

IMEOM 2019 Dhaka



The Second International Conference on Industrial and Mechanical Engineering and Operations Management (IMEOM)

12-13 December, 2019, Dhaka, Bangladesh Venue: Bangladesh Institute of Management (BIM), 4, Sobhanbag, Mirpur Road www.ieombd.org/imeom2019

Organized by: IEOM Society of Bangladesh and Production Management Division, BIM Supported by: IEOM Society International

Program Schedule - IMEOM 2019 Dhaka

| Day One: 12 December, 2019 (Thursday) | | |
|---------------------------------------|--|-----------------|
| 915 1700 | Registration | Venue: Room No |
| | | 312 |
| 830-900 | Morning Keynote | Venue: Room No |
| | | 314-A |
| Keynote Speaker | Prof Dr. M lqbal (SUST) | |
| Title: | Industry 4.0 and its impact in Bangladesh | |
| Session Chair: | Prof Dr. Md. Mamunur Rashid (BIM) and Dr. A.R.M. Harunur Rashid (IUT) | |
| 900 1000 | Long Keynote | Venue: Room No |
| | | 314-A |
| Keynote Speaker | Prof Dr. Abdur Rahim, UNB, Canada | |
| Title: | An Integrated Approach on Operations Management, | |
| | Quality Management, Maintenance and Supply Chain | |
| | Management | |
| Session Chair: | Prof Dr Nurul Absar Chowdhury, IUT and Prof Dr. Md. | |
| | Mamunur Rashid (BIM) | |
| 1000 1015 | Tea Break [working] | |
| 1000 -1100 | Technical Session 9 | Venue: Room314- |
| | | Α |
| Session Chair | Prof Dr. M Sarwar Morshed (AUST)and Prof Dr. Md. | |
| | Mamunur Rashid (BIM) | |
| ID | Title | Author(s) |
| | Improvement of Transportation Efficiency Using | |
| 90 | Simulation-Based Decision Support System | |
| | Risk Minimization of Warehousing System by showing | |
| | Probable Total Costs towards any Certain Company with | |
| 91 | the help of Monte Carlo Simulation | |

| | 0.4 | Endogenous Uncertainties Of Agricultural Production Yield | |
|----------------|-----|--|----------------|
| | 84 | Case Study | |
| | 04 | Fuzzy Logic Application for Aircraft Landing Performance | |
| | 81 | Analysis | |
| | | Productivity Improvement at a Soft Drink Manufacturing | |
| | 69 | Company: A Case Study | |
| 1000 -1100 | | Technical Session 10 | Venue: Room B |
| Session Chair | | Prof Dr. Md. Haider Ali Biswas, Khulna University and Dr. | |
| | | A.R.M. Harunur Rashid (IUT) | |
| ID | | Title | Author(s) |
| | | Mathematical Modeling Applied to Study the Effects of | |
| | | Wastage Produced from the Coal-Based Power Plant on | |
| | 77 | Marine Ecosystem | |
| | | Mathematical Modeling Applied To Assess The | |
| | 78 | Environmental Effect Of Smog Concentration In Dhaka City | |
| | | Analysis of National Skill Development Policy of | |
| | 7 | Bangladesh-2011 : Problem & Prospect. | |
| | 8 | Security Compliance of | |
| | | Impact of Workplace Conditions on Level of Employee | |
| | 70 | Satisfaction | |
| 1115-1615 | | Student Talk for IMEOM | Venue: Room-C |
| | | Selection Round | |
| 1100 1200 | | Technical Session 1 | Venue: Room A |
| Session Chair: | | Prof. Dr. Munnujahan Ara, Khulna University and Dr. | |
| | | A.R.M. Harunur Rashid (IUT) | |
| ID | | Title | Author(s) |
| | | Optimal Planning and Management of Groundwater Level | |
| | 59 | Declination: A Mathematical Model | |
| | | Modeling The Dynamics of Spreading Rumors and Fake | |
| | 60 | News Through Online and Social Media | |
| | | Optimal Control Applied to the Treatment Strategy for | |
| | 52 | Chronic Liver Disease | |
| | | Designing and Organizing a Training Course in an | |
| | 11 | Organizations | |
| | | Dissatisfaction in the workplace and its correlation to high | |
| | 56 | staff turnover | |
| 1100 1200 | | Technical Session 2 | Venue: Room B |
| Session Chair: | | Prof Dr. Shamsuddin Ahmed, IUT and Prof Dr. M Iqbal | |
| | | (SUST) | |
| ID | | Title | Author(s) |
| | | Organizational Readiness for introducing a performance | |
| | 10 | Management System. | |
| | 9 | Major Barrier to Industrialization in Bangladesh | |
| | | Energy Recovery from Gas Distribution by incorporating | Mohsina Morium |
| | 40 | Turbo Expander | |
| | | A Design Approach to Improve Existing CNG Filling Station | |
| | 45 | by Improving the Layout | |
| | . • | | ı |

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|-----------------|---|------------------|
| | Using Total Productive Maintenance as an Assessment in | |
| 67 | Improving System Performance | Venue: Room A |
| 1200 - 1300 | | |
| Session Chair: | Dr. Parveen Ahmed, Director,BIM | |
| | and Prof Dr. M Sarwar Morshed (AUST) | |
| ID | Title | Author(s) |
| 15 | Characteristics Analysis of Laser Beam Machining Process | |
| | Mathematical Modeling Of Friction On The Cutting Zone | |
| 2 | During Orthogonal Cutting | |
| | Optimizing the Hotel Management System with Marketing | |
| 75 | Segments | |
| | Particle transport through periodic tube with hexagonal | |
| 74 | cross-section | |
| | A Comparative Analysis of Natural and Artificial Flavorings | |
| | through Analytical Methods and Flavor Additive | |
| 68 | Regulations | |
| 1200 - 1300 | Technical Session 4 | Venue: Room B |
| Session Chair | Prof Dr Ali, BUTEX and Dr. A.R.M. Harunur Rashid (IUT) | |
| ID | Title | Author(s) |
| | Numerical Analysis of Natural Convection Heat Transfer | |
| 12 | from Slender Body in a Channel | |
| | Common Mistakes in Boiler Operation & | |
| 5 | Maintenance(Perspective Bangladesh) | |
| | Study On The Use Of Agent Based Modeling To Simulate | |
| 79 | Consumer Behavior | |
| 6 | Problems and Prospect of Textile Industry in Bangladesh | |
| 55 | Productivity Improvement at Coca-Cola | |
| 1300 1335 | Lunch and Prayer Break | Venue: Cafeteria |
| | | |
| 1335 1400 | Afternoon Keynote | Venue: Hall Main |
| 1555 1400 | Arternoon Reynote | (Room A) |
| Keynote Speaker | Prof Dr. Shamsuddin Ahmed, IUT | (NOOM 71) |
| Title: | Industry –Academia Partnership in Engineering Education | |
| Session Chair: | Prof Dr. M Iqbal (SUST) and and Dr. A.R.M. Harunur | |
| Session Chair. | Rashid (IUT) | |
| 1400-1500 | Technical Session 5 | Venue: Room A |
| Session Chair | Prof Dr. Md. Zahid Hossain, IUT and Prof Dr. M Sarwar | venue. Room / |
| Jession chair | Morshed (AUST) | |
| ID | Title | Author(s) |
| | Reduction of Power Consumption in Gas Booster | Mohsina |
| 22 | Compressor | |
| | Experimental Analysis of CFRP Drill Hole Quality Based on | |
| 24 | Pre-Hole & Force | |
| | Analysis and Optimization of Traffic Congestion at Single | |
| 89 | Intersection Using MATLAB and Arena | |
| | 1 | 1 |

| | | Implementation of TQM in a RMG factory- an empirical | |
|---------------|----|--|---------------|
| | 49 | case study | |
| | | Effects of NACA 0012 and NACA 2412 Airfoils as Rear | |
| | | Spoilers on Sports Car Aerodynamic Drag & Lift: a CFD | |
| | 63 | Study | |
| 1400-1500 | | Technical Session 6 | Venue: Room B |
| Session Chair | | Prof. Dr. Nurul Absar Chowdhury, IUT and Prof Dr. M | |
| | | Iqbal (SUST) | |
| ID | | Title | Author(s) |
| | 23 | Sustainable conventional electricity generation | |
| | | Scrutinizing the Effect of Three Process Parameters on the | |
| | | Two Mechanical Characteristics of Lead-Tin Alloy Casting | |
| | 64 | by Using Taguchi Orthogonal Array | |
| | | Acceleration analysis of transversely vibrated cracked | |
| | 65 | shaft | |
| | | Development of PLC and SCADA based Central Alarm | |
| | 85 | System for Glass Bottle Manufacturing Industry | |
| | | Application of PLC and SCADA Based Real-Time Online | |
| | | Counter for Glass Bottle Manufacturing Industry in | |
| | 86 | Bangladesh | |
| 1500-1600 | | Technical Session 7 | Venue: Room A |
| Session Chair | | Dr. Mamun Habib, BracU and Dr. A.R.M. Harunur Rashid | |
| | | (IUT) | |
| ID | | Title | Author(s) |
| | 39 | Clean Power Generation in Bangladesh | Mohsina |
| | | Static and Fatigue Behavior Analysis of New Design Leaf | |
| | 66 | Spring of Different Material Combination | |
| | 14 | The hidden costs of servitized business models | |
| | | Employee Health, Safety & Accident In Pharmaceuticals | |
| | 16 | Industry In Bangladesh | |
| | | Legal framework for the industrial relation system in | |
| | 17 | Bangladesh | |
| 1500-1600 | | Technical Session 8 | Venue: Room B |
| Session Chair | | Dr. A.S.M. Mojahidul Hoque, JUST and Dr. M. | |
| | | Hasanuzzaman, BUET/ Prof Dr. Md. Haider Ali Biswas, | |
| | | Khulna University | |
| ID | | Title | Author(s) |
| | 20 | Technological Change and Automation in Bangladesh | |
| | | World Trade Organization Rules on Sanitary and | |
| | 27 | Phytosanitary Measures: Bangladesh Perspective | |
| | | Occupational Safety & Health for Hospital Workers in | |
| | 29 | Dhaka | |
| | | Development of VFD, PLC and SCADA Based Fluid | |
| | | Temperature, Pressure and Level Control for Food | |
| | 87 | Manufacturing Industry | |
| | | An Image Processing Based Glass bottle Defect Detection | |
| | 88 | System | |
| | | | |

| 1400-1500 | Tea and Prayer Break | |
|-----------------|---|---------------------|
| 1600 1645 | Inaugural Ceremony | Venue: Room 314 |
| Chief Guest: | Secretary, Ministry of Industry | |
| Session Chair: | Tahmina Akhter, Director General, BIM | |
| | and Prof Dr. M Iqbal (SUST) | |
| 1645-1715 | Highlighted Paper Session | Venue: Room 314 |
| ID | Title | Author(s) |
| | | |
| 3 | An Exploration of Differences between Professional | Dr. Guru |
| | Advancement of Project Managers based on their Gender | Prabhakar, UWE, |
| | in Operations-Driven and Project-Driven Organizations | Bristol, UK |
| 4 | Boiler Manufacturing Scenario in Bangladesh | Md. Hanif Hossan, |
| | | Office of the Chief |
| | | Inspector of |
| | | Boilers, |
| | | Bangladesh Govt |
| Session Chair | Prof Dr. M Sarwar Morshed (AUST) and Dr. A.R.M. Harunur | |
| | Rashid (IUT) | |
| 1715-1730 | Tea and Prayer Break | |
| 1730-1930 | Cultural Program | Venue: Ground |
| | | Floor |
| 1930 - 2030 | Gala Dinner(Banquet) | Venue: Cafeteria |
| | | of BIM |
| Chief Guest: | BIM | |
| Dinner | Prof Dr. M Iqbal (SUST) and Prof Dr. Md. Mamunur | |
| Speaker/Special | Rashid (BIM) | |
| Guest | | |
| Chair: | Tahmina Akhter, Director General, BIM | |
| | | |

| Day Two: 13 December, 2019 (Friday) | | | |
|-------------------------------------|---|--------------------|--|
| 915 1700 | Registration | Venue: Room No-312 | |
| 800-830 | Keynote | Venue: A | |
| Keynote | Dr. Anwar Rahman, USA/ Dr. A.R.M. Harunur | | |
| Speaker | Rashid (IUT) | | |
| Title: | Disruptive Innovation and Industry 4.0 | | |
| Session Chair: | Dr Azizur Rahman, AUST and Prof Dr. M Iqbal | | |
| | (SUST) | | |
| 830 900 | Keynote | Venue: A | |
| Keynote | Prof Dr. M Sarwar Morshed (AUST) | | |
| Speaker | | | |
| Title: | Lean manufacturing | | |
| Session Chair: | Dr Khnodokar Akther, Ctg Port Auhtority | | |
| 900 930 | Keynote | Venue: A | |
| Keynote | Prof Dr. Md. Mamunur Rashid (BIM) | | |
| Speaker | | | |

| Title: | Technology Management | |
|-------------------|---|---------------|
| Session Chair: | Dr. Engr. Md. Lutfur Rahman, Water Board | |
| 930 1000 | Keynote | Venue: A |
| | Prof Dr. Lal Mohan Boral, AUST | venue. A |
| Keynote | Prof Dr. Lai Worldi Bordi, AOST | |
| Speaker Title: | Toutile Engineering in Dengladesh | |
| | Textile Engineering in Bangladesh | |
| Session Chair: | Prof Dr. Md. Haider Ali Biswas | |
| 1000 1015 | Tea Break [working] | |
| 1015-1215 | Student Talk for IMEOM | Venue: B |
| 4000 4400 | Final Round | ., . |
| 1000 1100 | Technical Session 11 | Venue: Room A |
| Session Chair: | Dr. Md. Altab Hossain, MIST and Dr. A.R.M. | |
| | Harunur Rashid (IUT) | |
| ID | Title | Author(s) |
| | Occupational Stress and work-life imbalance of | |
| 30 | Working Women-Bangladesh Perspective | |
| _ | Quality and Safety Assurance in Ready Made | |
| 31 | Garments Industry | |
| | Safety, Health and Welfare procedure of Garments | |
| 32 | sector in Bangladesh | |
| 33 | Health safety and hygiene in RMG in Bangladesh | |
| 34 | Maternity Benefits and Welfare. | |
| 1000 1100 | Technical Session 12 | Venue: Room B |
| Session Chair: | Prof Dr Iqbal Mahmud ,MBSTU Textile and Prof Dr. | |
| | Md. Mamunur Rashid (BIM) | |
| ID | Title | Author(s) |
| | National child labour law 2006 in Bangladesh | |
| 35 | Perspective | |
| | Effectiveness of laborlaw in Meghna | |
| 36 | Groupofindustries: Forces on section 78 to 99 | |
| | Implementation of labor law in terms of health & | |
| 37 | safety issues in RMG sector of Dhaka division | |
| | Emerging Challenge and problems work place in | |
| 38 | Bangladesh | |
| | Role and development procedure of executive | |
| 42 | personnel in Nestle Bangladesh Ltd | |
| 1100 - 1200 | Technical Session 13 | Venue: Room A |
| Session Chair: | Prof Dr. M Igbal (SUST) and Prof Dr. Md. Haider Ali | |
| | Biswas, KU | |
| ID | Title | Author(s) |
| | Determination of demand forecasting techniques | , , |
| | applicable for electronics product (cell phone) and | |
| 18 | comparative analysis | |
| | Study and evaluation of inventory management | |
| | system of pharmaceutical products in a healthcare | |
| 19 | service facility | |
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|----------------|--|------------------|
| | Study of Existing Safety Signs in Three Selected | |
| | Thermal Power Plants Situated in Sylhet Division, | |
| 41 | Bangladesh | |
| 47 | Motivating and reenforcement safety and Healthy | |
| | Effects of Environmental and Safety Factors on | |
| | Productivity of RMG Industry in Bangladesh: A | |
| 26 | Survey-Based Approach. | |
| 1100 - 1200 | Technical Session 14 | Venue: Room B |
| Session Chair | Dr. Shafiqul Islam, Head, Nuclear Dept and and Dr. | |
| | A.R.M. Harunur Rashid (IUT) | |
| ID | Title | Author(s) |
| | Proposed Assessment Model for Ship Recycling | . , |
| 43 | Industry in Bangladesh | |
| | Global warming and Impact to Third World | |
| 44 | Countries | |
| | Globalization and its impact on workers and | |
| | industrial social work practices: Bangladesh | |
| 46 | Perspective | |
| _ | Health Related Quality of Work Life in RMG sector | |
| 50 | in Bangladesh | |
| 51 | Compliance with the WHO Surgical Safety Checklist | |
| 1215 1345 | Lunch and Prayer Break | Venue: Cafeteria |
| | | |
| 1345 1600 | Industry-Academia and Global Engineering | Venue: A |
| 1010 | Education Panel Discussion | venue |
| Session Chair: | Prof Dr. Shamsuddin Ahmed, IUT and Prof Syed | |
| Session chair. | Fakhrul Hassan, SEU | |
| | Takina Hassan, see | |
| | | |
| 1400-1500 | Technical Session 1 5 | Venue: Room A |
| Session Chair | Prof. Dr. Faruque A. Haolader, IUT and Prof Dr. M | |
| Session chan | Sarwar Morshed (AUST) | |
| ID | Title | Author(s) |
| | A Crowdsourced Approach for Supply Chain | |
| 95 | Network Optimization Using Hub and Spoke Model | |
| | Curriculum and competence based education and | |
| 28 | training in Bangladesh | |
| 20 | Emerging Challenge and problems work place in | |
| 53 | Bangladesh | |
| 33 | 5S in Total Productive Maintenance (TPM) : A case | |
| 54 | study | |
| 61 | A STUDY ON DIESEL ENGINE COMBUSTION | |
| 1400-1500 | Technical Session 16 | Venue: Room B |
| | | venue. Noun b |
| Session Chair | Dr. A.R.M. Harunur Rashid (IUT) | Author(s) |
| ID | Title | Author(s) |
| | A Case Study on Optimization of Production Process | |
| 1 | in a Textile Industry | <u> </u> |

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|---------------|--|------------------|
| | Development of an Innovative Fireball Fire | |
| 25 | Extinguishing System | |
| | Study of automotive battery recycling and | |
| 92 | development of a sustainable method | |
| 96 | Design and Fabrication of Foldable Bicycle | |
| | Effect of Fiber Loading on Thermo-Mechanical | |
| | Properties of Onion Roots and Broom Grass Fiber | |
| 97 | Reinforced Hybrid Polypropylene Composites | |
| 1500-1600 | Technical Session 17 | Venue: Room A |
| Session Chair | Prof Dr. Lal Mohan Boral, AUST and Dr. A.R.M. | |
| | Harunur Rashid (IUT) | |
| ID | Title | Author(s) |
| | Eliminating Bad Work Posture by Proposing an | |
| | Alternative Ergonomic Workstation Design in the | |
| 21 | RMG Industry. | |
| | Pollutants from inland vessels of Bangladesh - a | |
| 62 | threat to the environment | |
| | Implementation of labor law in terms of health & | |
| 71 | safety issues in RMG sector of Dhaka division | |
| | Problems and Prospect of Textile Industry in | |
| 76 | Bangladesh | |
| | Role and development procedure of executive | |
| 80 | personnel in Nestle Bangladesh Ltd | |
| 1500-1600 | Technical Session 18 | Venue: Room B |
| Session Chair | Prof Dr. Mahbubul Alam, CUET and Prof. Dr. M | |
| | Sarwar Morshed (AUST) | |
| ID | Title | Author(s) |
| | Using Discrete event simulation to improve the | |
| 93 | patient flow of a healthcare system. | |
| | Legal framework for the industrial relation system | |
| 82 | in Bangladesh | |
| 83 | Major barrier of industrialization in Bangladesh | |
| 1600 1615 | Tea Break | |
| 1615 1700 | Closing Ceremony | Venue: Hall Main |
| Chief Guest: | Tahmina Akhter, Director General, BIM | |
| Chair: | Prof Dr. M Iqbal (SUST) | |
| Facilitator: | Prof Dr. Md. Mamunur Rashid (BIM) | |
| 1730 1830 | IEOM Meeting | Venue: Hall Main |
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Notes:

A = Level 3=Room No314=Hall Main

B = Level 3=Room No317

C = Level 3=Room No316

D = Level 3=Room No315

Cafeteria = Ground floor at the right side building

Prayer Room = 3rd floor of Library building

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