

Detail Program Schedule

Day 1, 08 December 2022 (Thursday)

Registration: 07.00 – 10.00	
Inauguration Ceremony: 09.30 – 11.00	
Zoom link: https://bdren.zoom.us/j/61235743814?pwd=dE5ITkZYcFF2Ti9valJNR1NVU0xYdz09 Meeting ID: 61235743814 Password: 1111	
Tea: 11.10 – 11.40 (Central Tea Bar, Tower 1)	
Keynote Session – 1: 11.40 – 13.00 Venue (Multipurpose Hall, Tower 1)	
Session Chair: Prof. Dr. A.K.M. Sadrul Islam	
Paper ID	Title
K1	Role of Mechanical /Manufacturing Engineers for Sustainable Development through Innovation
K2	CFD modelling of fire growth and propagation in building, forest and tunnel settings
Zoom Link: https://bdren.zoom.us/j/66645341554?pwd=YWJqekJBQXB3YW1mT3Z6cHlzNTVWUT09 , Meeting ID: 66645341554 Password: 1111	
Lunch and Prayer Break: 13.00 – 14.00 Venue (Central Tea Bar, Tower 1)	

Technical Session – 1A: 14.00 – 15.40; Day 1 Mechanics and Materials Engineering Venue (Room No: 201, Tower 2)	
Session Chair: Prof. Dr. Shahida Begum	
Paper ID	Title
C08-0002	Effects of Li and Al co-doping on Structural, Electronic and Optical Properties of CuO: DFT+U Study
C08-0003	Effect of Alkaline-earth Metal (Be, Mg, Ca) Doping on Structural, Mechanical, Electronic & Optical Properties of GaP: A First-principles Simulation
C08-0006	Investigation of the Electrochemical Corrosion Property of 2xxx Series Cast Aluminium Alloy in 0.3 M, 0.6 M NaCl and Seawater Environments
C08-0007	Structural Analysis and Topology Optimization of an Aircraft bracket under Multiaxial Loading
C08-0010	Effect of Strain on the Mechanical and Thermodynamic Stability of Lead-Free Double Perovskite, Cs ₂ AgSbBr ₆ : A DFT Study
Zoom Link: https://bdren.zoom.us/j/63696620000?pwd=c1Mra0Z3dlRXdkJRNjNveE4wcUhPUT09 , Meeting ID : 63696620000 Password: 1111	

Technical Session – 1B: 14.00 – 15.40; Day 1	
Fluids and CFD	
Venue (Room No: 202, Tower 2)	
Session Chair: Col. Mohammad Mobarak Hossain Majumder, psc	
Paper ID	Title
C01-0004	Numerical simulation of a double tube vertical ground heat exchanger-Effect of borehole lengths
C01-0008	Comparative analysis of aerodynamic Lift and Drag of Commercially used Airfoil incorporated with Co-Flow Jet
C01-0011	Comparative analysis of Magnus effect in terms of lift and drag in a commercially used Airfoil
C01-0012	An Experimental Investigation of Wind Effect on Tall Buildings with Pentagonal Cross Section
C01-0014	Influence of inlet velocity and wall wettability on PEM fuel cell
Zoom Link: https://bdren.zoom.us/j/3144887591?pwd=bjBhdGxjU25SShZqREhTZTBETGloQT09	
Meeting ID: 314 488 7591	
Password: 1111	

Technical Session – 1C: 14.00 – 15.40; Day 1	
Aerodynamics and Hydrodynamics	
Venue (Room No: 204, Tower 2)	
Session Chair: Dr. Rezwanul Karim	
Paper ID	Title
C02-0003	Study on the Effect of Body and Tail Fin Alignment on the Lift and Drag Performance of a Projectile in Subsonic Regime
C02-0009	Comparative study of blowing and suction slot geometry optimization on NACA 2412 Airfoil
C02-0012	Surface Modification of NACA 4418 Aerofoil with Different Shaped Dimples And Aerodynamic Performance Analysis
C02-0016	An Experimental and Computational Study on Static Extended Trailing Edge (SETE) for Lift Enhancement of an Airfoil
C02-0018	CFD Analysis of the Effect of Plain Flap Deflection on NACA 2415 with a Leading-Edge Slat at Different Angles of Attack
Zoom Link: https://bdren.zoom.us/j/7950963208?pwd=aXVQYXowNzNNNmZuWXYsVFFiVURKdz09 ,	
Meeting ID: 7950963208	
Password: 1111	

Technical Session – 1D: 14.00 – 15.40; Day 1	
Design and Manufacturing	
Venue (Room No: 301, Tower 2)	
Session Chair: Prof. Dr. Shaikh Reaz Ahmed	
Paper ID	Title
C09-0001	Reduction of Chatter during Turning using Temporary Electromagnet
C09-0008	Chatter Control using Electro Magnet to Lower Surface Roughness in Turning
C09-0010	Interfacing between Research and Product Commercial Development: A Case study of Centrifugal Fan
C09-0012	Design and Development of Smart Blind Stick for Visually Impaired People
C09-0013	Improvement of Machinability of Turning Operation on Hardened Steel using Cryogenically Treated Cutting Tool
Zoom Link: https://bdren.zoom.us/j/67358603224?pwd=Ump5Rm9Cd1F1SDVsejJhWDhzNm1QUT09 , Meeting ID: 67358603224 Password: 1111	

Technical Session – 1E: 14.00 – 15.40; Day 1	
Engineering Education, NDT and Failure Analysis	
Venue (Room No: 302, Tower 2)	
Session Chair: Prof. Dr. Mazharul Islam	
Paper ID	Title
C13-0001	A Comprehensive Review on Fire Safety in Urban Area Buildings: An Assessment and Strategies for System Improvement
C13-0005	Hazard Assessment of Rice Husk Ash Generated from Rice Mills in Bangladesh and Way Forward to Overcome or Adopt with the Hazards
C13-0008	Fostering Outcome Based Learning Model in Engineering Education: Challenges and Ways Ahead for Bangladesh
C13-0012	Assessment of Occupational Health Hazard of the Workers in Manual PET Bottle Recycling Factories of Bangladesh
C11-0001	A Review on Non-Destructive Testing in the Aerospace Industry and Future Trends
Zoom Link: https://bdren.zoom.us/j/64943936788?pwd=b2pTNnZsK2ZsZ0w3eDIQaVYrUDZ4Zz09 , Meeting ID: 64943936788 Password: 1111	

Technical Session – 1F: 14.00 – 15.40; Day 1	
Renewable Energy	
Venue (Room No: 303, Tower 2)	
Session Chair: Prof. Dr. Md. Enamul Hoque	
Paper ID	Title
C04-0016	Performance Enhancement of PV Module with Cooling Effect using Wet Wicks
C04-0018	Study on Exhaust Gas Characteristics of SI Engine Using Fuel (Gasoline) & HHO Gas
C04-0021	Investigation of the Effects of Momentum Injection on the Aerodynamic Performance of a Horizontal Axis Wind Turbine
C04-0022	A Review of Hydrogen as Combustion Engine Fuel
C04-0013	Jute Sticks Derived Activated Carbon for High-Performance Supercapacitors
Zoom Link: https://bdren.zoom.us/j/67669796072?pwd=TDdFYUl6OGdtZkx4L3dmMytncW9iQT09 , Meeting ID: 67669796072 Password: 1111	

Technical Session – 2A: 16.00 – 16.40; Day 1	
Mechanics and Materials Engineering	
Venue (Room No: 201, Tower 2)	
Session Chair: Col. Awal Khan	
Paper ID	Title
C08-0019	Application of Nanotechnology in Medical Science: A Review Based on Clinical Trial
C08-0020	Review on Functionalized Multi-Walled Carbon Nanotubes (CNT) Reinforced Glass Fiber/ Natural Fiber Hybrid Nanocomposites
C08-0040	Mechanical Systems for Reducing Drifts in Tall Wood Buildings
Zoom Link: https://bdren.zoom.us/j/66719186509?pwd=RFczaENaeTBcSXBIMURmYTd2cEk4Zz09 , Meeting ID: 66719186509 Password: 1111	

Technical Session – 2B: 16.00 – 16.40; Day 1	
AI and Industry IoT	
Venue (Room No: 202, Tower 2)	
Session Chair: Prof. Dr. Mohammad Sarwar Morshed	
Paper ID	Title
C07-0003	Fault Diagnosis of an Industrial Chemical Process using Machine Learning Algorithms: Principal Component Analysis (PCA) and Kernel Principal Component Analysis (KPCA)
C07-0004	Fuzzy Logic Control Solar Powered Portable Cooling Box
Zoom Link: https://bdren.zoom.us/j/3144887591?pwd=bjBhdGxjU25SSHZqREhTzTBTETGloQT09 Meeting ID: 314 488 7591 Password: 1111	

Technical Session – 2C: 16.00 – 16.40; Day 1 Applied Sciences Venue (Room No: 204, Tower 2)	
Session Chair: Lt. Col. Md Altab Hossain, PhD	
Paper ID	Title
C14-0005	Polyurethane (PU) Coating for Anticorrosion and Flame-Retardant
C14-0007	Interaction of Tapentadol with Selected Metal Ions Studied by UV-Vis and FTIR Spectroscopy
Zoom Link: https://bdren.zoom.us/j/61486360556?pwd=UUdIRUtlbHlMNkNWNS9FK3Mwd2ozUT09 Meeting ID: 61486360556 Password: 1111	

Technical Session – 2D: 16.00 – 16.40; Day 1 Mechatronics, Robotics and Automation Venue (Room No: 301, Tower 2)	
Session Chair: Dr. Mohammad Harun-Or-Rashid	
Paper ID	Title
C05-0003	Solar Technology Enabled Operational Robot: An Interconnected Cybernetics System with (IoV) and Multidisciplinary Implementation for an Intelligent Robot Control and Monitoring System
C05-0006	Development of an Automatic Fire Detecting & Fire Fighting Robot
Zoom Link: https://bdren.zoom.us/j/63317035716?pwd=enQ0L0dWMmhQQTR1djZ4VVdDQ1Evdz09 Meeting ID: 63317035716 Password: 1111	

Technical Session – 2E: 16.00 – 16.40; Day 1 Design and Manufacturing Venue (Room No: 302, Tower 2)	
Session Chair: Dr. Muammer Din Arif	
Paper ID	Title
C09-0014	Reduction of Surface Roughness in End Milling of Stainless Steel by applying a Chatter Control Strategy
C09-0009	Topology optimization and 3D printing of a unibody quadcopter airframe
Zoom Link: https://bdren.zoom.us/j/7950963208?pwd=aXVQYXowNzNNNmZuWXYsVFFiVURKdz09 Meeting ID: 7950963208 Password: 1111	

Technical Session – 2F: 16.00 – 16.40; Day 1 AI and Industry IoT Venue (Room No: 303, Tower 2)	
Session Chair: Prof. Dr. Zamberi Bin Jamaluddin	
Paper ID	Title
C07-0010	Implementing an IoT dashboard to control boiling and cooling systems in manufacturing industries
C07-0011	Real-Time Sign Language Word Detection Using LRCN

Zoom Link: <https://bdren.zoom.us/j/64685720849?pwd=alpFU1JIUUdNYzhOTkpYbTB3eWJ2QT09>
 Meeting ID: 64685720849
 Password: 1111

Day 2, 09 December 2022 (Friday)

Technical Session – 3A: 9.00 – 10.40; Day 2	
Mechanics and Materials Engineering	
Venue (Room No: 201, Tower 2)	
Session Chair: Prof. Dr. Shahida Begum	
Paper ID	Title
C08-0023	A Study on Physical Properties of Commercially Pure Cu in Various Corrosive Media
C08-0024	Mechanical Performance of Matt Glass Fiber Reinforced Plastic (GFRP) Composites subjected to Laser Cutting
C08-0027	A Comparative Study on Banana Tree Fibers and Jute Fibers Treated with Modified Carbon Nanotubes
C08-0029	Effect of Chemical Treatment and Silicon Carbide (SiC) Fillers on Mechanical Properties and Water Absorption Tendency of Sisal/Glass Fiber Reinforced Epoxy Composites: A TOPSIS Algorithm Based Comparative Study
C08-0030	Parametric study on progressive failure analysis of composite bolted T-joints based on LaRC05 failure criterion
Zoom Link: https://bdren.zoom.us/j/65557359781?pwd=TjdpZDZlVjZ1k0T1k2ckFteWtET2xOUT09	
Meeting ID: 65557359781	
Password: 1111	
Tea Break: 10.40 – 11.00	
Venue (Central Tea Bar, Tower 1)	

Technical Session – 3B: 9.00 – 10.40; Day 2	
Fluid and CFD	
Venue (Room No: 202, Tower 2)	
Session Chair: Prof. Dr. Mohammad Ali	
Paper ID	Title
C01-0016	Investigation of varying drag force over series of rivets under Subsonic Flow of Air at Cruising Altitude
C01-0017	Numerical analysis of pressure distribution around a Symmetrical Aerofoil for high Reynolds Number
C01-0020	Flow and heat transfer characteristics over a NACA 4415 airfoil
C01-0021	Aerodynamic and Flow Characteristics of a Rough Airfoil: A Numerical Study
C01-0039	Physical modelling of grassfire propagation on sloped terrain at field-scale under low wind speed
Zoom Link: https://bdren.zoom.us/j/3873258202?pwd=NllrVHlrLzI6NlVvTVh4d3Z0b1Bsdz09	
Meeting ID: 387 325 8202	
Password: 1111	
Tea Break: 10.40 – 11.00	
Venue (Central Tea Bar, Tower 1)	

Technical Session – 3C: 9.00 – 10.40; Day 2	
Fluid and CFD	
Venue (Room No: 204, Tower 2)	
Session Chair: Prof. Dr. Dewan Hasan Ahmed	
Paper ID	Title
C01-0026	A numerical investigation on boundary layer control with blown flaps incorporating COANDA effect
C01-0027	A Practical Design Approach of the Tesla Turbine for Hydro Power Applications
C01-0031	Numerical Analysis of Wettability Mediated Droplet Formation in the Dripping Regime in T-junction
C01-0032	Numerical analysis of a sweptback wing with blended winglet on aerodynamic performance
C01-0034	Numerical Investigation on the Aerodynamic Effects of Variable Geometry Raked Wingtip
Zoom Link: https://bdren.zoom.us/j/64590639541?pwd=ckt2aTQ4VFFmMS9PTUdXcWR4bGRHQQT09	
Meeting ID: 64590639541	
Password: 1111	
Tea Break: 10.40 – 11.00	
Venue (Central Tea Bar, Tower 1)	

Technical Session – 3D: 9.00 – 10.40; Day 2	
Aerospace and Avionics	
Venue (Room No: 301, Tower 2)	
Session Chair: Capt. Kaosar Rashid, psc, BN	
Paper ID	Title
C06-0002	Design and Development of a Low Cost Prototype Radar for Sensing Range, Doppler effect and Synthetic Aperture (SAR) Imaging
C06-0009	Study of Robotics & Automation in the Aerospace Industry
C06-0013	Enhancing Aircraft Electro- Thermal Anti- Icing System by Using Carbon Nano-Tube on a Silicon- Nitride Substrate
C06-0014	Development of Mortar Firing Simulator Predicting the Accuracy of its Projectile
C06-0015	Development of a Graphical User Interface (GUI) and Signal Processing Unit for a Prototype Radar
Zoom Link: https://bdren.zoom.us/j/62876322524?pwd=NjdJYytqWFFmSG9FTVVNRk01YjI1Zz09	
Meeting ID: 62876322524	
Password: 1111	
Tea Break: 10.40 – 11.00	
Venue (Central Tea Bar, Tower 1)	

Technical Session – 3E: 9.00 – 10.40; Day 2 Mechanics and Materials Engineering Venue (Room No: 302, Tower 2)	
Session Chair: Brig. Gen. Sanuwar Uddin, NDC, psc, PhD, PEngg	
Paper ID	Title
C08-0031	Progressive Failure Analysis of Carbon Fiber Reinforced Polymer Composite with a Circular Notch by varying Fiber Orientation
C08-0033	Effect of stacking sequence and weight fraction on tensile and flexural properties of woven jute and woven carbon-jute reinforced polyester composites
C08-0034	Potential Nanoparticles to Integrate with Ceramic Membranes for Treating Industrial Wastewater: A Review
C08-0035	Characteristics and Comparative Study of Sodium Hydroxide treated Banana Fiber Reinforced Composite Material
C08-0036	Development process of composite polymer tiles with antimicrobial agent using Plastic wastes as raw materials
Zoom Link: https://bdren.zoom.us/j/63727040330?pwd=TnpNNjZ6dWI4NG9WMXF2cGdjRHJHZz09 Meeting ID: 63727040330 Password: 1111	
Tea Break: 10.40 – 11.00 Venue (Central Tea Bar, Tower 1)	

Technical Session – 3F : 9.00 – 10.40; Day 2 Thermal Engineering Venue (Room No: 303, Tower 2)	
Session Chair: Lt Col Faisal Kader, PhD	
Paper ID	Title
C03-0001	Performance Evaluation of Direct Liquid-Based Cooling System for Data Centers
C03-0002	Numerical Analysis of Thermal Behavior of 3D Printing Nozzle Arrangement
C03-0003	Hardness and Microscopic Evaluation of Heat Treated Steel with 0.47% Carbon
C03-0004	Comparative Analysis of Exhaust Emission of Retrofitted SI Engine Runs by Different Fuels
C03-0005	Experimental Study of Radiation and Natural Convective Heat Transfer over Circular Disk under Vacuum and Air Medium
Zoom Link: https://bdren.zoom.us/j/7950963208?pwd=aXVOYXowNzNNNmZuWXXVsVFFiVURKdz09 Meeting ID: 7950963208 Password: 1111	
Tea Break: 10.40 – 11.00 Venue (Central Tea Bar, Tower 1)	

Keynote Session – 2: 11.00 – 13.00; Day 2 Venue (Multipurpose Hall, Tower 1)	
Session Chair: Prof. Dr. Maglub Al Nur	
Paper ID	Title
K3	Role of Nanotechnology in Advancement of 4 th Industrial Revolution

K4	Aerodynamics and Hydrodynamics in Sports – Is It Important?
K5	Software-based Safe Robot for SMEs
Zoom Link: https://bdren.zoom.us/j/68165885928?pwd=WTdqYlZoTXE4dDRlQzd5REErSVMwdz09 , Meeting ID: 68165885928 Password: 1111	
Lunch and Prayer Break: 13.00 – 14.30 Venue (Central Tea Bar, Tower 1)	

Technical Session – 4A: 14.30 – 16.30; Day 2 Renewable Energy Venue (Room No: 201, Tower 2)	
Session Chair: Prof. Dr. Md. Enamul Hoque	
Paper ID	Title
C04-0005	An Alternative to Conventional Solar Steam Production using Phase Change Material (PCM)
C04-0008	Study on Development of an Automatic Wind Turbine System
C04-0010	Structural and Electrochemical Performance of Sr _{0.9} La _{0.1} WO ₄ Electrolyte Materials for Solid Oxide Fuel Cells
C04-0012	Identification of the Potentials and Hazards of Solar Waste Generation in Bangladesh and Assessing the Way Forward for the Hazard Reduction
C04-0014	Analysis of Flower Based Dyes and Titanium Dioxide Based Photo-Anode for Dye Sensitized Solar Cell
C04-0015	Design, Construction, and Investigation of the Drying Equipment Using Solar Power for Bangladeshi Fruits and Vegetables
Zoom Link: https://bdren.zoom.us/j/3873258202?pwd=NllrVHlrLzl6NlVvTVh4d3Z0b1Bsdz09 Meeting ID: 387 325 8202 Password: 1111	

Technical Session – 4B: 14.30 – 16.30; Day 2 Applied Sciences, AI and Industry IoT Venue (Room No: 202, Tower 2)	
Session Chair: Lt Col Md. Maruf Hasan, PhD	
Paper ID	Title
C14-0010	Breast Cancer Detection Using Infrared Thermography
C14-0013	Contribution of BSM Particles on Electric Dipole Moment of Charged Leptons in the Minimal Left-Right Symmetric Model
C14-0019	Transient Analysis of LBLOCA with Subsequent Loss of Offsite Power and Loss of All AC Power in VVER-1200 Reactor
C14-0020	FitzHugh-Nagumo Reaction Diffusion System on Nerve-Cell Dynamics: A Study
C07-0005	IoT-based system for welding molten metal temperature sensing
C07-0009	CNN-based Clinical Diagnosis and Decision Support System for Chest X-ray
Zoom Link: https://bdren.zoom.us/j/68571817138?pwd=VDJFOFBiQ09rak8zQVZLbC9hdUNTdz09 Meeting ID: 68571817138 Password: 1111	

Technical Session – 4C: 14.30 – 16.30; Day 2	
Mechanics and Materials Engineering	
Venue (Room No: 204, Tower 2)	
Session Chair: Lt. Col. Altaf Hossain, PhD	
Paper ID	Title
C08-0039	Effect of Nylon Fiber Reinforcement on Mechanical Behavior of Expanded Perlite/Sodium Silicate Composites
C08-0041	Jute Fiber Reinforced Biocomposite: Towards Developing Composite Bone Plate
C08-0043	Lightweight design and structural analysis of an e-bike chassis using FEM
C08-0044	FEA-Based Structural Analysis of Motorcycle Suspension System Using Different Materials
C08-0045	Evaluation of Mechanical Properties of Kenaf-Woven Kevlar & Jute-Woven Kevlar Reinforced Hybrid Epoxy Composites with Different Weight Fractions and Layering Sequences
C08-0047	Thermo-elastic Characteristics of Thermal Barrier Coating in a Gas Turbine Combustion Chamber with an Intermediate FGM Layer
Zoom Link: https://bdren.zoom.us/j/61365921190?pwd=ZUtOSkZYMkYzaGJkR2dYTGy0bVkwZ09	
Meeting ID: 61365921190	
Password: 1111	

Technical Session – 4D: 14.30 – 16.30; Day 2	
Mechatronics, Robotics and Automation, Mechanics and Materials Engineering	
Venue (Room No: 301, Tower 2)	
Session Chair: Asst. Prof. Dr. Md. Golam Mostofa	
Paper ID	Title
C05-0008	A Computer Vision based Artifact Protection System for Museum
C05-0009	Design and Development of an Automatic Floor Cleaner Robot
C05-0010	Li-Fi Technology Enabled Unmanned Underwater Vehicle: Combined Cybernetics Application and Implementation of Underwater Long Range Communication and Maritime Safety
C05-0011	Remotely Operated Unmanned Ground Vehicle (UGV) with Firing Mechanism for Diverse and Challenging Environments inherent to Military Operation
C08-0008	Investigation of Mechanical Properties of Natural Fiber Reinforced Laminated Composite
C08-0012	Orientation Impact of Banana Fiber on the Mechanical Properties of Banana-Glass Carbon Fiber Hybrid Composite
Zoom Link: https://bdren.zoom.us/j/68563162851?pwd=Sm8xTkN6bitMNDVQOEJ3N203UERxdz09	
Meeting ID: 68563162851	
Password: 1111	

Technical Session – 4E: 14.30 – 16.30; Day 2
Ship Building, Thermal Engineering
Venue (Room No: 302, Tower 2)

Session Chair: Assist. Prof. Dr. S M Ikhtiar Mahmud

Paper ID	Title
C10-0003	Experimental Investigation on Degradation of Shipbuilding Steel Plate Exposed to the Open Environment
C10-0005	Comparative study of used and unused plates in Bangladesh ship building industry
C10-0008	Directional Spectrum of Wind Generated Waves in Bangladesh Rivers for Designing the Inland Vessels
C10-0009	Total Roll Moment of Bangladesh Inland Vessel Due to the Wind Generated Waves and Gust
C10-0011	Environmental Pollution in Bangladesh by Inland Passenger Vessel Operation
C03-0009	Experimental investigation on the characteristics of a closed loop pulsating heat pipe (CLPHP) for different fluids
Zoom Link: https://bdren.zoom.us/j/61211351104?pwd=UUJBZzY2NCsyN3kzZlhaOVNiVW0yUT09	
Meeting ID: 61211351104	
Password: 1111	

Technical Session – 4F : 14.30 – 16.30; Day 2
Thermal Engineering
Venue (Room No: 303, Tower 2)

Session Chair: Lt Col Faisal Kader, PhD

Paper ID	Title
C03-0010	Numerical Study on Thermal Behavior of a Solar Chimney
C03-0011	Heating Ventilation and Air Conditioning (HVAC) System for Greenhouse
C03-0012	Design and Construction of a Rapid Milk Chiller Using Cold Energy Storage System
C03-0013	Thermal Performance Analysis of a Rectangular Finned Heat Sink under Dust Deposition
C03-0016	Droplet Evaporation and Leidenfrost Phenomena on Metallic Surfaces
C03-0018	Numerical Investigation Over the Experimental Analysis of Temperature Distribution of Pinned Surface for Forced Convection Along with Different Material Assignments & Geometries
Zoom Link: https://bdren.zoom.us/j/7950963208?pwd=aXVQYXowNzNNNmZuWXVsVFFiVURKdz09	
Meeting ID: 7950963208	
Password: 1111	

Day 3, 10 December 2022 (Saturday)

Technical Session – 5A: 09.00 – 10.00; Day 3 Fluids and CFD Venue (Room No: 201, Tower 2)	
Session Chair: Prof. Dr. Mohammad Ali	
Paper ID	Title
C01-0035	A Smart Jacket with Portable Thermoelectric Cooling System
C01-0038	Laminar convective heat transfer across a circular pipe by using MWCNT + Fe ₃ O ₄ hybrid nanofluid: A numerical study
C01-0041	CFD Simulation of Fuel-Air Mixing in a Dual-Cavity Scramjet Combustor
Zoom Link: https://bdren.zoom.us/j/3144887591?pwd=bjBhdGxjU25SSHZqREhTZTBETGloQT09	
Meeting ID: 314 488 7591	
Password: 1111	

Technical Session – 5B: 9.00 – 10.00; Day 3 Aerodynamics and Hydrodynamics; Fluids and CFD Venue (Room No: 202, Tower 2)	
Session Chair: Gp Capt A K M Zahidur Rahman, psc	
Paper ID	Title
C02-0020	Experimental Analysis of Lift and Drag Coefficient of Cessna 152A and its Relation with the Flow Separation
C02-0021	Experimental Investigation of the Effect of Swirl on the Flow Field of Free Circular jet
Zoom Link: https://bdren.zoom.us/j/66806849960?pwd=aU9HaE81M3N1dTlnMmZOVnhRRkE4UT09	
Meeting ID: 66806849960	
Password: 1111	

Technical Session – 5C: 9.00 – 10.00; Day 3 Mechatronics, Robotics and Automation Venue (Room No: 204, Tower 2)	
Session Chair: Asst. Prof. Dr. Md. Golam Mostofa	
Paper ID	Title
C05-0012	Development of an ECG Signals Extracting Algorithm from Clinical ECG Images
C05-0013	Automatic and Contactless COVID Protection Module Development for Occupational and Institutional Safety
C05-0015	Solar Powered Multipurpose Agricultural Vehicle Prototype
Zoom Link: https://bdren.zoom.us/j/3873258202?pwd=NllrVHlrLzl6NlVvTVh4d3Z0b1Bsdz09	
Meeting ID: 387 325 8202	
Password: 1111	

Technical Session – 5D: 9.00 – 10.00; Day 3
Mechatronics, Robotics and Automation
Venue (Room No: 301, Tower 2)

Session Chair: Dr. Mohammad Harun-Or-Rashid

Paper ID	Title
C05- 0016	Development and Analysis of Additively Manufactured Non-pneumatic Tires for Mars Rover
C05-0019	Detecting Emotion From Unsupervised Learning Algorithms Using MFCC for Bengali Language
C05-0022	A robotic arm for pick-and-place operation: An experimental study
Zoom Link: https://bdren.zoom.us/j/7950963208?pwd=aXVQYXowNzNNNmZuWXVsVFFiVURKdz09	
Meeting ID: 7950963208	
Password: 1111	

Technical Session – 5E: 9.00 – 10.00; Day 3
Industrial Management, Project Management and Operation Research
Venue (Room No: 302, Tower 2)

Session Chair: Lt Col Md Amirul Islam, PhD

Paper ID	Title
C12-0002	Performance Evaluation of Queueing Models using Perspective-based Assessment
C12-0004	A comparative analysis of balanced transportation problems
C12-0005	A Multi-Period Mathematical Model in Wooden Products Supply Chain Considering Environmental Effects
Zoom Link: https://bdren.zoom.us/j/65218375376?pwd=eFNBBllBbDUwY0JLQ2lHczRlMmlaQT09	
Meeting ID: 65218375376	
Password: 1111	

Technical Session – 5F: 9.00 – 10.00; Day 3
Industrial Management, Project Management and Operation Research, Applied Sciences
Venue (Room No: 303, Tower 2)

Session Chair: Col Awal Khan

Paper ID	Title
C12-0008	Lowering the Power Consumption of Healthcare Centers in Bangladesh using Low-Power Consuming Computing Devices or Thin Client System
C12-0009	Industrial Management, Project Management and Operation Research
C14-0021	Unexplored Resources: A potential Energy Remedy for Bangladesh
Zoom Link: https://bdren.zoom.us/j/68073213261?pwd=K2s4QmlJOU1JRXRHSUw4QktCeGQ1UT09	
Meeting ID: 68073213261	
Password: 1111	

Keynote/Invited Speaker Session– 3: 10.00 – 11.30; Day 3 Venue (Multipurpose Hall, Tower 1)	
Session Chair: Prof. Dr. Shahida Begum	
Paper ID	Title
K6	Sensing and Monitoring using Nanocomposite Sensors and Hybrid Copper Conductive Inks
C13-0006	Engaging Students in Learning through Visual Demonstration Models in Engineering Education
K7	Hydrogen production, storage, transportation and key challenges
Zoom Link: https://bdren.zoom.us/j/61343056462?pwd=NmFLbVZRUHJFay84V2tueTF5S3lEQOT09 , Meeting ID: 61343056462 Password: 1111	
Tea Break 11.30 – 12.00	

Poster Exhibition: 12.00 – 13.00; Day 3 All disciplines Venue (Central Tea bar and Corridor 2nd floor, Tower 1)	
Session Chair: Brig. Gen. Md Humayun Kabir Bhuiyan, psc, Dr. Muammer Din Arif, Dr. Md Sayem Hossain Bhuiyan , Lec Md Insiat Islam Rabby	
Paper ID	Title
C01-0030	Computational Modeling of Air Flow Pattern around the Four Towers of Military Institute of Science and Technology (MIST): A 2D Study
C03-0008	Design and Development of a Surface Wettability Measurement Instrument
C03-0017	Design proposition of a fast load variation adaptable ORC-based Waste Heat Recovery system using cost-effective thermal oil and working fluid
C03-0019	Numerical Investigation & Comparative Analysis of Airfoil Fin, Tapered Fin, and Pinned Fin for Free Convection, Along with Varying Material Assignments
C05-0017	Construction and modelling of an inverted pendulum on a cart
C05-0018	Automatic Ground Clearance System for Car
Lunch and Prayer Break: 13.00 – 14.00 Venue (Central Tea Bar, Tower 1)	

Keynote Session – 4: 14.00 – 15.00; Day 3 Venue (Multipurpose Hall, Tower 1)	
Session Chair: Prof. Dr. A. K. M. Nurul Amin	
Paper ID	Title
K8	Developments of water desalination and purification technologies using renewable energy and advanced materials
K9	International Research Interests and Efforts in Materials Processing Technologies
Zoom Link: https://bdren.zoom.us/j/64698615878?pwd=dVhqUWVBRINvVDNCb0l1Qng2OTczZz09 , Meeting ID: 64698615878 Password: 1111	

Industry – Academia Interactive Session: 15.00 – 16.00; Day 3
Venue (Multipurpose Hall, Tower 1)

Session Chair: Cdre A H M Rafiqul Islam, (E), NUP, psc, BN

Topic ID	Title
IT1	Impact of Lubrication on Industrial Machinery
IT2	Shipbuilding Industry – A Bangladesh Perspective

Prise Giving Ceremony and Closing Session: 16.00 – 16.30; Day 3
Venue (Multipurpose Hall, Tower 1)

Gala Dinner and Cultural Program: 19.30 – 22.00 ; Day 3
Venue (Central Tea Bar, Tower 1)

Invited Guest: Commandant – MIST, Sponsors, Keynote speakers, All registered presenters, All members of the organising committee