



# Annual Conference of Bangladesh Medical Physics Society (ACBMPS-2023)

Date: 26 January 2024

Venue: Krishibid Institution Bangladesh, Dhaka, Bangladesh

## Scientific Programme

08:30-09:30	Registration and Kits Collection		
10:00-11:00	Inaugural Ceremony		
11:00-11.30	Tea Break		
11.30-13.00	Scientific Session-I		<b>Chair: Dr. Parvin Akter Banu</b> <b>Co-chair: Prof. Abdullah Al Mashud</b> <b>Moderator: Dr. Md Anwarul Islam</b>
11.30-11.50	IV-01	Advances of AI in Radiotherapy	Biplab Sarkar (IN)
11.50-12.05	IV-02	Management of quality assurance program and quality audit of radiotherapy center in Bangladesh: A review of regulatory Inspection	Md Rayhan Uddin (BAERA)
12.05-12.20	IV-03	Quantification of intra-fraction organs motion in MRI guided brachytherapy of cervical cancer	Abdus Sattar Khalid (UK)
12.20-12.30	OP-01	High-Dose-Rate brachytherapy for cervical cancer using an artificial neural network	Alamgir Hossain (RU)
12.30-12.40	OP-02	Retrospective study of CTV-PTV margin: an institutional experience	Syeda Fariha Hasan (GB)
12.40-12.50	OP-03	Detection of leukemia in microscopic images by using image processing techniques	Debojoti Paul Ananyo (IUB)
12.50-13.00	OP-04	Clinical validation of radiotherapy treatment planning system for 6 MV, 10 MV & 15 MV photon beams using CIRS thorax phantom	Mehrab Hassan Udoy (BSMMU)
13:00-14:00	Lunch and Prayer Break		
14:00-14:30	Vendor Presentation		<b>Chair: Prof. Golam Abu Zakaria</b> <b>Co-chair: Dr. Md Akhtauzzaman</b> <b>Moderator: Mr. Md Jobairul Islam</b>
14:00-14:20	VP-01	Advancement in treatment planning solutions	Karrthick KP (Varian)
14:20-14:30	VP-02	Everything you need to know about cancer centers	Sajan Hossain (Trade House)
14:30-16:00	Scientific Session-II		<b>Chair: Prof. Dr. Sarwar Alam</b> <b>Co-chair: Dr. Munima Haque</b>



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		<b>Moderator: Mr. Md Motiur Rahman</b>	
14:30-14:45	IV-04	Dosimetric impact of grid size and statistical uncertainty on monte carlo algorithm in vmat planning with monaco tps for single lesion brain stereotactic radiotherapy	Md Akhtaruzzaman (EHC)
14:45-15:00	IV-05	Unlocking the therapeutic potential of Mangifera indica leaf extract compounds: an in-silico exploration for breast cancer inhibitors through quantum mechanics, molecular dynamic simulations, ADME, and toxicity analysis	Md Abdullah Al Mashud (IU)
15:00-15:10	OP-05	A comparative dosimetric study of egs based monte carlo simulation code and comparison with anisotropic analytical algorithm (AAA), Acuros XB (AXB) in inhomogeneous medium.	Md Saiful Islam (CMH)
15:10-15:20	OP0-6	Prevalence of breast cancer incidence in bangladesh in association with risk factors, diagnosis and treatment procedures	Adiba Hasan Prova (GB)
15:20-15:30	OP-07	Specification of setup margin (SM) of planning target volume (PTV) in left breast cancer for specific Linac machine	Md. Zulkar Naen (CMH)
15:30-15:40	OP-08	Comparative dosimetric analysis of deep inspiration breath-hold and free breathing techniques in radiation therapy for left-sided breast cancer: a single-institution retrospective study	Md. Jobairul Islam (LCH)
15:40-15:50	OP-09	Clinical feasibility study of an artificial intelligence assisted auto-contouring system for radiation therapy treatment planning: a proof-of- concept methodology	S M Hasibul Hoque (LCH)
15:50-16:00	OP-10	Identification of skin lesions through the analysis of dermoscopy images utilizing convolutional neural network and developing a flask based artificial intelligence web application	Md. Eshtiaqul Haque (GB)
<b>16:00-16:10</b>	<b>Tea Break</b>		
<b>16:10-17:00</b>	<b>Poster Session (Parallel)</b>		<b>Panel of Judges:</b> <b>Prof. Golam Abu Zakaria (Chair)</b> <b>Prof. Hasin Anupama Azhari</b> <b>Dr. M. Anwarul Islam</b> <b>Dr Md Rayhan Uddin</b> <b>Mr. Md Abu Kausar</b> <b>Mr. Md Mokhlesur Rahman</b> <b>Mr. Md Shahidul Mia</b>



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PP-01	Deep learning for high risk and low risk ischemic strokes based on MRI images	Md Alamgir Hossain (RU)
PP-02	Investigations of Aloe Vera leaves Extracted Phytochemicals to Inhibit Liver Cancer: HOMO-LUMO, Quantum Calculation, MEP, and Toxicity Analysis	Md. Abdur Rahman (IU)
PP-03	The In-silico Investigations of Averrhoa Carambola Leaves Extracted Nanocomposites to Inhibit Breast Cancer: Quantum calculations, Molecular Dynamic Simulation, ADME and Toxicity Analysis	Md. Mobinul Hoque (IU)
PP-04	Characterizations and In-Silico Investigations of Coriandrum Sativum Leaves Extracted Nano Compounds Profiling Against Colon cancer: Quantum Calculations, Molecular Docking, MD Simulation and ADMET Analysis	Nayan Kumar Sarkar (IU)
PP-05	GCMS Extraction Phytochemicals of Camellia Sinensis leaves to Assay Against DENV viruses: Chemical Reactivity, Quantum Calculation, MEP, and ADMET Analysis	Md. Mehedi Hasan Somrat (IU)
PP-06	Machine Learning Based Risk Factors Prediction and In-Silico Exploration of Withania Somnifera Leaf Extracted Nanocomposites for Breast Cancer Inhibition	Rakib Hasan (IU)
PP-07	Quantum Calculations, ADMET Analyais, and In-Silico study of Pleurotus tuber-regium (Mashroom) Extracted Phytochemicals to Inhibit MDA-MB-468 Cell Line of Breast Cancer	Suraya Rahman (IU)
PP-08	A Review of Electronic Brachytherapy- Present and Future Directions	M N Hasan (GB)
PP-09	Dosimetric Evaluation of VMAT Plans using 6MVFF and 10MVFF Energies in the Management of Carcinoma Cervix Patients: A Comparative Study	Ritu Akter Setu (GB)
PP-10	Dosimetric Evaluation of Treatment Plans of 3DCRT, IMRT, and VMAT in Rectum Cancer	Niloy Kumar (GB)
PP-11	The Application of Gel Dosimeters and Comparison with Other Dosimeters in Radiotherapy: A Literature Review	Md. Mahbubur Rahman (GB)
PP-12	A Prospective Study of VMAT versus IMRT for Preoperative Rectal Cancer: A Dosimetric Analysis	Kazim Uddin Olin (GB)
PP-13	Evaluate the Shielding Thickness of Primary and Secondary Barriers for the New LINAC Bunker at the INMP, AERE, BAEC, Bangladesh	Nahida Sultana (GB)
PP-14	Comparative Analysis and Machine Learning Predictions of Cervical Cancer	Shah Faisal (BRAC)



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		Incidence: A Multi-National Study	
	PP-15	Comparative Analysis and Machine Learning Prediction Oral Cancer Epidemiology: A Multi-National Study	Tshewang Palden (BRAC)
	PP-16	Comparative Analysis on Biodegradable Granular Bone Substitute with in Situ Antibiotic and Growth Factor Releasing Capability	Nahid Anjum (GB)
	PP-17	Electronic Brachytherapy- The New Era of Entering into Sophisticated Cancer Treatment in Bangladesh	Nikas Kanti Nath (GKH)
<b>16:10-17:00</b>	<b>AFOMP Session: Medical Physics Education, Training and Profession (Parallel)</b>		<b>Chair: Prof. Dr. Kazi Manzur Kader Chair: Prof. Dr. Md. Sanowar Hossain Moderator: Mr. Abdus Sattar Khalid</b>
16:10-16:30	IV-06	Training and career for medical physics graduates: Global opportunities	Golam Abu Zakaria (DE/BD)
16:30-16:50	IV-07	Importance of a unified medical physics syllabus in AFOMP	Hasin Anupama Azhari (AFOMP)
16:50-17:00	OP-11	Aspect of medical physics in Bangladesh: a growing field with a bright future	Shahdat Hossen Shuvo (GB)
<b>17:00-18:00</b>	<b>Valedictory Session/Award Ceremony, AGM of BMPS</b>		