Varian			IOMP Teaching Lecture 4	08:00			
08:15											08:15		
08:30											08:30		
09:00	Plenary Presentation Prof Simon Cherry, University of California, Davis, United States											09:00	
10:30	Morning Tea											10:30	
11:00	1.9 Patient Dosimetry, PSQA + Techniques 2	1.12 IMRT VMAT	IFMBE General Assembly	Toh Siew Lok Student Design Competition	Workshop: GEANT4 bio-medical modelling	5.2 NM: Modeling and Analysis	14.1 HTTA	26.1A Sustainable and Affordable Technologies	Special Symposium: Rehabilitation robotics: What are we doing now and what will the future hold?	18.2 Diagnostic and Therapeutic Instrumentation	24.2 Curriculum Design, Accreditation and Assessment	23.1 Clinical Engineering Systems	11:00
12:30	Lunch											12:30	
14:00	1.7 Commissioning + Superficial	1.21 SABR/SRS 1	Keynote Presentation: Prof Jun Li, National University of Singapore	Special Symposium: Medical physics: Accreditation, certification, registration and continued education	Workshop: GEANT4 bio-medical modelling	6.1 Detectors, Dosimeters, Instrumentation	5.3 NM: Dosimetry and Theranostics	26.2A Capacity and Capability for Global Health	16.1 Prosthetics and Assistive Tech	8.5A BME Modelling and Simulation 1	24.3 Asia Pacific Education and Training Case Studies	13.10 AI in Biomedical Engineering 3	14:00
14:45										8.5B BME Modelling and Simulation 2			14:45
15:30	Afternoon Tea											15:30	
16:00	9.1 Cellular Radiosensitivity and Radiological Impact	1.22 SABR/SRS 2	Joint AAPM/ACPSEM Special Symposium: FLASH beam dosimetry: Challenges and opportunities	Special Symposium: Empowering young researchers, early career professionals, and students to conduct innovative, socially impactful projects using emerging technologies	Workshop: GEANT4 bio-medical modelling	13.2 AI and Image Segmentation	7.4 Emerging Radiation Delivery Modalities	10.1 Radiation Safety and Quality	2.2 Quality Control	8.1A Dose Calculation and Verification (A)	23.2 Role of the Clinical Engineer		16:00
16:45	9.2 Experimental Models and Pre-Clinical Technologies									8.1B Dose Calculation and Verification (B)			16:45
17:30	IOMP Teaching Lecture 5											17:30	
18:30	Break											18:30	
19:00	Congress Dinner											19:00	
23:00	End of Day 3											23:00	



Program current as of 4 July 2025, subject to change

Thursday 2 October 2025																					
07:00																					
07:30																					
07:45																					
08:00	Special Symposium: Early Career Medical Physics Group (ECMP) of Asia-Oceania Federation of Organizations for Medical Physics (AFOMP)	Special Symposium: Advanced medical science and technology in alternative medicine: Integrating green sustainability and environmental protection	Special Symposium: Medical AI in 20XX – Messages to young investigators	Special Symposium: Ready, willing and able: Professional standards for the emerging now	Special Symposium: SHAPES 4 LMICs (Sustainable Healthcare through Advancement of Physical and Engineering Sciences for LMICs)	Special Symposium: Clinical - Biomedical Engineering (CE-BME) and emerging digital health tools	Special Symposium: Women leaders in biomedical engineering and physics from across the world (panel discussion)	Sponsored Special Symposium: Vision RT	IOMP Teaching Lecture 6												
08:15																					
08:30																					
09:00	Plenary Presentation Dr Jitendra Sharma, Andhra Pradesh MedTech Zone (AMTZ), India																				
10:30	Morning Tea																				
11:00	1.13 Tracking	1.19 Electrons	IUPESM General Assembly	5.5 NM: From Supply to Synthesis	Workshop: Radiation shielding for medical linear accelerators	1.17 Brachytherapy 1	15.1 Biosignals - Cardiac	12.1 3D Printing	13.12 AI in Biomedical Engineering 5	2.1 Clinical Radiology	3.1 Image Quantification Using AI and Machine Learning	Special Symposium: Full circle: The road to an effective circular economy in healthcare	Special Symposium: Full circle: The road to an effective circular economy in healthcare								
12:30	Lunch																				
14:00	1.14 Treatment Planning and Related 1	1.20 Total Body Irradiation	Keynote Presentation: Dr Chia-Ho Hua, St. Jude Children's Research Hospital, United States AND Prof Marie-Catherine Vozenin, Lausanne University Hospital and University of Lausanne, Switzerland	5.1 NM/PET Instrumentation	Workshop: Radiation shielding for medical linear accelerators	13.5 AI Patient Prognosis Prediction in Oncology/Radiomics	15.2 Biosignals - Neurological and Functional	26.1B Sustainable and Affordable Technologies	IFMBE Special Symposium: Biomedical and Clinical Engineering Education Part I: Innovative approaches and global perspectives on curriculum	8.3 Radiobiology, Radiomic and Tumour Modeling	2.3 Imaging Technology	22.2 Novel Medical Devices	22.2 Novel Medical Devices								
14:45										8.4 Imaging Physics and Detector Simulations											
15:30	Afternoon Tea																				
16:00	1.15 Treatment Planning and Related 2	13.4 AI Patient Outcomes Prediction in Oncology	21.2 Tissue Engineering	Special Symposium: When brachytherapy breaks. Learning from medical event reporting: Can we learn from medical event reporting, and can we do better?	Workshop: Radiation shielding for medical linear accelerators	Asia Pacific Research Networking Fellowship	AFOMP Awards Session	16.2 Motion Analysis	IFMBE Special Symposium: Biomedical and Clinical Engineering Education Part II: Global collaboration in education and industry	Special Symposium: Patient radiation safety: A dialogue with referring physicians	Special Symposium: Radiopharmaceutical Therapy (RPT): Personalized dosimetry- based treatment planning, is the goal in sight?	24.4 Capacity Building and Diversity in Africa									
17:00													IOMP Teaching Lecture 7	Student Town Hall Meeting							APSIG Trivia Night
17:30																					
18:30																					
19:00	End of Day 4																				



Friday 3 October 2025									
07:00	Morning Run Club							07:00	
07:30		Special Symposium: Indigenously developed 3D printed radiotherapy treatment accessories for clinical application	Special Symposium: Medical Physics for World Benefit: Can a small organisation make a difference?	Special Symposium: Lighting the way: Novel uses of surface guidance in radiation therapy	Special Symposium: Bridging global clinical engineering expertise through collaborative working groups	Special Symposium: Digital twins for non-invasive personalized electrical stimulation	Special Symposium: The realities of scientific publishing	IOMP Teaching Lecture 8	07:30
08:00									08:00
08:30	Break								08:30
09:00	Plenary Presentation Prof Maryellen Giger, <i>University of Chicago, United States</i>								09:30
10:30	Morning Tea								10:30
11:00	AFOMP Awardee Presentation Session	IFMBE Early Career Achievers Award	1.24 Detectors in RO 2	1.18 Brachytherapy 2	3.3 Image Analysis	24.4 Capacity Buildings and Diversity in Africa		11:00	
11:45			1.25 Detectors in RO 3					11:45	
12:30	Lunch								12:30
14:00	Keynote Presentation: Prof Karen Jones, <i>University of Adelaide, Australia</i> AND Prof Ehsan Samet, <i>Duke University, United States</i>	IOMP Best Presentation Session	23.3 Clinical Engineering Practice	16.3 Soft Tissue Biomechanics	IFMBE Awards Session	1.26 Brachytherapy 3	1.6 Imaging in Radiation Therapy 2	18.1 Cardiovascular Instrumentation	14:00
15:30	Afternoon Tea								15:30
16:00	Closing Ceremony								16:00
17:30	End of Congress								17:30