

# PROGRAM SCHEDULE

## Plenary Sessions

<b>Keynote Lectures</b>	<b>Plenary Session-I</b> <b>28 December, Thursday 11:00 AM – 01:00 PM</b> <b>Venue: Seminar Room</b> <b>Chair: Prof. Dr. Md. Shamim Akhter (RUET, Bangladesh)</b> <b>Co-Chair: Prof. Dr. Mihir Ranjan Halder (KUET, Bangladesh)</b>	<b>Page No.</b>
<b>KL-01</b>	Aerodynamics: A Tool to Achieve Glory in Speed Sports <i>Firoz Alam (RMIT University, Melbourne, Australia)</i>	
<b>KL-02</b>	Condition Monitoring of Rotating Machinery: A Recent Trend <i>Rajiv Tiwari (Indian Institute of Technology Guwahati, India)</i>	

<b>Keynote Lectures</b>	<b>Plenary Session-II</b> <b>29 December, Friday 8:30 AM - 09:30 AM</b> <b>Venue: Seminar Room</b> <b>Chair: Prof. Dr. Mohd. Rafiqul Alam Beg (RUET, Bangladesh)</b> <b>Co-Chair: Prof. Dr. Rajiv Tiwari (IIT Guwahati, India)</b>	<b>Page No.</b>
<b>KL-03</b>	Present and Future Research Trend in Electro Discharge Machining <i>Mohammad Yeakub Ali (International Islamic University Malaysia)</i>	
<b>KL-04</b>	Desalination Seawater: A Source of Fresh Water <i>M.N.A. Hawlader (International Islamic University Malaysia)</i>	

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## Technical Sessions

Paper ID	<b>Technical Session-I</b> <b>Applied Mechanics</b> <b>28 December, Thursday 2:00 PM-4:00 PM</b> <b>Venue: Seminar Room</b> <b>Chair: Dr. Ali Ahsan Talukder (Ex-Faculty, RUET, Bangladesh)</b> <b>Co-chair: Prof. Dr. Md. Emdadul Hoque (RUET, Bangladesh)</b>	Page No.
AM-23	Analysis of the Finite Element Solutions of Saint Venant torsion problem for a trapezoidal cross section <i>Md. Amirul Islam (Uttara University, Dhaka, Bangladesh),</i> <i>Md. Shajedul Karim (SUST, Bangladesh)</i>	
AM-95	Assessment of Surface Roughness Using LVDT: A Convenient and Inexpensive Way of Measuring Surface Irregularities <i>Sanjida Nasreen (RUET, Bangladesh), Md. Rokunuzzaman (RUET),</i> <i>Samarjith Biswas (RUET)</i>	
AM-118	Modeling and Analysis of Elastic Fields of Human Femur <i>M S. Parvej(BUET, Bangladesh), A.M. Afsar (BUET),</i> <i>T H.S. Rafi Ahmed (BUET., S M Shayak Ibna Faruqui (BUET)</i>	
AM-124	Design and construction of a two-wheel independent drive smart electric wheelchair for mobility impaired people <i>Md. Fahim Bhuiyan (IU, Bangladesh), Mohammad Rejwan Uddin (IU),</i> <i>Zaima Tasneem (IU), Khosru M Salim (IU)</i>	
AM-131	Study and Design of Dexterous Prosthetic Hand for Upper Limb Amputee <i>Kazi Jubair (KUET, Bangladesh), Kazi Jamil Hossain (AIU, Bangladesh),</i> <i>Mir Ashraf Ali Ronok (KUET)</i>	
AM 157	Mode-I Failure Investigation of Eccentric Elliptical Hole Containing Crack with Varying Eccentricity and Crack Length <i>Oishwarya Bhowmik (BUET, Bangladesh), Turash Haque Pial (BUET), Moinuddin Shuvo (BUET) and Abdullah Al Aminb (Case Western Reserve University)</i>	
AM-161	A Proposal of Smart Home Automation System Based on Renewable Energy <i>A K Ehsanul Haque Mashuk (IU, Bangladesh), Pranti Tawheed (IU), Md. Khizir Al Zabir (IU), Ahsan Ul Kabir Shawon (IU), Mehdi Alam(IU),</i> <i>Md. Nasfikur R. Kha (IU)</i>	
AM 247	Improvement of Driving Mechanism of Rickshaw <i>Newton Roy(RUET, Bangladesh), Nikash kanti Nath (RUET),</i> <i>Md. Rokunuzzaman (RUET) and Miraj Bin Alam (RUET)</i>	
AM-270	Continuous Rotation Control of Robotic Arm using Slip Rings for Mars Rover <i>Rakibul Islam (RUET, Bangladesh), Md. Faridul Islam (RUET), Md. Rokunuzzaman (RUET)</i>	
AM-274	Transient Peak Reduction by Feedforward Control in Zero-compliance System with Displacement Cancellation Technique <i>Mhia Md. Zaglul Shahadat (RUET, Bangladesh), Nirendranath Mustafi (RUET), Md. Emdadul Hoque RUET), Takeshi Mizun (Saitama University, Japan)</i>	
AM 275	A Conceptual Design of Line Follower Pick-and-Place Robot for Industrial Purpose <i>Maruf Ar Rusafi (RUET, Bangladesh), Md Mashum Billal (RUET), Farjana Yasmin (RUET), Rukunuzzaman Khan (RUET), Sanjida Ferdousi (RUET)</i> <i>and S.M. Salauddin Iqbal (RUET)</i>	
AM-279	Performance Analysis of a Fabricated Distinct Voice Coil Motor <i>Mhia Md. Zaglul Shahadat (RUET, Bangladesh), Md. Golam Kibria (RUET), Md. MonnafAli (RUET)</i>	
AM 282	Development of an IOT based Delta Robot for Industrial Application <i>Shahajada Mahmudul Hasan (RUET, Bangladesh), Amit Roy (RUET) and Rifat Al Amin (RUET)</i>	

<b>Paper ID</b>	<p style="text-align: center;"><b>Technical Session-II</b>  <b>Energy Technology-I</b>  <b>28 December, Thursday 2:00 PM-4:00 PM</b>  <b>Venue: Room No.: 204</b>  <b>Chair: Prof. Dr. Mohd. Rafiqul Alam Beg (RUET, Bangladesh)</b>  <b>Co-Chair: Prof. Dr. Jamal Uddin Ahamed (CUET, Bangladesh)</b></p>	<b>Page No.</b>
<b>ET-06</b>	Energy and Carbon Footprint Analysis of University Vehicles in Bangladesh <i>Md. Shazib Uddin (RUET, Bangladesh), Md. Saiful Islam (RUET), Md. Fazlur Rashid (RUET), Isahak Mohammad Habibulla (RUET), Nazmul Haque (RUET)</i>	
<b>ET-27</b>	Production of Biogas from Anaerobic Digestion of Biodegradable Waste Blends in Lab-scale Reactor <i>Sohail Ahmed (RUET, Bangladesh), Arun Sarker (RUET), Tasnuva Choudhury (RUET)</i>	
<b>ET-33</b>	Opportunities, Challenges and Future Developments of CNG (Compressed Natural Gas) Sector in Bangladesh <i>Syed Misbah Uddin (SUST, Bangladesh), M. Iqbal, Rezaul Islam Khan (SUST), Md. Nazmus Sakib (SUST)</i>	
<b>ET-53</b>	Waste Heat Thermal Storage System a Way to Renewable Energy <i>Tamal Chowdhury (CUET, Banglaedesh), Pranta Barua (CUET), Hemal Chowdhury (CUET), Sakib Ahmed (CUET), MD. Niamul Quader (CUET), Bodus Salam (CUET)</i>	
<b>ET-60</b>	Assessment of Biogas Resources for Rural Electrification in Bangladesh <i>M. S. Islam (RUET, Bangladesh), M. R. Islam (RUET), B. K. Das (RUET), Najmul Hoque (RUET)</i>	
<b>ET-83</b>	Design, Construction, and Performance Test of a Portable Solar Photovoltaic Water Pumping System for Irrigation and Household Water Supply <i>Sk. Suzauddin Yusuf (BAUST, Bangladesh), Md. Shariful Islam (Renata Ltd, Bangladesh), Robiul Islam Rubel (BAUST), Md. Abu Shaid Sujon (IUT, Bangladesh), Mohd. Rafiqul Alam Beg (RUET, Bangladesh)</i>	
<b>ET-90</b>	Generation of Hydrogen from Biomass Through Thermo-Chemical Fluidized Bed Gasification <i>Samitava Deb Nath (Lub-rref Ltd. Bangladesh), Md. Eyasin Arafat (BUET, Bangladesh)</i>	
<b>ET-121</b>	Extraction of Biofuel from Orange Peel and its Characterization <i>Asma-Ul-Husna (RUET, Bangladesh), Mona Ferajee (RUET), Kazi Farzana Akhtar (RUET)</i>	
<b>ET-136</b>	Electricity Generation from Treadmill Using Piezoelectric Transducer <i>Al-Barkat Mehedi (RUET, Bangladesh), Masuma Akter (RUET), Asma-Ul-Husna (RUET)</i>	
<b>ET-140</b>	Effect of Additives Biogas Generation Using Anaerobic digestion <i>A. Kafi (RUET, Bangladesh), Liza Afrin (RUET), M. Mourshed (RUET), N. Mustafi (RUET)</i>	
<b>ET-146</b>	Prospects of Underground Coal Gasification (UCG) Process in Khalaspir Coal Fields, NW, Bangladesh <i>Md. Lotifuzzaman (JUST, Bangladesh), Md. Kamrul Islam (JUST)</i>	

<b>Paper ID</b>	<p style="text-align: center;"><b>Technical Session-III</b>  <b>Material Science-I</b>  <b>28 December, Thursday 2:00 PM-4:00 PM</b>  <b>Venue: Room No.: 203</b>  <b>Chair: Prof. Dr. Abu Bokr Md Ismail (RU, Bangladesh)</b>  <b>Co-chair: Prof. Dr. Md. Shamimur Rahman (RUET, Bangladesh)</b></p>	<b>Page No.</b>
<b>MS-19</b>	Preparation and Characterization of Polymer Concrete from Unsaturated Polyester Resin Reinforced with Building Waste <i>Muhtasim Kader Mukit (NSTU, Noakhali, Bangladesh), Md. Abdul Gafur (NSTU), Muhammed Yusuf Miah (NSTU), Md. Kamruzzaman (NSTU)</i>	
<b>MS-22</b>	Effect of Saw Dust on the Physical and Mechanical Properties of China Clay Refractory <i>Abdullah Al Mahmood (RUET, Bangladesh), Mushfiqur Islam (RUET), N. Shahriar (RUET), M.S. Rahman, Tasmia Zaman (RUET), Tauhidul Islam Tushar (RUET)</i>	
<b>MS-49</b>	Characterization of Tensile Properties in Thermal Modified Cu-Ni Content Al-Si Hypoeutectic Alloy under Different Strain Rates <i>A. Hossain (Sylhet Gas Fields Limited, Sylhet, Bangladesh), F. Gulshan (BUET, Bangladesh), ASW. Kurny (BUET)</i>	
<b>MS-50</b>	Tribological (Wear) Properties of Cu/Ni/Cu-Ni Content Al-Si Hypoeutectic Alloys under Dry Sliding Condition <i>A. Hossain (Sylhet Gas Fields Ltd, Bangladesh), M. A. Gafur (BCSIR, Dhaka, Bangladesh), F. Gulshan (BUET, Bangladesh), ASW. Kurny (BUET)</i>	
<b>MS-58</b>	A comprehensive review of First Principle Study on Bismuth Ferrite <i>Md. Fatin Ishtiyayq (BUET, Bangladesh), Utpal Roy (BUET), Hasin Ishraq Tamim (BUET), Azmain Faek Islam (BUET), Ahmed Sharif (BUET)</i>	
<b>MS-79</b>	Effects of Defects on the Fracture Strength of Hexagonal Boron Nitride <i>Shahriar Muhammad Nahid (BUET, Bangladesh), Fakhrul Hasan Bhuiyan (BUET), Tawfiqur Rakib (BUET), Satyajit Mojumder (BUET)</i>	
<b>MS-82</b>	Approximation techniques of stress concentration factor of double notched plate <i>Md. Shafiul Ferdous (BAUST, Saidpur, Bangladesh), Md. Robiul Islam (BAUST), Md. Hasan Ali (BAUST), Md. Abu Shaid Sujon (BAUST), Sk. Suzauddin Yusuf (BAUST), Md. Rasel Sarkar (BAUST), Robiul Islam Rubel (BAUST)</i>	
<b>MS-112</b>	Study of Fiber Matrix Bonding Property Enhancement in Terms of Flexural Behavior and Macro Analysis of Fracture Behavior of Borassus flabellifer (Palmyra Palm) Fiber Reinforced Polymer Matrix Composites <i>Mohammad Tashfiul Amin Chowdhury (BUET, Bangladesh), Md. Aminul Islam (BUET)</i>	
<b>MS-166</b>	Sustainable Green Materials for Building Construction <i>Ashik Iqbal (KUET, Bangladesh), Faisal Jahangir Swapnil (KUET)</i>	

<b>Paper ID</b>	<p style="text-align: center;"><b>Technical Session-IV</b>  <b>Fluid Mechanics</b>  <b>28 December, Thursday 4:15 PM - 6:30 PM</b>  <b>Venue: Seminar Room</b>  <b>Chair: Prof. Dr. Firoz Alam (RMIT, Australia)</b>  <b>Co-chair: Prof. Dr. Mohammad Rofiqul Islam (RUET, Bangladesh)</b></p>	<b>Page No.</b>
<b>FM-30</b>	CFD Analysis of Shell and Tube Heat Exchanger with Different Baffle Orientation & Baffle Cut <i>Noor Afsar (KUET, Bangladesh), Dr. Mohammad Ilias Inam (KUET)</i>	
<b>FM-75</b>	Numerical Predictions of Calm Water Resistance of a Modern Surface Combatant <i>Doyal Kumar Sarker (BUET, Bangladesh), Md. Safwan Ahsanullah (BUET), Samiul Azam (BUET), Md. Mashiur Rahaman (BUET)</i>	
<b>FM-76</b>	Characteristics Analysis of Dual Bell Nozzle using Computational Fluid Dynamics <i>Yeasir Mohammad Akib (RUET, Bangladesh), Asif Kabir (BUET, Bangladesh), Mahdi Hasan (CUET, Bangladesh)</i>	
<b>FM-91</b>	Numerical Study of Marine Propeller Performance <i>Parnab Saha (BUET, Bangladesh), Kaustuv Brohmachary (BUET), Dr. Md. Refayet Ullah (BUET)</i>	
<b>FM-92</b>	Boundary layer analysis along a stretching wedge surface in cylindrical coordinate <i>M. Ali (CUET, Bangladesh), M. A. Alim (BUET, Bangladesh), R. Nasrin (BUET)</i>	
<b>FM-159</b>	Study of Shockwave with Supersonic Compressible Flow over an Inclined Flat Plate <i>Syed Angkan Haidera (BUET, Bangladesh), Shadman Tahmid (BUET)</i>	
<b>FM-165</b>	Observation of Unsteady Shock Behavior around a Biconvex Circular Arc Airfoil with Circular Cavities on It in a Channel <i>Zabir Mahmud (BUET, Bangladesh), Rifat Ibn Azad (BUET), Redowan Ahmed Niloy (BUET), Adibuzzaman Rahi (BUET), Shadman Tahmid (BUET)</i>	
<b>FM-169</b>	Numerical Analysis of Shock Oscillation around a Biconvex Circular Arc Airfoil by Incorporating a Bump on it in a Channel <i>Sujan Barua (BUET, Bangladesh), Sattajit Barua (BUET), Adibuzzaman Rahi (BUET), Redowan Ahmed Niloy (BUET), Shadman Tahmid (BUET)</i>	
<b>FM-229</b>	Design optimization & Numerical analysis of different bus geometry to reduce air drag co-efficient and fuel consumption <i>Md. Yasin Ali (KUET, Bangladesh), Shabnoor Mahmud Joty (KUET), Dr. Mohammad Ilias Inam (KUET)</i>	
<b>FM-238</b>	Design of a Microcontroller Operated PVC, uPVC and CPVC Pipe Internal Pressure Test Rig <i>MD. Samirul Islam (RUET, Bangladesh), Sadat Rafi (RUET), Md. Firojjaman (RUET), Rashidul Hasan (RUET), Md. Mujahid Ul Islam (RUET), Fazlur Rashid (RUET)</i>	
<b>FM-244</b>	A Numerical Study on the Fluid Structure Interaction of a Wind Turbine Blade <i>Sumaiya Tasnim (KUET, Bangladesh), Md. M. Islam (KUET), Shabnoor M. Joty (KUET), Zahir U. Ahmed (KUET)</i>	
<b>FM-249</b>	A Nonconventional Approach of Designing Airfoils <i>Rubiat Mustak (KUET, Bangladesh), Tanjim Ahmed (KUET)</i>	
<b>FM-266</b>	Design and Construction of a Jet Impingement Apparatus <i>Amitav Roy (KUET, Bangladesh), Pial Das (KUET), Md.Omar Faruk (KUET)</i>	

<b>Paper ID</b>	<p style="text-align: center;"><b>Technical Session-V</b>  <b>Industrial Engineering-I</b>  <b>28 December, Thursday; 4:15 PM - 6:30 PM</b>  <b>Venue: Room No.: 204</b>  <b>Chair: Prof. Dr. Mohammad Yeakub Ali (IIUM, Malaysia)</b>  <b>Co-Chair: Prof. Dr. Md. Mosharraf Hossain (RUET, Bangladesh)</b></p>	<b>Page No.</b>
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<b>IE-63</b>	Safety in Workplace and Its Effect on Labor Productivity: A Case Study for Pharmaceutical Industry <i>Md Shafiqul Islam (SUST, Bangladesh), Tanjila Islam (SUST)</i>	
<b>IE-64</b>	Developing Control Charts in a Manufacturing Industry and Improvement of Quality Using PDCA Cycle <i>Tanjila Islam (SUST, Bangladesh), Md Shafiqul Islam (SUST)</i>	
<b>IE-80</b>	Productivity improvement in Solar Panel Manufacturing Company through In-Process Quality Inspection: A Case Study <i>Mohammad Ahnaf Sadat (BUET, bangladesh), Gazi Nazia Nur (BUET), Ahsan Akhtar Hasin (BUET)</i>	
<b>IE-103</b>	Measuring and Analyzing Job Stress and Fatigue among Workers and Its Impact on Employee Productivity in a Pharmaceutical Factory: A Case Study <i>Md Shafiqul Islam (SUST, Bangladesh), Md Mahraj Uddin (SUST), Md. Rabiul Hasan (SUST)</i>	
<b>IE-123</b>	Productivity Improvement of a Flow Line Layout Using Line Balancing Techniques <i>Md.Naime Hossain Bhuiyan (SUST, Bangladesh), Chowdhury Md. Luthfur Rahman (SUST), Md Ashraf Uddin (SUST)</i>	
<b>IE-129</b>	Cost Minimization and Environmental Impact Reduction on the Basis of Green Supply Chain Management Concept <i>Md. Saifur Rahman (BGMEA, Bangladesh), Md. Hasan Ali (BAUST, Bangladesh), A.S.M. Tariq Hoque (RFL Electronics Ltd, Bangladesh)</i>	
<b>IE-154</b>	Performance Assessment and Improvement of a Printing Press in Terms of Effectiveness and Efficiency <i>M.M.A. Khan (SUST, Bangladesh), S. Saha (SUST), A. M. Tousif (SUST), M. R. Islam (SUST), M. A. Islam (SUST)</i>	

<b>Paper ID</b>	<b>Technical Session-VI Related Technology-I</b> <b>28 December Thursday 4:15 PM - 6:30 PM</b> <b>Venue: Room No.: 203</b> <b>Chair: Prof. Dr. Syed Abdul Mofiz (RUET, Bangladesh)</b> <b>Co-chair: Prof. Dr. Md. Shamsul Alam (RUET, Bangladesh)</b>	<b>Page No.</b>
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<b>RT-44</b>	Design And Performance Test of An Automatic Irrigation System <i>Anupom Roy (KUET, Bangladesh), Riad Al Hasan Abir (KUET), A.S.M. Moniruzzaman Hashemy (KUET)</i>	111
<b>RT-46</b>	A Proposal on Segregation of Road Side Wastes during Collection Period by Introducing an Innovative System <i>Sk. Md. Imdadul Islam (KUET, Bangladesh), Md. Nazmul Haque (KUET)</i>	112
<b>RT-57</b>	Feasibility Study of CO <sub>2</sub> Sequestration in the Potential Gas Fields of Bangladesh <i>S. M. Shamsul Hoque (CUET, Bangladesh), Md. Nahin Mahmood (CUET), Tareq Uz Zaman (Memorial University of Newfoundland, Canada)</i>	112
<b>RT-70</b>	A proposal for an autonomous robotic model ship for continuous measurement of turbidity using wireless network system and GPS <i>Maqsood Mansur (BUET, Bangladesh), Preetom Kumar Sarker (BUET), Md. Safwan Ahsanullah (BUET), Md. Kamruzzaman Prodan (BUET), Kaustuv Brohmachary (BUET), Sakib Noor (BUET), Doyal Kumar Sarker (BUET)</i>	113
<b>RT-84</b>	Design and Construction of Solar Water Purifier <i>Gazi Nazia Nur (BUET, Bangladesh), Mohammad Ahnaf Sadat (BUET)</i>	113
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<b>RT-142</b>	Design, Construction and Performance Test of a Color Detective Device <i>Md. Abdullah Al Mamun (KUET, Bangladesh), Md. Hasan Ali (BAUST, Bangladesh), Md. Shafiul Ferdous (BAUST)</i>	115
<b>RT-170</b>	Construction and Experimental Analysis between cylindrical type & canonical type silencer <i>Mihir Dutta (KUET, Bangladesh), Susmita Das Puja (KUET), Nusrat Sharmin (KUET)</i>	115
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<b>RT-207</b>	Design and performance analysis of unmanned aerial vehicle (UAV) to deliver aid to the remote area <i>Rafi ur Rahman (MIST, Bangladesh), Muhammed Hasnain Kabir Nayeem (MIST), Mosarruf Hossain (MIST), Md. Roman Hossain Fazlah Rabby (MIST)</i>	116
<b>RT-222</b>	Assessment of Sound Level at Different Locations of Rajshahi City <i>Pronob Das (RUET, Bangladesh), Zikrul Haque (RUET), Md. Shamim Akhter (RUET)</i>	117

<b>Paper ID</b>	<p style="text-align: center;"><b>Technical Session-VII</b>  <b>Energy Technology-II</b>  <b>29 December, Friday 10:50 AM-12:30 PM</b>  <b>Venue: Seminar Room</b>  <b>Chair: Prof. Dr. Mohd. Rafiqul Alam Beg (RUET, Bangladesh)</b>  <b>Co-Chair: Prof. Dr. Mihir Ranjan Halder (KUET, Bangladesh)</b></p>	<b>Page No.</b>
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<b>ET-253</b>	Solar Based Plugged-in Hybrid Engine Driven rickshaw (Auto-Rickshaw) & its Feasibility Analysis for Bangladesh <i>Avijit Mallik (RUET, Bangladesh), Md. Arman Arefin (RUET), Fazlur Rashid (RUET), Md. Asfaquzzaman (RUET)</i>	
<b>ET-263</b>	Performance Analysis of a Solar Powered Adsorption Cooling System <i>Sai Yagnamurthy (IIT, Delhi, India), Dibakar Rakshit (IIT), Sanjeev Jain (IIT)</i>	
<b>ET-264</b>	Designing of an Off Grid Photovoltaic System for a Residential Building <i>Md. Raquibul Hasan (PUST, Bangladesh), Md. Asaduzzaman Shobug (PUST)</i>	
<b>ET-273</b>	Liquid Fuel Production by Co-Pyrolysis of Polythene and Sawdust <i>M. S. Haque (RUET, Bangladesh), M. K. Hasan (RUET), J. Ferdous (RUET), M. S. Hossain (RUET), M. R. Islam (RUET), H. Haniu (KIT, Japan)</i>	
<b>ET-277</b>	Solar Energy Resources and Related Technologies Practice in Bangladesh <i>M. S. Islam (RUET, Bangladesh), M. R. Islam (RUET), Nurul Huda (RUET), Rakibul Islam (RUET), Shohag Hossain (RUET)</i>	
<b>ET-281</b>	Prospect of rural electrification through biogas in Bangladesh-design & feasibility study of biogas based electricity facility of a poultry farm <i>Md. Nurul Islam (RUET, Bangladesh), S. M. Najmul Hoque (RUET), Soumya Mandal (RUET), Abir Hasan (RUET), Md. Rafsan Nahian (RUET)</i>	



<b>Paper ID</b>	<p style="text-align: center;"><b>Technical Session-VIII</b>  <b>Industrial Engineering-II</b>  <b>29 December, Friday 10:50 AM-12:30 PM</b>  <b>Venue: Room No.: 204</b>  <b>Chair: Prof. Dr. Rajiv Tiwari (IIT Guwahati, India)</b>  <b>Co-Chair: Prof. Dr. Md. Emdadul Hoque (RUET, Bangladesh)</b></p>	<b>Page No.</b>
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<b>IE-185</b>	<p>Demand Forecasting Techniques Applicable to the Supplier of Industrial Products in Bangladesh (An Exploratory Study)  <i>M. A. Islam (SUST, Bangladesh), M. M. A. Khan (SUST), S.K. Nahar (SUST)</i></p>	
<b>IE-221</b>	<p>Weight Optimization of Helical Spring Using Genetic Algorithm  <i>Shabnoor Mahmud Joty (KUET, Bangladesh), Md. Yasin Ali (KUET)</i></p>	
<b>IE-225</b>	<p>Improvement of Productivity through Manipulating Fabrication Layout in Sewing Department of a Footwear Industry  <i>Md. Nazmul saif (KUET, Bangladesh), Md. Alif Hossain (KUET), Adhir Chandra Paul (KUET)</i></p>	
<b>IE-243</b>	<p>Understanding the difficulties of implementing TQM in garment sector: A case study of some RMG industries in Bangladesh  <i>Subrata Talapatra (KUET, Bangladesh), Md. Kutub Uddin (KUET)</i></p>	
<b>IE-268</b>	<p>Improving OEE of a Garment Factory by Implementing TPM Approach  <i>Sajib Saha (JUST, Bangladesh), Sadi Mohammad Akash (JUST), Tarun Kumer Biswas (JUST)</i></p>	
<b>IE-278</b>	<p>How Mobile Phone Impacts on Engineering Students' Academic Performance: A Case Study  <i>Md. Asadujjaman (RUET, Bangladesh), Jamshed Uddin (RUET), G.H.M. Jilan, Sonia Akhter (RUET)</i></p>	

<b>Paper ID</b>	<p style="text-align: center;"><b>Technical Session-IX</b>  <b>Thermal Engineering</b>  <b>29 December, Friday 10:50 AM-12:30 PM</b>  <b>Venue: Room No.: 203</b>  <b>Chair: Prof. Dr. M.N.A. Hawlader (IIUM, Malaysia)</b>  <b>Co-chair: Prof. Dr. Nirendra Nath Mustafi (RUET, Bangladesh)</b></p>	<b>Page No.</b>
<b>TE-25</b>	<p>Experimental Investigation on Micro Heat Pipes (MHP) of Different Lengths  <i>Al-Basir (IUT, Bangladesh), Mohammed Shahed Hossain (DU, Bangladesh), Rajib Sarkar Rajan (UAP, Bangladesh), Md. Shahrier Hakim (University of Greenwich, UK), Md. Abdur Razzaq Akhanda (IUT)</i></p>	
<b>TE-48</b>	<p>Water Based Ferrofluid and Nanofluid Mixed Convective Flow through a Square Channel: Effect of Magnetic Induction  <i>Mohammad Mokaddes Ali (MBSTU, Bangladesh), M.A. Alim (BUET, Bangladesh), R. Nasrin (University of Malaya, Malaysia)</i></p>	
<b>TE-85</b>	<p>Study of power consumption characteristics of LPG and R134a in a vapor compression refrigeration system  <i>Md. Abu Shaid Sujon (IUT, Bangladesh), Rakibul Hossain Ahmed (Walton Ltd, Bangladesh), Dr. A.K.M. Sadrul Islam (IUT), Sk. Suzauddin Yusuf (BAUST, Bangladesh)</i></p>	
<b>TE-152</b>	<p>Prospects of Solar Powered Air Conditioning Systems in Bangladesh and Comparative Analysis with Conventional Systems  <i>Sami Ahabab Chowdhury (RUET, Bangladesh), Shaikh Sumit Noor (RUET), Oishwarjya Ferdous (RUET), Md. Emdadul Hoque (RUET)</i></p>	
<b>TE-209</b>	<p>MHD Free Convection and Mass Transfer Flow over a Vertical Porous Plate in Presence of Ion-slip Current  <i>Md. Delowar Hossain (CUET, Bangladesh), Md. Mahmud Alam (KU, Bangladesh), Syed Mainur Rahman (CUET)</i></p>	
<b>TE-262</b>	<p>A Comparative Study and Parametric Analysis of Phase Change Materials Utilization for Interior Heat Gain Reduction  <i>Pranaynil Saikia (IIT Delhi, INDIA), Dibakar Rakshit (IIT, Delhi)</i></p>	
<b>TE-280</b>	<p>Feasibility of utilizing waste heat in drying of plant-based food materials  <i>M. H. Masud (RUET, Bangladesh), Mohammad U.H. Joardder (RUET), Md. Tariqul Islam (RUET), Md. Munthakimoon Hasan (RUET), Md. Muntasir Ahmed (RUET)</i></p>	

Paper ID	<p style="text-align: center;"><b>Technical Session-X</b>  <b>Material Science-II</b>  <b>29 December, Friday 2:30 PM-4:15 PM</b>  <b>Venue: Room No.: 204</b>  <b>Chair: Prof. Dr. M Mamun Ur Rashid Khandkar (RU, Bangladesh)</b>  <b>Co-chair: Prof. Dr. Md. Mahmud Sazzad (RUET, Bangladesh)</b></p>	Page No.
MS-177	<p>Thermal Resistance Approach to Analyze Temperature Distribution in Hollow Cylinders Made of Functionally Graded Material (FGM): Under Dirichlet Boundary Condition  <i>S M Shayak Ibna Faruqui (BUET, Bangladesh), Abul Al Arabi (BUET), M. S Parvej (BUET)</i></p>	
MS-184	<p>Measurement of Small Strain Stiffness Parameters of Granular Materials by DEM  <i>Md. Mahmud Sazzad (RUET, Bangladesh), Md. Shariful Islam (RUET), Md. Sumon Hossain (RUET)</i></p>	
MS-193	<p>Synthesis and Experimental Investigation of PALF Twill Fabric Reinforced Polyester Biocomposites  <i>Subrata Chandra Das (PTexEC, Pabna, Bangladesh), Debasree Paul (KYAU, Sirajgonj, Bangladesh), Md. Abdullah Al Mamun (MBSTU, Bangladesh), Bidhan Kumer Mitro (MBSTU), M. Tauhidul Islam (KYAU), Mubarak Ahmad Khan (BAEC, Bangladesh)</i></p>	
MS-210	<p>Effect of Aspect Ratio on the Micro-Scale Responses of Granular Materials  <i>Md. Mahmud Sazzad (RUET, Bangladesh), Saleha Akter Poly (RUET), Nazia Nowshin Sudipta (RUET)</i></p>	
MS-231	<p>Unusually High Thermoelectric Figure of Merit in Monocrystalline Metallic Vanadium Dioxide Nanobeams and Its Potential as a Thermoelectric Material  <i>MD. Samirul Islam (RUET, Bangladesh), Md. Mujahid Ul Islam (RUET), Md. Firojjaman (RUET), Tauhidur Rahman (RUET), Sadat Rafi (RUET)</i></p>	
MS-239	<p>Design and Simulation of a Graphene Based Thermoelectric Device  <i>MD. Samirul Islam (RUET, Bangladesh), Md. Nahid Hossan (RUET), Md. Najmul Huda Bijoy (RUET), Tauhidur Rahman (RUET), Md. Mujahid Ul Islam (RUET)</i></p>	
MS-260	<p>Investigation of Different Mechanical Properties of Commonly Available Papers  <i>M. W. Akram (RUET, Bangladesh), M. W. Islam (RUET), S. K. Choudhury (RUET)</i></p>	
MS-269	<p>Influences of Various Ceramic Oxides on Physical and Mechanical Properties of Zirconia Toughened Alumina (ZTA): A Review.  <i>Md. Wahedul Islam (RUET, Bangladesh), Md. Bakhtier khalzi (RUET), Md. Suzauddin (RUET), Nirendra Nath Mustaf (RUET)</i></p>	
MS-272	<p>Comparison of Mechanical Properties of Induction Furnace Steel Slag and Electric Arc Furnace Steel Slag as a Replacement of Coarse Aggregate in Construction Materials  <i>Riad Morshed Rezaulm (BUET, Bangladesh), Raihan Atahar (BUET), Tahmeed Bin Tasnim (BUET), ASW Kurny (BUET), Rowshan Momtaz (BUET), Fahmida Gulshan (BUET)</i></p>	
MS-276	<p>Influence of Aspect Ratio of Granular Materials on the Mechanical Behavior during Cyclic Loading by DEM  <i>Md. Mahmud Sazzad (RUET, Bangladesh), Tasnim Rahat (RUET)</i></p>	

<b>Paper ID</b>	<p style="text-align: center;"><b>Technical Session-XI Related Technology-II 29 December, Friday 2:30 PM-4:15 PM Venue: Room No.: 203</b></p> <p style="text-align: center;"><b>Chair: Prof. Dr. M. Shahidur Rahman (RU, Bangladesh) Co-chair: Prof. Dr. Md. Rafiqul Islam Sheikh (RUET, Bangladesh)</b></p>	<b>Page No.</b>
<b>RT-226</b>	<p>A Study on the Correlation among Different Foot Parameters of Bangladeshi Male <i>Adhir Chandra Paul (KUET, Bangladesh), SK. Ahasanuzzaman (KUET), Anik Alam (KUET)</i></p>	117
<b>RT-237</b>	<p>Design and Performance Study of a Circular Flow Channel Solar Water Heater <i>Md. Mujahid Ul Islam (RUET, Bangladesh), Dr. M R I Sarker (RUET), Md. Moshiur Rashid (RUET), Md. Firojjaman (RUET), MD. Samirul Islam (RUET)</i></p>	
<b>RT-248</b>	<p>Welding joint evaluation of mild steel samples for varying current and voltage to reduce the defect using non destructive testing <i>Md. Emdadul Hoque (RUET, Bangladesh), Md. Jabid Hasan (RUET), Md. Kamrul Hasan (RUET)</i></p>	
<b>RT-250</b>	<p>Chromium Removal from the Tannery Wastewater Using Coir Pith Charcoal <i>Md. Abul Hashem (KUET, Bangladesh), Aziza Ahsan (KUET), Md. Hasibur Rahman Sheikh (KUET), Syeda Anika Bushra (KUET), Alvi Rownok (KUET)</i></p>	
<b>RT-252</b>	<p>Chromium Removal from the Wastewater Equipped Artocarpus heterophyllus Bark Charcoal <i>Md. Abul Hashem (KUET, Bangladesh), Mehedi Hasan (KUET), Md. Abdul Momen (KUET), Shoeb Rahman (KUET)</i></p>	
<b>RT-255</b>	<p>Development of Thermo Acoustic Device for Cooling Effect in Machining Process <i>Anayet U Patwari (IUT, Bangladesh), Mohammad Ahsan Habib (IUT), Md. Saiful Islam (IUT), Md. Sayeed Ul Hasan (IUT)</i></p>	
<b>RT-256</b>	<p>Improvement of Surface Profile of Different Materials by Hot Air in Turning Process <i>Anayet U Patwari (IUT, Bangladesh), Mohammad Ahsan Habib (IUT), Md. Firoz Mahmud (IUT), Md. Minhazul Islam (IUT)</i></p>	
<b>RT-267</b>	<p>Feasibility Study of a Solar Charging Station for Charging Auto-rickshaw in Bangladesh <i>Md. Shazib Uddin (RUET, Bangladesh), Md. Saiful Islam (RUET), A. Z. M. Waliur Rahman (RUET), Sumon Kumar Mondol (RUET)</i></p>	
<b>RT-271</b>	<p>Characterization of Waste Lithium ion Batteries in the Process of Recovery of Value Materials <i>Md. Imran Noor (BUET, Bangladesh), ASW Kurny (BUET), Md. Rakibul Qadir (BCSIR, Bangladesh), M. A. Gafur (BCSIR), Fahmida Gulshan (BUET)</i></p>	

**International Conference on Mechanical Industrial and Materials Engineering 2017**  
(28-30 December 2017, RUET, Rajshahi-6204, Bangladesh)

*Program at a Glance*

Date & Time	8:30-9:30 AM	9:30-10:30 AM	10:30-11:00 AM	11:00 AM-1:00 PM	1:00-2:00 PM	2:00-4:00 PM	4:00-4:15 PM	4:15-6:30 PM (Prayer break 5:20~5:35PM)	7:00-8:30 PM
28 <sup>th</sup> December, 2017 (Thursday)	Registration & Kit Collection Venue: RUET Auditorium	Inaugural Session Venue: RUET Auditorium	Refreshment	<b>Plenary Session-I</b> Venue: Seminar Room  <b>Session Chair</b> Prof. Md. Shamim Akhter (Bangladesh)  <b>Co-Chair</b> Prof. Mihir Ranjan Halder (Bangladesh)  <b>Keynote Speakers</b> Prof. Firoz Alam (Australia)  Prof. Rajiv Tiwari (India)	Lunch and Prayer Break	Technical Session-I (Applied Mechanics) Seminar Room	Tea and Prayer Break	Technical Session-IV (Fluid Mechanics) Seminar Room	Conference Banquet Venue: Chinese Restaurant
						Technical Session-II (Energy Technology-I) Room-204		Technical Session-V (Industrial Engineering-I) Room-204	
						Technical Session-III (Material Science-I) Room-203		Technical Session-VI (Related Technology-I) Room-203	

❖ All Plenary and Technical Sessions will be Held in 1<sup>st</sup> Floor of Heat Engine Laboratory, RUET

**International Conference on Mechanical, Industrial and Materials Engineering 2017**  
**(28-30 December 2017, RUET, Rajshahi-6204, Bangladesh)**

*Program at a Glance*

Date & Time	8:30-9:00AM	9:00-10:30AM	10:30-10:50 AM	10:50AM to 12:30 PM	12:30-2:15 PM	2:30-4:15 PM	4:15-4:30 PM	6:00-8:00 PM
29 <sup>th</sup> December, 2017 (Friday)	Registration & Kit Collection Venue: RUET Auditorium	<b>Plenary Session-II</b> Venue: Seminar Room  <b>Session Chair</b> Prof. Mohd. Rafiqul Alam Beg (Bangladesh)  <b>Co-Chair</b> Prof. Rajiv Tiwari (India)  <b>Keynote Speakers</b> Prof. Mohammad Yeakub Ali (Malaysia) Prof. M. N. A. Hawlader (Malaysia)	Refreshment	Technical Session-VII (Energy Technology-II) Seminar Room  Technical Session-VIII (Industrial Engineering-II) Room-204  Technical Session-IX (Thermal Engineering) Room-203	Lunch and Prayer Break	Technical Session-X (Related Technology-II) Room-204  Technical Session-XI (Material Science-II) Room-203	Tea and Prayer Break	<b>Closing Ceremony</b> Venue: Seminar Room  <b>Dinner Packs will be Served</b>
30 <sup>th</sup> December, 2017 (Saturday)	<p align="center"><b>9.00 AM-5.00 PM</b>  <b>Visit in Industries and Historical Places</b></p>							

❖ All Plenary and Technical Sessions will be Held in 1<sup>st</sup> Floor of Heat Engine Laboratory, RUET

