



Session VIII: Biomedical Engineering (BME)

- Venue : Auditorium, Atomic Energy Centre, Dhaka
- Time : 11:15 – 12:45
- Chair(s) : Prof. Abu Sayem Koral, PhD
Dept. of Physics, Bangladesh University of Engineering and Technology
- : Prof. Muhammad Abdul Kadir, PhD
Dept. of Biomedical Physics & Technology, University of Dhaka
- Invited Lecture : **Advanced Diagnosis of Cartilage Damage in Knee Joint by Applying AI IL-07 in AE Technique**
- Prof. Towhidul Islam Khan, PhD
Dept. of Biomedical Engineering, Graduate School of Advanced Health Sciences, Saga University, Saga, Japan

Contributory Papers:

Abstract ID	Title	Author Name(s)
BME01-041	A Step-by-Step Machine Learning (ML) Approach for Early Diabetic Disease Prediction	Md. Mahmud Hasan, Md. Ismail Jabiullah and SM Muraduzzaman
BME02-067	Numerical Analysis and Optimization of a Quasi-D-Shaped PCF-Based SPR Biosensor for Malaria Detection	Md. Jarjis Mondal and Mohammed Imamul Hassan Bhuiyan
BME03-074	Comparative Study of THz Microstrip Antenna Materials for Biomedical Applications	Mahjabin Mobarak, Mst. Arifa Khatun, Md. Mahmudul Hasan Tonmoy, Hasibul Hossain, and Mohammad Farhan Tanvir
BME04-092	Integrated Differential Expression and Functional Enrichment Analysis Reveals Core Dysregulated Pathways in Pancreatic Ductal Adenocarcinoma	Maimoona Hossain Moumita, Faya Zur Rahman, Fatema Jannat, and Acramul Haque Kabir
BME05-205	Comparative Evaluation of CNN and Transfer Learning Architectures for Melanoma Detection	Md. Jubayel, Md. Muzahidul Islam, Md. Atiqur Rahman Anik, and Md. Jamiul Islam
BME06-217	A Deep Learning-Based Approach for Brain Tumor Classification Using VGG16 from the Dataset of Brain MRIs	Sher Shermin Azmiri Khan and Uzzal Kumar Acharjee
BME07-230	Synthesis and Characterization of Bismuth Oxide (Bi ₂ O ₃) Nanoparticles for Application as a Computed Tomography (CT) Contrast Agent	Md. Zahin Hasan Monim, Hasan Mehdi, Md. Mominul Islam, Md Nahid Hossain, Sheikh Manjura Haque, and Arup Kumar