

Tentative Scientific Program of AMPICON 2022

05th-07th November, 2022 at AIIMS, New Delhi

Day 1 | Saturday 05th November 2022

Hall - A				Hall - B			
08:00-09:00Hrs				Registration			
Session - 1							
Time		Topics	Speakers				
09:00-09:10Hrs	Welcome & Introduction						
09:15-10:00Hrs	Oration-01	AMPI - Dr. Ramaiah Naidu Memorial Oration	D D Deshpande, Mumbai				
10:00-10:25Hrs	KL-01	The Promise of Big Data for Precision Radiation Oncology	Jatinder Palta, USA				
10:25-10:45Hrs	IT-01	Quantitative Molecular and Functional Imaging: Treatment Response Assessment and Adaptation	Luliana Toma Dasu, Sweden				
10:45-11:05Hrs	IT-02	Flash Radiotherapy: Potential and Challenges	Tharmar Ganesh, Coimbatore				
11:05-11:25Hrs	Tea break						
Session - 2							
Time		Topics	Speakers				
11:30-11:50Hrs	IT-03	Clinical Implementation of Proton Therapy Program-USA-LCI Experience	Suresh Rana, USA				
11:50-12:10Hrs	IT-04	Proton Therapy Facility Shielding Design and Radiation Safety	Ghanshyam Sahani, Mumbai				
12:10-12:30Hrs	IT-05	Advances in Proton Treatment Planning and Optimization	Dayanand Sharma, Chennai				
12:30-12:50Hrs	IT-06	Impact of RBE and LET in Clinical Proton Therapy	Alexendru Dasu, Sweden				
13:00-13:40Hrs	Lunch Break						
13:40-14:25Hrs		Panel Discussion (45 Min.)					
	PD-01	Competency-based Medical Physics Education: Global Scenario and Need in India					
	Moderator:- Arun Chougule Coordinator:- Lalit Mohan Aggarwal Panelists:- S D Sharma, P Aruna, Arun Singh Oinam						
Session - 3				Session 1 - Oral Talk			
Time		Topics	Speakers	Time		Topics	Speakers
14:30-14:50Hrs	IT-07	Photon Counting CT for Precision Imaging Practice: Technologies and Challenges	Katsumi Tsujioka, Japan	14:30-14:42Hrs	OT-01	Comparison of two approaches for generating mass density to hounsfield unit table for proton therapy dose calculation in the raystation treatment planning system	Ranjith C P
14:50-15:10Hrs	IT-08	Personalised Brachytherapy in Clinical Practice	D N Sharma, Delhi	14:42-14:54Hrs	OT-02	Estimation of dosimetric uncertainties in liver-sbrt with deep inspiration breath hold technique	Clinto C O
15:10-15:30Hrs	IT-09	Latest Developments in Brachytherapy: Hybrid Applicators, 3D Printing and AlphaDaRT	Vibha Chaswal, USA	14:54-15:06Hrs	OT-03	Artificial neural network-based pretreatment prediction of multi-leaf collimator positional discrepancies during sliding window IMRT delivery	Sharandeep Singh
				15:06-15:18Hrs	OT-04	Room shielding considerations for a magnetic resonance imaging guided medical linear accelerator (MRI-LINAC)	Jolly Joseph K
Session - 4				Session 2 - Oral Talk			
Time		Topics	Speakers	Time		Topics	Speakers
15:35-15:55Hrs	IT-10	Dosimetric Plan Quality Assessment: ESTRO Survey	Victor Hernandez, Spain	15:25-15:37Hrs	OT-05	Evaluation for hybrid SPECT/CT calibration factor for 1777LU activity quantification in clinical radionuclide dosimetry workflow.	Madhulika Mehrotra

15:55-16:15Hrs	IT-11	Motion Management Strategies & Challenges	L Nithya, Trivandrum	15:37-15:49Hrs	OT-06	Optical fiber based prototype OSL set up	Narender Singh Rawat
16:15-16:30Hrs	IT-12	SGRT in Clinical Practice: Guidelines and Survey	Malin, Sweden	15:49-16:01Hrs	OT-07	Quantification for radiation dose to the radiologist's eyes associated with various interventional radiology procedures	Subash Chand Kheruka
				16:01-16:13Hrs	OT-08	Monte Carlo x-ray unit simulation and validation with IPEM report 78	Naresh Rajagopal
				16:15-16:30Hrs	IT-13		TBA
16:30-16:45Hrs	Tea Break						
Session - 5				Session - 3			
Time		Topics	Speakers	Time		Topics	Speakers
16:45-17:05Hrs	IT-14	Staffing Model and Career Progression of Clinical Medical Physics - AFOMP Countries	Hasina Anupama Azhari, Bangladesh	16:45-17:05Hrs	IT-16	Clinical Commissioning of Gamma Knife ICON System: USA-MCI experience	Vibha Chaswal, USA
17:05-17:25Hrs	IT-15	Role of RT Technologist in Precision Radiotherapy	Gurvinder Singh, Delhi	17:05-17:25Hrs	IT-17	3D Printing in Radiation Oncology - AIIMS Experience	N Gopishankar, New Delhi
17:25-17:45Hrs	TT-01 (P)	Advances in Dosimetry	PTW India	17:25-17:45Hrs	IT-18	Precise Patient Positioning and Immobilization for SRS/SBRT-Technologist perspective	Debojoyti Dhar, Mumbai
18:00-19:00Hrs	Inauguration & Cultural (Hall-A)						
19:30Hrs Onwards	Welcome Dinner						
Day 2 Sunday 06th November 2022							
Hall - A				Hall - B			
Session - 1				Session - 1 CMPI Refresher Course at Hall - B			
Time		Topics	Speakers	Time		Topics	Speakers
8:15-08:35Hrs	KL-02	Medical Physics in Cancer Treatment & Research	Andrew Beavis, NHS, UK	09:00-10:20Hrs	Best Poster Session		
08:35-08:55Hrs	IT-19	Artificial Intelligence in Medical Physics	Paul Ravindran, Nagaland				
08:55-09:15Hrs	IT-20	Radiation Incident Learning and Reporting System in India: Regulatory perspective	P K Dash Sharma, Mumbai				
Session - 2							
Time		Topics	Speakers				
09:20-09:40Hrs	IT-21	MR Imaging for Radiation Treatment Simulation and Planning	Rajesh Kinikhar, Mumbai				
09:40-10:00Hrs	IT-22	MR Image Guided Radiotherapy with UNITY System - Clinical Commissioning Experience	Shanmuga Subramanian, Hyderabad				
10:00-10:20Hrs	IT-23	MRI Safety in Clinical Practice	Luca Gentile, Italy				
10:20-10:35Hrs	Tea Break						
Session - 3				Session 2 - Oral Talk			
Time		Topics	Speakers	Time		Topics	Speakers
10:35-10:55Hrs	IT-24	An Overview of HyTEC Radiobiological Model for Hypofractionated SBRT	Manju Sharma, USA	10:35-10:47Hrs	OT-09	Exploring the max-min method for extracting edges from nuclear medicine images	Anil Kumar Pandey
10:55-11:15Hrs	IT-25	Radiotherapy using Artificial Intelligence: NHS-UK Romford's Experience	Vasu Ganesan, UK	10:47-10:59Hrs	OT-10	Comparison of the solid-state cum GM-based survey meter with an ionization chamber-based survey meter in a linear acclerator radiation protection survey.	Rohidas N Punde
11:15-11:35Hrs	IT-26	Ring-Gantry Ethos Linear Accelerator System: Clinical Commissioning Experience	A Pichandi, Bangalore	10:59-11:11Hrs	OT-11	Computerisation and business reengineering of regulatory system: The oversights observed during a decade of use of the system for medical applications (using ionising radiation).	Bibekananda Mishra

				11:11-11:23Hrs	OT-12	Evaluation of dosecheck and per fraction software for analyzing IMRT-pre-treatment and per fraction software for analyzing IMRT-pre-treatment and transit dose patient specific assurance.	Surudhi Ranjani K
				11:23-11:35Hrs	OT-13	Cone beam computed tomography-imaging dose optimization technique based on the "image assessment scoring"	Gaurav Trivedi
Session - 4				Session 3 - Oral Talk			
Time		Topics	Speakers	Time		Topics	Speakers
11:40-12:00Hrs	IT-27	Radiation Oncology in the era of Precision Medicine- Opportunities and challenges	Shaleen Kumar, AROI Representative	11:40-11:52Hrs	OT-14	Dosimetric study of inter-fraction variation in organ at risk (OAR) in intracavitary brachytherapy (ICBT) using image registrations.	Nidhi Marjara
12:00-12:20Hrs	IT-28	Radiogenomics Modeling in Radiation Oncology	Ragavendra Holla, Pune	11:52-12:04Hrs	OT-15	Commissioning of Elekta's Geneva universal gynaecological applicator	Rajshekhar Agnivashya
12:20-12:40Hrs	TT-02 (VT)	SGRT with AlignRT System-Status & Horizons	VisionRT	12:04-12:16Hrs	OT-16	Risk analysis in HDR brachytherapy based on TG-100 recommendations	Sourab Shyleshan
12:40-13: 00Hrs	TT-03 (ML)	MRI-Linac for Precision Radiation Medicine	TBA	12:16-12:36Hrs	IT-29	TBA	TBA
				12:36-12:56Hrs	IT-30	TBA	TBA
13:00-13:40Hrs	Panel Discussion 2 (45 Min.)			Lunch Break			
13:40-14:25Hrs	PD-02	Strengthening Medical Physics Research in India: Current Status, Challenges and Action Plans					
	Moderator:- Pratik Kumar Coordinator:- Biplab Sarkar Panelists:- AK Pandey, Thirunavukarasu, Vijayaprabhu						
14:30-15:30Hrs	Session 5 - Best Oral Paper Session						
Time		Topics	Speakers				
14:30-14:42Hrs	BP-01	Generative Adversarial network (GAN) for proton radiography	Alaka B G				
14:42-14:54Hrs	BP-02	Computed tomography image synthesis from magnetic resonance images using wassertein generative adversarial network (WGAN) architecture.	Niyas Puzhakkal				
14:54-15:06Hrs	BP-03	Evaluation of DNA damage for low and high dose ionizing radiation using alkaline comet assay.	L Jose Solomon Raj				
15:06-15:18Hrs	BP-04	Dosimetry of indigenously developed pediatric Ru-106 eye plaque using radiochromic film.	Nitin R. Kakade				
15:18-15:30Hrs	BP-05	An indigenously developed deformable lung phantom for analysis of active breathing coordinator (ABC) system reproducibility using relative target dose measurement with film dosimetry.	Pratik Bajirao Shiyekar				
Session - 6							
Time		Topics	Speakers	Time		Topics	Speakers
15:35-15:55Hrs	IT-31	Intraoperative Radiotherapy technologies and practise	K R Muralidhar, Hyderabad	15:25 -15:37Hrs	OT-17	Commissioning and quantitative evaluation of compass-dolphin system for pre-treatment verification of stereotactic volumetric-modulated arc delivery.	Yashvi Chhabra
15:55-16:15Hrs	IT-32	Exhaled Breathing Analysis for Early Cancer Detection: Non-Invasive Approach	C S Sureka, Coimbatore	15:37-15:49Hrs	OT-18	Evaluation of adaptive planning through in-vivo transit dosimetry in case of head & neck treatment planT	Priyanka Agarwal
16:15-16:30Hrs	TT-04 (PT)	TBA	TBA	15:49-16:01Hrs	OT-19	Quantitative evaluation of deformable image registration based on TG-132	Ragul T
16:30-16:45Hrs	TT-05	TBA	TBA	16:01-16:13Hrs	OT-20	Lung segmentation in chest x-ray using deep learning	Mohini
16:45-17:15Hrs	Tea break						
17:15-18:45Hrs	AMPI GBM						

19:30Hrs onwards	Gala Dinner		
Day 3 Monday 07th November 2022			
Hall - A			
8:00-09:00Hrs	CMPI Refresher Course		
Session - 1			
Time		Topics	Speakers
09:00-10:00Hrs		IDMP inauguration (Hall - A)	
10:00-10:15Hrs		Tea break	
10:15-10:40Hrs	KNS-03	Re-igniting the Role of Physics in Medicine for Sustainable Future	Robert Jeraj, USA
10:40-11:05Hrs	KNS-04	Augmenting the Triple Helix Model Collaboration Between Bio-Medical Engineering and Medical Physics for Sustainable Development	S M Krishnan, USA
11:05-11:25Hrs	IDMP-01	Medical Physics for Sustainable Healthcare	IOMP Vice President - Eva Bezak
11:30-12:30Hrs	IDMP Minisymposium - Interprofessional Collaboration for Innovation and Research in Medical Physics		
	MS-01	AFOMP - Education & Training	Arun Chougule, Jaipur
	MS-02	ESTRO - Clinical Practice	Victor Hernandez, Spain
	MS-03	AAPM - Research & Innovation	Jitendra Palta, USA
	MS-04	IOMP - Professional Development	Eva Bezak, Australia
	MS-05	AMPI - Quality Management	S D Sharma, Mumbai
12:35-13:35Hrs	PD-03	Multidisciplinary Collaborative Research for Technology Development in India	
	Moderator:- K J Mariadas, Lucknow Coordinator:- TBA Panelists:-		
	MS-06	Cancer Therapy Technology Development in India - Clinical Perspective	AROI/ Rakesh Jalali, Chennai
	MS-07	Cancer Therapy Technology Development in India - Scientific & Technical Perspective	AMPI Representative
	MS-08	Medical Imaging Technology Development in India - Clinical Perspective	IRIA and SNMI Representatives
	MS-09	Medical Technology Development in India - Bio-Medical Engineering Perspective	Bio-Medical Engineer's Society
	MS-10	Role of SAMEER in Linac Technology Development in India-Current Status and Horizons	SAMEER, Govt of India
	MS-11	Industrial Partners Perspective in Technology Development in India - National and International Partners Perspectives	India & Global Partners
13:35-14:30Hrs	Lunch Break		
Time		AMPI-AAPM Initiative on Early Career Investigator Development Program	Program Directors
14:30-15:30Hrs	Medical Physics Research Priorities, Intramural and Extramural Research Project Development, Global Research Collaboration and Funding Opportunities.		Robert Jeraj, AAPM (USA)
V Subramani, AMPI (India)			
15:30-16:30Hrs	Award Ceremony & Valedictory Function		
16:30Hrs	Tea break & seeing off!		