

## ACTING COMMANDANT'S MESSAGE



It is a great pleasure to know that MIST is publishing its 42nd issue of newsletter. With the motto 'Technology for Advancement', MIST began its journey on 19th April, 1998. Within a span of more than two decades, MIST is now one of the leading engineering institutes of Bangladesh. The institution in providing quality education in the field of science, engineering technology and is conducting research to meet the 'National and Global Challenges'. Moreover, MIST regularly arranges different seminars, conferences, workshops, industrial tours and other co-curricular activities. The first half of the academic session 2022-23 is more vibrant and eventful in terms of academic and co-curricular activities. I express my heartfelt thanks and gratitude to the editorial board for publishing the MIST Newsletter regularly.

## ACADEMIC COUNCIL MEETING OF MIST

The 75th and 76th Academic Council Meeting of MIST were held on 07 February and 18 May 2023 respectively. Brigadier General Md Wahidul Islam, SUP, ndc, psc, Acting Commandant, MIST chaired the meeting. Representatives from the Ministry of Education, Ministry of Defence, Armed Forces Division, Three Services Headquarters and representatives of BMA, BNA, BAFA, BUET & DU were present in the meeting.



## DELEGATIONS



Armed Forces War Course (AFWC-2023) visited the Cyber Range at MIST on 16 February 2023. The primary purpose of this visit was to provide a thorough understanding of the core principles of cyber warfare and cyber security. During the visit, participants actively engaged in discussions and hands-on exploration of the ever-evolving realm of cyber threats, emphasizing the critical need to protect vital infrastructure and digital platforms.

Sufi Mohammed Mizanur Rahman, Chairman of PHP Group of Bangladesh visited MIST on 23 May 2023. During his short visit, he inspired the students with his valuable insight. He also visited the MIST Central Library and the Advanced Laboratories in the Department of Biomedical Engineering (BME).



A delegation from the Bangladesh Kira Shikkha Protisthan (BKSP), led by the Director General of BKSP, visited the Department of Biomedical Engineering (BME), MIST on 16 April 2023. The purpose of this visit was to explore the advanced laboratories in the field of biomedical engineering and exchange insights regarding contemporary sports medicine technologies.

Orientation Training visit by BCS & BJS-79 on 09 March 2023. The team was briefed on the different activities and facilities of MIST. After briefing, they visited MIST Cyber Range Lab, Concrete Lab, Department of Mechanical Engineering, Aeronautical Engineering and Biomedical Engineering.



Joint Registrar of Green University of Bangladesh, Md. Mazharul Islam with his team visited MIST Central Library on 02 February 2023 for the sharing of knowledge on Library Management.

## FAREWELL OF MIST COMMANDANT



Major General Md Wahid-Uz-Zaman, BSP(BAR), ndc, aowc, psc, te Commandant MIST signed visitor book during farewell ceremony on 09 January 2023. He served as Commandant MIST from 13 June 2019 to 09 January 2023.

## MoU SIGNING



MIST signed an MoU with GHP Ispat Limited on 09 February 2023.



CATS-MIST signed an MoU with Signal 11 & Footprint 99 on 11 April 2023.



MIST signed an MoU with Upay on 07 June 2023.

## MIST FACULTY DEVELOPMENT PROGRAM - 2023



**MIST Faculty Development Program-2023** was held on 13 and 14 March 2023. Lieutenant General Md Aminul Karim (Retd), Mohammad Farashuddin, founder of East West University and Prof Dr. M. Shamim Z. Bosunia were present as guest speakers. All Faculty members of MIST were present in the program.

## INDUSTRIAL ADVISORY PANEL MEETING

The **4th Industrial Advisory Panel Meeting** of the CSE Department was held on 17 April 2023. Brigadier General Md Mahfuzul Karim Majumder, ndc, psc, te, Head of the Department along with senior faculty members of the CSE Department was present in the meeting.



The **5th Advisory Committee Meeting** of the Architecture Department, MIST was held on 07 June 2023. The head of the department, Colonel Muhammad Sohail-U-Samad chaired the meeting and Brigadier General Md Wahidul Islam, SUP, ndc, psc, Acting Commandant, MIST was present in the meeting as chief patron. Advisory Committee members from Architecture Department and other reputed institutions were present in the meeting.

## MIST LEETCON 2023: HACKMEIFYOUCAN- BANGLADESH'S FIRST INTERNATIONAL CYBER SECURITY CONFERENCE



**MIST LeetCon 2023: HackMeIfYouCan** the first-ever international cyber security conference in Bangladesh took place on 20 May, 2023 and was co-organized by MIST Cyber Security Club (MCSC) and MIST Computer Club (MCC). The conference was graced by the honorable chief guest, Mr Zunaid Ahmed Palak, MP, State Minister for Information and Communication Technology (ICT) Division of Bangladesh.

## SEMINAR ON ENVIRONMENTAL IMPACT ANALYSIS AND ENGINEERING ECONOMICS FOR BANGLADESH

On 21 May 2023 ME Department arranged the seminar on **Environmental Impact Analysis and Engineering Economics for Bangladesh** where the chief guest was Dr Rafat Alam, Associate Professor at Grant MacEwan University, Canada. The purpose of the seminar was to raise awareness and build capacity for sustainable development in Bangladesh with a specific focus on highlighting the essential roles of environmental impact analysis and engineering economics.



## SEMINAR ON SMART BANGLADESH AND INNOVATION



On 28 February 2023, the Mechanical Engineering Department hosted a seminar titled **Smart Bangladesh and Innovation** featuring Dr. Dewan Muhammad Humayun Kabir, the Project Director of 'Aspire to Innovate (a2i),' as the distinguished chief guest speaker. Approximately 150 students attended the seminar, gaining valuable insights into the government's efforts to digitize Bangladesh and its potential impact on our overall development. Following the seminar, a project showcase and poster presentation event unfolded.

## INDUSTRIAL TALK ON PROSPECTS OF VLSI DESIGN INDUSTRY



An Industrial Talk on Prospects of the VLSI Design Industry took place on 06 June 2023 at MIST. The distinguished speaker for the event was Mohammad Ismail Hossain, an ex-student of MIST and currently serving as the Head of Program Management at Neural Semiconductor Limited.

## CAREER TALK

On 06 June 2023 the Department of NAME conducted a seminar on **Career Talk**. Cdre M Munir Hassan, (E), BN (Retd) former Head of NAME Department & Dean of FME graced the seminar as chief guest.

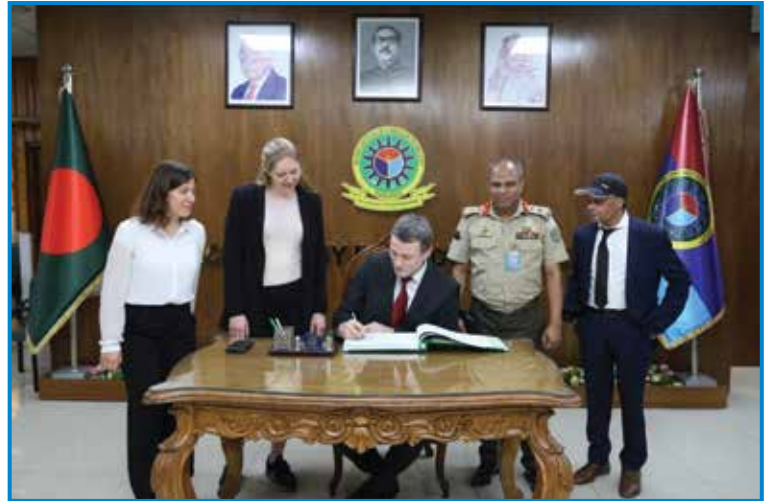


The PME Department successfully organized a **Career Talk** on 18 May 2023. All the students of the PME Department attended it. The guest speakers of the Career Talk were Engr. Khasbur Rahman (Deputy Manager, RPGCL) and Engr. Ismail Hossain (Gas Plant Operation Specialist, Chevron Bangladesh). The speakers provided a speech on skills needed for entering the Oil, Gas and Mining industries.



## VIEW EXCHANGE AND INTERACTIVE WORKSHOP

On 23 February 2023, an official meeting called **View Exchange & Interactive Workshop** occurred, bringing together representatives from RWTH AACHEN University, Germany, and the ME Department, MIST. During this meeting, Dr Moorman and his team, consisting of an MSc student and a PhD candidate, discussed the potential use of drones for delivering relief aid efficiently to flood-affected areas in Bangladesh. They expressed a strong interest in collaborating with the ME Department, MIST to bring this project to fruition. After the discussion, the head of the ME Department, Brigadier General Md Humayun Kabir Bhuiyan, psc led the German team on a tour of the lab facilities, MIST campus and showcased various ongoing departmental projects, facilitating the exchange of ideas and knowledge.



Brigadier General Md Humayun Kabir Bhuiyan, psc led the German team on a tour of the lab facilities, MIST campus and showcased various ongoing departmental projects, facilitating the exchange of ideas and knowledge.

## WORKSHOP ON OUTCOME BASED EDUCATION (OBE)



The CSE Department of MIST organized two workshops on February 2023 and March 2023 on **Outcome Based Education (OBE)**, providing a valuable opportunity for the faculty members to enhance their understanding of this important educational approach.

## WORKSHOP ON BOSOTBARI: HABITAT INTERPRETATION FROM COMMUNAL MEMORY

On the 18 and 20 May 2023 a workshop on **Bosotbari: Habitat Interpretation from Communal Memory** was held at the Department of Architecture with the students of level 04 and level 05. Reesham Sahab Tirtho- a renowned graphic artist and practicing architect, and Saad Ben Mustafa- a young architect and winner of the prestigious Aga Khan Award were present as instructors.



## CERTIFICATION COURSE ON SHIP DESIGN SOFTWARE - 2023



The NAME Department is committed to enchanting students' abilities, enabling them not only to design entire and create 3D models for a visually appealing representation. To achieve this objective, a certified course is conducted annually. In February 2023, a total of 28 students, including those from MIST and various other disciplines, actively participated in the program.

## TRAINING ON HIGH VOLTAGE LABORATORY

The Department of EECE understands the significance of continuous professional development for faculty members to enhance their knowledge and expertise. In recognition of this, the department organized 6 days of training sessions specifically tailored for faculty members and lab assistants on High Voltage Laboratory practices. The training aims to empower faculty members with the latest advancements, techniques, and safety protocols related to working in high-voltage environments. It provides them with the opportunity to update their understanding of high voltage systems, experimental setups, and industry best practices with the new set of tools.





## INDUSTRIAL TRAINING VISIT



On 17 June 2023 students of Level 4 from the ME Department, MIST visited the Shiddhirgonj 120 x 2 thermal peaking power plant.



On 9 and 10 June 2023 students of the ME Department, MIST visited the Abul Khair Steel (AKS) Factory.



EWCE Department organized a visit program on 16 May 2023 with Level -4 students and faculties to a LEED Platinum Certified reputed garment industry '4A Yarn Dyeing Ltd' of Team Group Company and 'Green Lab' of BEPZA.



Industrial training visit of level-3 students of the BME Department, MIST at Combined Military Hospital (CMH), Dhaka, Bangabandhu Sheikh Mujib Medical University (BSMMU), Evercare Hospital Dhaka and JMI Ghazaria Munshiganj from 29 January to 23 February 2023.

## LAUNCHING CEREMONY OF MIST INTERNATIONAL JOURNAL OF SCIENCE AND TECHNOLOGY (MIJST)



The **Launching Ceremony of the online version MIJST**, Volume 11 June - 2023 issue was organized by the Research and Development Wing, MIST on 25 June 2023. Acting Commandant, MIST Brigadier General Md Wahidul Islam, SUP, ndc, psc graced the occasion as chief guest.



## LAUNCHING CEREMONY OF ACADEMIC SESSION 2022-23 (BSc ENGINEERING)



The **Launching Ceremony of the academic session 2022-2023 (BSc Engineering)** was held on 07 May 2023. Eight hundred students comprising both military and civil students joined MIST in level-1 in different department. Acting Commandant, MIST Brigadier General Md Wahidul Islam, SUP, ndc, psc graced the occasion as chief guest and gave a valuable speech for newcomer students.

## INAUGURATION OF MIST DAY CARE CENTRE

MIST Day Care Center was inaugurated on 02 January 2023. This will provide a setting where children can experience love and safety while being cared for by qualified adults. Having children under qualified supervision would provide working mothers peace of mind. They will be able to focus better and provide the institute with quality work.



## OBSERVANCE

### CELEBRATION OF BIRTH ANNIVERSARY OF THE FATHER OF THE NATION AND NATIONAL CHILDREN'S DAY- 2023



MIST celebrated the 103rd Birth Anniversary of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman and National Children's Day on 17 March 2023 with great enthusiasm. The discussion session focused on the life and work of Bangabandhu, followed by the screening of documentary films.

### GENOCIDE DAY OBSERVANCE AT MIST



MIST Observed the Genocide Day on 25 March 2023.

### INDEPENDENCE DAY PROGRAMMING CONTEST - 2023

**The Independence Day Programming Contest - 2023** was organized by the MIST Computer Club on 01 April 2023. 60 teams from MIST and four closely knitted universities (BUP, BAIUST, BAUET, and BAUST) have participated in the contest. The chief guest of the event was Acting Commandant, MIST Brigadier General Md Wahidul Islam, SUP, ndc, psc.



## WORLD ENVIRONMENT DAY- 2023



Celebration of **World Environment Day- 2023** by EWCE Department in association with MIST Environment Club and Food and Agriculture Organization of the United Nations (FAO) at MIST campus on June 05, 2023. Acting Commandant, MIST Brigadier General Md Wahidul Islam, SUP, ndc, psc graced the occasion as chief guest and Mr Nur Ahamed Khondaker assistant FAO representative was present as the guest of honor. The program was inaugurated with a tree plantation by the chief guest followed by a seminar on the theme of World Environment Day 2023. Dr Abdullah Al Mueeed, Chief Operating Officer (COO) of CWIS-FSM support cell, DPHE delivered the keynote speech on the importance of combating plastic pollution for sustainable environment management. The day-long events ended with the unveiling of EWCE Departmental magazine, titled 'ENVIRONIA' followed by a cultural programme.

## ME ALUMNI DAY – 2023



On 07 April 2023 More than 220 alumni from ME 01 to ME 17 batches participated in the event. Lieutenant Colonel Tanvir from ME 01, Nusrat Jerin Mimma from ME 03, and Md Tarequl Islam from ME 04 made informative speeches on that day. The day marked a new beginning in the collaboration between alumni and faculty members of the ME Department.

## CLUB ACTIVITIES

### HSBC BANGLADESH STUDENT WORK PLACEMENT SEMINAR - WE ARE HIRING ENGINEERS

MIST Career Club organized an outstanding seminar in collaboration with HSBC Bank under the supervision of the Directorate of Students' Welfare on 8 May 2023.



### WORKSHOP ON BASIC PHOTOGRAPHY



MIST Photography Club organized a workshop on **Basic Photography** to enhance the knowledge in the sector of photography under the supervision of the Research and Development Wing on May 31, 2023. Brigadier General Md Towhidul Islam, PBGM, BGBMS, ndc, afwc, psc Director Research & Development Wing MIST attended the session as chief guest.

### CAMPUS TO CORPORATE

MIST Career Club arranged a session with British American Tobacco Bangladesh titled **Campus to Corporate** on March 21, 2023. The chief guest of this event was the Director of the Directorate of Students' Welfare Colonel Zabed Sultan, BGBMS.



## SEMINAR ON MODERN HYBRID ENGINE TECHNOLOGY

On 31 May 2023 MOTO MIST Automotive Club organized a seminar on **Modern Hybrid Engine Technology**. The seminar was conducted by Brigadier General Md Humayun Kabir Bhuiyan, psc, Head of the Department of ME who shared valuable insights on the latest trends in Hybrid Engine Technology.



## MIST CAMPUS TOWNHALL SESSION ON CUSTOMER BEHAVIOR ADAPTION



On 31 May 2023 the MIST career club hosted a session named **MIST Campus Townhall Session on Customer Behavior Adaption** in collaboration with Grameen Phone. The event's chief guest was Brigadier General Md Mahfuzul Karim Majumder, ndc, psc, te the Head of the Department of CSE.

## CERTIFICATE AWARDING CEREMONY

**Certificate Awarding Ceremony of Former Representatives and Club Presidents** was arranged by the present representatives, club presidents, faculties and officers of the Directorate of Students' Welfare on 02 May 2023. The chief guest of the event was the Director of the Directorate of Students' Welfare, Colonel Zabed Sultan, BGBMS.



## NOBIN BORON - 2023



The **Nobin Boron - 2023** Ceremony was held at MIST on 25 May 2023 under the supervision of the Directorate of Students' Welfare. Acting Commandant, Brigadier General Md Wahidul Islam, SUP, ndc, psc and spouse of Commandant, Mst Taslima Khanum were the chief and special guest respectively.

## BORSHA BORON -1430



The students of MIST welcomed-1430 the **Rainy Season** by a grand event on 15 June 2023. The event was facilitated by MIST Literature and Cultural Club under the supervision of the Directorate of Students' Welfare.

## PROGRAMMING CONTESTS AND ORIENTATION OF NEW BATCH- MIST COMPUTER CLUB



An event was organized by the MIST Computer Club on 01 June 2023 to recognize the recent achievement holders and introduce the students of level 1 to the amazing journey of the MIST Computer Club. The event's chief guest was Brigadier General Md Mahfuzul Karim Majumder, the Head of the Department of CSE.

## ORIENTATION PROGRAM OF NEW BATCH - MIST INNOVATION CLUB

MIST Innovation Club (MIC) organized an **Orientation Program** for level-1 students of MIST on 19 June 2023 under the supervision of the Research and Development Wing. The purpose of this event was to welcome and introduce the newcomer students to the MIC community and provide them with an overview of the club's activities.



## INTER DEPARTMENT CULTURAL COMPETITION - 2023

**Inter Department Cultural Competition - 2023** was held in MIST from 14 to 18 May 2023. The event was facilitated by MIST Literature and Cultural Club under the supervision of the Directorate of Students' Welfare. 12 departments of MIST participated in a total 7 segments; they are: Patriotic, Rabindra, Nazrul and Modern songs, Short drama, Dance, and Recitation. The best male performer was flying officer Md. Maksudul Kabir from AE Department and the best female performer was Arpita Debnath from IPE Department. The winner and runner-up of the competition were the EWCE Department and the CE Department respectively.



## INTER DEPARTMENT CRICKET COMPETITION - 2023



Inter Department Cricket Competition - 2023 held from 28 May to 11 June 2023 under the supervision of the Directorate of Students' Welfare. 12 Departments of MIST participated in the tournament. Acting Commandant, Brigadier General Md Wahidul Islam, SUP, ndc, psc was the chief guest of the final match and distributed the prizes among the winners. CE Department became the Champion and NAME Department became the Runner-up of the tournament.

## POSTER PRESENTATION COMPETITION - 2023

The PME Department organized a poster competition for the students of Level-3, titled **Poster Presentation Competition - 2023** on May 29, 2023. Respected Department Head Brigadier General Md Awal Khan and all the faculty members of IPE were present.





## ACHIEVEMENTS

### ACHIEVEMENT OF GOLD MEDAL AWARDS

The NSE Department won two gold awards at the 34th International Innovation and Technology Exhibition (ITEX) 2023 competition held in Kuala Lumpur, Malaysia. The gold medal was awarded to the project 'Natural Active Pain Reducer from Local Herbs' In the category of 'Medicine and Health' where Chief Researcher, Prof. Mokhlesur Rahman with his other team members Colonel Molla Md Zubaer, SPP, te, and M.B. Awang. Another gold medal was received for the project 'Revolutionizing Eco- Friendly Textile Innovating Water Repellent Natural Fiber from Jute' in the field of 'Agriculture' by Prof. Mokhlesur Rahman the Chief Researcher along with Md Zaved, Colonel Molla Md Zubaer, SPP, te and Nazmul Hasan.



### RESEARCH INCENTIVE AWARDING CEREMONY - 2022



Research Incentive Awarding Ceremony-2022 was held on 14 March 2023. Acting Commandant of MIST, Brigadier General Md. Wahidul Islam, SUP, ndc, psc handed over the prize to the researcher. This is an endeavor to encourage researcher for quality publications affiliated to MIST. MIST Researchers are financially incentivized to publish in Scopus indexed 202 publications such as journal articles, conference papers, reviews, book chapters and books.

### SELECTION OF RANK A GUEST RESEARCHER



Prof Dr. Mahbubur Rahman of the CSE Department was selected as a Rank A Guest Researcher by the National Institute of Information and Communications Technology (NICT), JAPAN. His tenure will be one year. During this time, he will be working with Dr. Hideyuki Takuda.



## PARTICIPATION AS A GUEST SPEAKER IN INTERNATIONAL SEMINAR



Department of Biomedical Physics & Technology, DU and BiBeat Ltd jointly arranged an Intl hybrid seminar at the 14th Meditex Bangladesh 2023 Intl Expo, on 'University industry collaboration for innovative healthcare eqpt in low resources countries - A successful model from Bangladesh.' Dean, Faculty of Science and Engg and Head BME Colonel Syed Mahfuzur Rahman, SPP attended as a panel speaker and delivered his valuable speech.

## RESEARCH AND INDUSTRIAL CONCLAVE-INTEGRATION '23



On 14 to 16 May 2023 Md Insiat Islam Rabby, Md Wasi Uddin, and Mohammad Tarequl Islam secured "Second Place" in SCIENTIFIQUE: ORAL PRESENTATION under the Department of ME at Research and Industrial Conclave-Integration'23 organized by the Indian Institute of Technology (IIT), Guwahati. The name of the presented article is "Numerical study on heat transfer through a wavy channel by using MWCNT+Fe<sub>2</sub>O<sub>3</sub> water hybrid nanofluid".

## THE DIGITAL INNOVATION CHALLENGE FOR WOMEN - 2023

Team Grande, comprising participants Ellora Yasi and Maliha Zerine from Level 4, CSE Department, MIST achieved an impressive feat as the 2nd Runner-up at the Digital Innovation Challenge for Women 2023. The contest reached its culmination with a prestigious award-giving ceremony on 14 May 2023. Team Grande's exceptional performance not only earned them well-deserved recognition but also a cash prize of BDT 20,000.



## GIRLS BRING GLORY FOR MIST AT NGPC - 2022



This year, in the **6th National Girls' Programming Contest (NGPC) 2022** held in February, 2023 hosted by Daffodil International University, the teams of MIST have shown their best performance so far, with three teams qualifying for the main round and one team achieving a position among the top ten. MIST\_Object\_Grind, a team from MIST, has achieved the 6th position in the NGPC 2022. Prior to that, MIST Revolution became the first team to emerge in the standings by solving the first problem of NGPC 2022.

## ENVIRONMENT MEGAFEST ON WORLD ENVIRONMENT DAY - 2023

On 05 June 2023 the auspicious occasion of World Environment Day was celebrated by MIST Environment Club with an incredible event called the Environment MegaFest. Students from different disciplines came together to showcase their ideas and projects aimed at protecting and preserving our environment. Among the participants, a team of three students from the Dept. of CSE, MIST stood out with their exceptional performance in the Poster Presentation segment. They secured an impressive 1st Runner-up position in the competition, earning a well-deserved prize money.



## COMPLETION OF POST GRADUATE DEGREE BY NEPAL ARMY OFFICERS



Maj Bipin Thapa Magar and Capt Kumar Shrestha of Nepal Army successfully completed MSc Degree in BME from MIST .

## ACHIEVEMENT IN THE ICPC ASIA WEST CONTINENT FINAL CHAMPIONSHIP

Team MIST\_FirstByte\_1.1, overall 27th position and the 5th position among the teams from Bangladesh in the International Collegiate Programming Contest (ICPC) Asia West Continent Final Championship held on 20 May 2023.

## PUBLICATIONS

## JOURNAL ARTICLE

## CE DEPARTMENT

- Lt Col Khondaker Sakil Ahmed, PhD, PEng, CEng and MSc student Lutfur Rahman Talukdar Rana published a journal article titled “Fresh and hardened properties of concrete containing recycled waste glass” in Journal of Building Engineering (Q1, Impact Factor 7.11) of Elsevier in April 2023. <https://doi.org/10.1016/j.undsp.2023.02.008>
- Lt Col Khondaker Sakil Ahmed, PhD, PEng, CEng, Johana Sharmin and Mehedi Ahmed Ansary published a journal article titled “Numerical investigation of tunneling induced surface movement: A case study of MRT line 1, Dhaka” of Underground Space (Q1, Impact Factor 5.32) of Elsevier in May 2023. This is a collaborative research with MIST and BUET. <https://doi.org/10.1016/j.job.2023.106327>
- Maj Gen F M Zahid Hossain (retd), Avijit Pal of PBRLP, Lt Col Khondaker Sakil Ahmed, PhD, PEng, CEng, of MIST and Prof M Sharia Alam of UBC Canada published a journal article titled “Shear behavior of polypropylene fiber-reinforced concrete beams containing recycled aggregate and crumb rubber” in Journal of Cleaner Production (Q1, Impact Factor 11.08) of Elsevier in May 2023. This is an outcome of a collaborative research with MIST and UBC Canada. <https://doi.org/10.1016/j.jclepro.2023.137370>
- Lt Col Md Jahidul Islam, PhD, Tasnia Ahmed, Fahad Bin Imamr, Hamidul Islam published a journal article titled “Comparative study of carbon fiber and galvanized iron textile reinforced concrete” of Construction and Building Materials Journal. March 2023.
- Asst Prof Nur Mohammad Shuman, N.M Khan, S. and Amini, F. published a journal article titled “Settlement based load capacity curve for single helix helical pile in c- $\phi$  soil” of Soils and Foundations, 63(1), p.101265.
- Lec Md Anwar Uddin, Md. Shamsul Hoque, Tahsin Tamanna, Saima Adiba, Shah Md. Muniruzzaman, Md. Shahriar Parvez. “A framework to measure transit-oriented development around transit nodes: Case study of a mass rapid transit system in Dhaka, Bangladesh.” PLoS ONE. January 2023.
- Lec Md Anwar Uddin, Methun Debnath, Sumit Roy, Samia Adiba, Md Mahub Alam Taukder published a journal article titled “Identifying the Smoking and Smokeless Tobacco-Related Predictors on Frequencies of Heavy Vehicle Traffic Accidents in Bangladesh: Linear and Binary Logistic Regression-Based Approach” Hindawi, Advances in Civil Engineering Volume 2023, Article ID 7116057, 31 pages <https://doi.org/10.1155/2023/7116057>, January 2023.
- Lec Md Anwar Uddin, Tahsin Tamanna, Sayma Adiba, Sadib Bin Kabir published a journal article titled “Revolutionizing TOD Planning in a Developing Country: An Objective Weighted Framework for Measuring Nodal TOD Index” Wiley and Hindawi, Journal of Advanced Transportation, Volume 2023. April 2023.
- Abu Jar Md Minhaz Uddin, Lec Md Anwar Uddin, Md Asadur Rahman published a journal article titled “Developing an Algorithm for Sequential Sorting of Discrete and Connected Characters Using Image Processing of Multi-Line License Plates” Array of Elsevier. April 2023.
- Lec Md. Anwar Uddin. “Measuring Effectiveness of Non-Motorized Vehicles on Spatial Extent for TOD Development: A Case Study for MRT 6 in Dhaka”. MIST International Journal of Science and Technology. June 2023.

## JOURNAL ARTICLE

### CSE DEPARTMENT

- An article titled “An attention-based hybrid deep learning approach for Bengali video captioning” written by Prof Dr Mahbubur Rahman, Lec M. M. Rushadul Mannan of CSE Department and co-author(s) is published in a Q1 journal having IF=8.839
- An article titled “Graph coloring in university timetable scheduling: A comparative study” written by Prof Dr Mahbubur Rahman, Asst Prof Dr. Nusrat Sharmin of CSE Department and co-author(s) is published in a Q3 journal having IF=1.74.
- An article titled “Predicts: An IoT and Machine Learning-based System to Predict Risk Level of Cardio-Vascular Diseases” written by Lt Col Nazrul Islam, Lec M. M. Rushadul Mannan of CSE Department and co-author(s) is published in a Q1 journal having IF=3.647.
- An article titled “Exploring the dominant features and data-driven detection of polycystic ovary syndrome through modified stacking ensemble machine learning technique” written by Lt Col Nazrul Islam of CSE Department and co-author(s) is published in a Q1 journal having IF=3.776.
- An article titled “Designing User Interfaces for Illiterate and Semi-Literate Users: A Systematic Review and Future Research Agenda” written by Lt Col Nazrul Islam & Nafiz Imtiaz Khan of CSE Department and co-author(s) is published in a Q2 journal having IF=2.100.
- An article titled “Exploring Usability Problems of mHealth Applications Developed for cervical Cancer: An Empirical Study” written by Lt Col Nazrul Islam of CSE Department and co-author(s) is published in a Q2 journal.
- An article titled “AI-based small arms firing skill evaluation system in the military domain” written by Maj Md Mokhlesur Rahman & Asst Prof Dr. Nusrat Sharmin of CSE Department and co-author(s) is published in a Q1 journal having IF=4.035.
- An article titled “Analyzing Critical Success Factors for Sustainable Cloud-Based Mobile Learning (CBML) in Crisp and Fuzzy Environment” written by Asst Prof Dr. Md Akhtaruzzaman of CSE Department and co-author(s) is accepted in a Q1 journal having IF=3.889.

### EECE DEPARTMENT

- Md Ahsan Kabir, Faija Farjana, Rukhsana Choudhury, Ahmed Imrul Kayes, Md Sawkat Ali, and Omar Farroq “Netmetering and Feed-in-Tariff Policies for the Optimum Billing Scheme for Future Industrial PV Systems in Bangladesh.” Alexandria Engineering Journal, Elsevier, 2023. doi:10.1016/j.aej.2022.08.004 (Q1) Scopus indexed (Impact Factor 6.765)
- Md Arifuzzaman Pramanik, A. A. M Shah Sadman, Meherab Hossain Mahim, Md Hossam-E-Haider “Performance Analysis and Optimization of HF Communication Over Bangladesh,” International Journal of Research and Innovation in Applied Science (IJRIAS), vol. 8, issue. 3, pp. 53 – 59, March 2023.

### ME DEPARTMENT

- Article titled Advanced Biopolymers for Automobile and Aviation Engineering Applications written by Professor Tariq Mahbub of ME Department with 5 co-authors. Published on 13th February 2023, at the Journal of Polymer Research, 30, 106 (2023), <https://doi.org/10.1007/s10965-023-03440-z>.

# JOURNAL ARTICLE

## BME DEPARTMENT

- Article titled “Silica Aerogel: Synthesis, Characterization, Applications, and Recent Advancements” written by Adib Bin Rashid, Shariful Islam Shishir, Md Azim Mahfuz, Md Tanvir Hossain, Prof Dr. Md Enamul Hoque is published in Particle and Particle Systems Characterization.
- Article titled “A cost-effective prosthetic leg: Design and development” written by Prof Dr. Md Enamul Hoque, Shifat Al Hasnayeem Riham, Md Abdul Alim Shuvo is published in Hybrid Advances.
- Article titled “Collagen/Nigella Sativa/Chitosan Inscribed Electrospun Hybrid Bio-Nanocomposites for Skin Tissue Engineering” written by Rubel Alam, Shah Alimuzzaman, Abdus Shahid, Fahmida-E- Karim, Prof Dr. Md Enamul Hoque is published in Journal of Biomaterials Science, Polymer Edition.
- Article titled “Advanced Biopolymers for Automobile and Aviation Engineering Applications” written by Md Zillur Rahman, Maliha Rahman, Tariq Mahbub, Md Ashiquzzaman, Suresh Sagadevan, Prof Dr. Md Enamul Hoque is published in Journal of Polymer Research.
- Article titled “Gelatin-Based Scaffolds–An Intuitive Support Structure for Regenerative Therapy” written by Adib Bin Rashid, Nazmir-Nur Showva, Prof Dr Md Enamul Hoque is published in Publisher Current Opinion in Biomedical Engineering.
- Article titled “Gelatin-Based Scaffolds–An Intuitive Support Structure for Regenerative Therapy” written by Adib Bin Rashid, Nazmir-Nur Showva, Prof Dr Md Enamul Hoque is published in Publisher Current Opinion in Biomedical Engineering.
- Article titled “Chemical upcycling of plastics as a solution to the plastic trash problem for an ideal, circular polymer economy and energy recovery. Environment, Development and Sustainability” written by Shashank Shekhar, Prof Dr. Md Enamul Hoque, Pramendra Kumar Bajpai, Habibul Islam, Bhasha Sharma. is published in Environment, Development and Sustainability.
- Article titled “Structural Integrity and Performance of a Novel Chemically Treated Cellulosic Paper Corn/Polyester Sustainable Biocomposites” written by Faris M AL-Oqla, Mohammed Hayajneh, Prof Dr. Md Enamul Hoque is published in Journal of Bioactive and Compatible Polymers.
- Article titled “Electrospun bio-nano hybrid scaffold from collagen, Nigella sativa, and chitosan for skin tissue engineering application” written by Md Rubel Alam, Md Abdus Shahid, Shah Alimuzzaman, Md Mehedi Hasan, Prof Dr. Md Enamul Hoque is published in SAGE Publications.
- Article titled “3D bioprinting in the era of 4th industrial revolution–insights, advanced applications, and future prospects” written Adib Bin Rashid, Abu Saleh Md Nakib Uddin, Fahima Akter Azrin, Khondker Safin Kaosar Saad, Prof Dr. Md Enamul Hoque is published in Rapid Prototyping Journal.
- Article titled “A benign way of measuring hemoglobin in blood–Towards developing a non-invasive technique” written Prof Dr. Md Enamul Hoque, Sadia Mannan Shanta, Rhythem Tahrin, Saem Chowdhury, Zarin Tasnim, Md Abdul Alim Shuvo, Shifat Al Hasnayeem Riham is published in Hybrid Advances.
- Article titled “Prevalence of Multidrug-Resistant Salmonella in Raw Salad Vegetables in Dhaka Metropolitan Area” written by Palash Kumar Sarker, Hafizur Rahman, Kulsum Ara, Md. Shahidul Kabir, Shishir Kanti Pramanik, and Lt Col Maruf Hasan, PhD, EME is published in MIJST.
- Article titled “Handbook of Research on Consumer Behavioral Analytics in Metaverse and the Adoption of a Virtual World” written by Md Ashrafuzzaman, Rayesa Haque Rupanti, Nawrin Tasnim, Tasnuba Tabassum Mourin is published in International Journal IGI Publisher of Timely Knowledge.

## JOURNAL ARTICLE

### BME DEPARTMENT

- Article titled “Construction of copy number variation landscape and characterization of associated genes in a Bangladeshi cohort of neurodevelopmental disorders” written by Hosnara Akter, Muhammad Mizanur Rahman, Shaoli Sarker, Mohammed Basiruzzaman, Md. Mazharul Islam, Md. Atikur Rahaman, Md. Ashiquir Rahaman, Tamannat Binte Eshaque, Nushrat Jahan Dity, Shouvik Sarker, Md. Robed Amin, Mohammad Monir Hossain, Maksuda Lopa, Nargis Jahan, Shafaat Hossain, Amirul Islam, Ashaduzzaman Mondol, Md Omar Faruk, Narayan Saha, Gopen kumar Kundu, Shayla Imam Kanta, Rezaul Karim Kazal, Kanij Fatema, Md. Ashrafur Rahman, Lt Col Maruf Hasan, PhD, EME, Md. Abid Hossain Mollah, Md. Ismail Hosen, Noushad Karuvantevida, Ghausia Begum, Binte Zehra, Nasna Nassir, A. H. M. Nurun Nabi, K. M. Furkan Uddin, and Mohammed Uddin is published in International Journal Frontiers in Genetics.
- Article titled “Emotional State Classification from MUSIC-Based Features of Multichannel EEG Signals” written by Palash Sakib Abrar Hossain, Asst Prof Dr. Md Asadur Rahman, Amitabha Chakrabarty, Mohd Abdur Rashid, Anna Kuwana and Haruo Kobayashi is published in International Journal Bioengineering.
- Article titled “Improvement of Classification Accuracy of Four-Class Voluntary-Imagery fNIRS Signals using Convolutional Neural Networks” written by M. M. H. Milu, Asst Prof Dr. Md Asadur Rahman, M. A. Rashid, A. Kuwana, and H. Kobayashi is published in International Journal Engineering, Technology & Applied Science Research.

### IPE DEPARTMENT

- Adib Bin Rashid, Nazmir-Nur Showva (2023), “Design and fabrication of a biodegradable face shield by using cleaner technologies for the protection of direct splash and airborne pathogens during the COVID-19 pandemic” Cleaner Engineering and Technology. <https://doi.org/10.1016/j.clet.2023.100615>
- Adib Bin Rashid, Uddin, A.S.M.N., Azrin, F.A., Saad, K.S.K. and Hoque, M.E. (2023), "3D bioprinting in the era of 4th industrial revolution – insights, advanced applications, and future prospects", Rapid Prototyping Journal, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/RPJ-02-2023-0041>
- Adib Bin Rashid, Nazmir-Nur Showva 2, Md Enamul Hoque (2023),“Gelatin-based scaffolds: An intuitive support structure for regenerative therapy” Current Opinion in Biomedical Engineering Volume 26, June 2023, 100452. <https://doi.org/10.1016/j.cobme.2023.100452>
- Khan, Md. Muzahid., Bashar, I., Minhaj, G. M., Wasi, A. I., & Hossain, N. U. I. (2023). Resilient and sustainable supplier selection: an integration of SCOR 4.0 and machine learning approach. Sustainable and Resilient Infrastructure, 1-17
- Alshamrani, A., Sengupta, D., Das, A., Bera, U. K., Hezam, I. M., Nayeem, M. K., & Aqlan, F. (2023). Optimal Design of an Eco-Friendly Transportation Network under Uncertain Parameters. Sustainability, 15(6), 5538.
- Adib Bin Rashid, "Utilization of Nanotechnology and Nanomaterials in Biodiesel Production and Property Enhancement", Journal of Nanomaterials, vol. 2023, Article ID 7054045, 14 pages, 2023. <https://doi.org/10.1155/2023/7054045>
- Adib Bin Rashid., Shishir, S. I., Mahfuz, M. A., Hossain, M. T., Hoque, M. E., Silica Aerogel: Synthesis, Characterization, Applications, and Recent Advancements. Part. Part. Syst. Charact. 2023, 40, 2200186. <https://doi.org/10.1002/ppsc.202200186>
- Alam, S. T., Tomal, A. A., & Nayeem, M. K. (2023). High-speed machining of Ti-6Al-4V: RSM-GA based optimization of surface roughness and MRR. Results in Engineering, 100873.

## JOURNAL ARTICLE

### SC & HUM DEPARTMENT

- Mohebul Ahsan, Md Musfiqur Rahman, Amjad E. Alsafrani, Md. Abdul Aziz, Albandary, Almahri, Hadi M. Marwani, Mohammed M. Rahman, Mohammad A. Hasnat, Immobilization of poly(o - aminophenol) film on Pt surface: A robust sensor for detecting As (III) in an acidic medium, Surfaces and Interfaces, Vol. 39, pp. 102976, 2023. DOI: 10.1016/j.surfin.2023.102976

## CONFERENCE PAPER

### CSE DEPARTMENT

- Prof Dr Mahbubur Rahman & Asst Prof Dr. Md Akhtaruzzaman and co-authors. Context Based Emotion Recognition from Bengali Text using Transformers. In proceedings of the 5th International Conference on Smart Systems and Inventive Technology (ICSSIT) 2023, IEEE, 23-25 Jan 2023, Tirunelveli, India.
- Prof Dr Mahbubur Rahman & Asst Prof Dr. Nusrat Sharmin and co-authors. Tracking of Artillery Shell using Optical Flow. In proceedings of the 5th International Conference on Image Processing and Machine Vision (IPMV 2023), IEEE, 13-15 Jan 2023, Macau, China.
- Prof Dr Mahbubur Rahman, Maj Md Mokhlesur Rahman & Asst Prof Dr. Nusrat Sharmin and co-authors. Tropical Cyclone Genesis Forecasting using Light GBM. In proceedings of the 3rd International Conference on Artificial Intelligence and Logistics Engineering (ICAILE2023), IEEE, 11-12 Mar 2023, Macau, China.
- Prof Dr Mahbubur Rahman & Asst Prof Dr. Nusrat Sharmin and co-authors. Cyclone Prediction Visualization Tools Using Machine Learning Models and Optical Flow. In proceedings of the International Conference on Electrical, Computer and Communication Engineering (ECCE), IEEE, 23-25 Feb 2023, CUET.
- Lt Col Muhammad Nazrul Islam, Asst Prof Iyolita Islam & Lec Zinia Sultana and co-authors. Designing Interactive Mobile UIs for Detecting Dementia. In Proceedings of the 11th International Conference on communities and Technologies May 2023.
- Lt Col Muhammad Nazrul Islam, Sqn Ldr Zohirul Islam & Lec Tasneem Mubashshira and co-authors. Towards Developing an Intelligent Mobile Application for Identifying Intoxicated people based on situational Impairment. In Proceedings of the Computer Society Bangladesh Chapter Summer Symposium (IEEE CS BDC SS) 09-10 Jun 2023, Islamic University, Kustia.
- Lt Col Muhammad Nazrul Islam & Lec Ramisha Fariha Baki and co-authors. Towards Developing an Intelligent Robotic System for Assisting Children in Basic Drawing. In Proceedings of the International Conference on Next-Generation Computing, IoT and Machine Learning (NCIM 2023) May 2023, DUET.
- Lt Col Muhammad Nazrul Islam and co-authors. A Machine Learning-based System to Recommend Appropriate Military Training Program for a Soldier. In Proceedings of the International Conference on Machine Intelligence and Emerging Technologies (MIET 2022) Jun 2023, Noakhali, Bangladesh.
- Lt Col Muhammad Nazrul Islam and co-authors. Obesity and Mental Health During the COVID-19 Pandemic: Prediction and an Exploration of Their Relationship. In Proceedings of the Fourth Industrial Revolution and Beyond, Lecture Notes in Electrical Engineering Jun 2023.



## CONFERENCE PAPER

### CSE DEPARTMENT

- Lt Col Muhammad Nazrul Islam and co-authors. Factor Affecting Mental Health of High School Students due to COVID-19; An Exploratory Study. In Proceedings of the International Conference on Next-Generation Computing, IoT and Machine Learning (NCIM 2023) May 2023, DUET, Bangladesh.
- Lt Col Muhammad Nazrul Islam and co-authors. An Ensemble-based Deep Learning Model for Multi-class Flower Recognition. In Proceedings of the International Conference on Next-Generation Computing, IoT and Machine Learning (NCIM 2023) May 2023, DUET, Bangladesh.
- Lt Col Muhammad Nazrul Islam and co-authors. An Ensemble ML Model to Predict the Wastage of Food: Towards Achieving the Food Sustainability. In Proceedings of the International Conference on Next-Generation Computing, IoT and Machine Learning (NCIM 2023) May 2023, DUET, Bangladesh.
- Lt Col Muhammad Nazrul Islam and co-authors. An Effective Method to Detect DHCP Starvation Attack Using Port Scanning. In Proceedings of the International Conference on Next-Generation Computing, IoT and Machine Learning (NCIM 2023) May 2023, DUET, Bangladesh.
- Asst Prof Dr. Nusrat Sharmin and co-authors. Bullet Hole Detection in a Military Domain Using Mask R-CNN and ResNet-50, 2023. In Proceedings of the International Conference for Advancement in Technology (ICONAT) 23-25 Feb 2023, CUET, Bangladesh.
- Asst Prof Nuzhat Tabassum and co-authors. Footwear 3D Model Generation from Smartphone 2D Images Utilizing Photogrammetry. In Proceedings of the International Conference on Electrical, Computer and Communication Engineering (ECCE) 23-25 Feb 2023, CUET, Bangladesh.
- Lec Rubyeat Islam and co-authors. Optimal K-mer Analysis for Alignment Free Phylogenetic Tree. In Proceedings of the 10th International Conference on Bioinformatics Research and Applications Feb 2023, Barcelona, Spain.

### EECE DEPARTMENT

- D. Roy and M. Hossam. E Haider, "Automatic Boot Spray Machine: A Preventive Measure Against Corona Virus" in 2023 International Conference for Advancement in Technology (ICONAT). pp. 1-4., January 2024
- D. Roy and M. Hossam. E Haider, "Object Tracking Based on Background Subtraction and Kalman Filtering" in 2023 International Conference for Advancement in Technology, pp. 1-4, January 2024
- M Kabir, R Tasfia, and M. Golam Mostafa, "An Improved Video Recommendation System for IoT Devices Using Federated Learning." In 2023 International Conference on Device Intelligence, Computing and Communication Technologies", pp 608-613, March 2023.
- R. Tasnim Rupoma, W. Bin Ataur Rahman Akash and M. Golam Mostafa, "Improved Channel Model of UAV to UAV Millimeter Wave Link Under Hovering Fluctuations and Doppler Effect," 2023 International Conference on Device Intelligence, Computing and Communication Technologies, (DICCT), pp. 575-580 Dehradun, India, 2023,
- M A. Islam, M Ariful, A S Jasir and A. A Pratyay, "Layout Design and Analysis of UWB Gaussian Pulse Transmitter Using 90nm CMOS Technology." In 2023 International Conference for Advancement in Technology (ICONAT), pp. 1-6, January 2023
- M A. Islam, M Ariful, A S Jasir and A.A Pratyay, " Pratyay A.A. Design and Analysis of a Low Power UWB Transmitter Using Second Derivative Gaussian Pulse." In 2023 International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics (IITCEE) , pp. 24-29, January 2023.

## CONFERENCE PAPER

### EECE DEPARTMENT

- M A. Islam, M Ariful, A S Jasir and A.A Pratyay, "Layout Design and Analysis of UWB Gaussian Pulse Transmitter Using 90nm CMOS Technology" In 2023 International Conference for Advancement in Technology (ICONAT) pp. 1-6, January 2023.
- Shaira Senjuti Oyshee, Shaharehar Rahaman Anik, Mohammad Jawad Ul Kabir Chowdhury and Md Ahsan Kabir, "Machine Learning based Load and Temperature Behavior Clustering and Peak Shifting Implementation on Bangladeshi Grid Data" In Proc. of ECCE, IEEE, 2023.
- M S A A F Shiblee, Md. Ziaur Rahman, Hasan Monir, and Md Ahsan Kabir, 'Exploratory Perspective of PV NetEnergy Metering for Residential Prosumers: A Case Study" In Proc. of ECCE, IEEE, 2023.
- W. Mashrur, S.B. Salim, S. Sultana, M.S. Hasan, M.A.U. Zaman, K.Z. Rahman and M.R. Islam, "Effect of Extended Back Gate in GaAs Based DG-JLMOSFET." in 25th International Conference on Computer and Information Technology (ICCIIT), pp. 722-726, March 2023.
- K.Z. Rahman, M.A.U. Zaman, S. Sultana, M.S. Hasan, S.B. Salim, W. Mashrur and M.R. Islam, "Effect of Recessed Gate Metal on Performance Analysis of GaAs Based DG-JLMOSFET." in International Conference on Electrical, Computer and Communication Engineering (ECCE), pp. 1-5, February 2023.
- A. A. Pratyay, T. Nahar, M.S. Hasan, S. Sultana and M.R. Islam, "Impact of Channel Length Scaling on the Performance of Recessed GaAs Channel DGJLFET." in International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics (IITCEE), pp. 90-95, April 2023.
- A. A. M. Shah Sadman, "Study on Plausible Application of Bangabandhu Satellite -2 as a Search and Rescue Satellite Under Cospas-Sarsat Programme," 2022 4th International Conference on Sustainable Technologies for Industry 4.0 (STI), Dhaka, Bangladesh, 2022, pp. 1-5, doi: 10.1109/STI56238.2022.10103354. (Published in IEEE Xplore: 24 April 2023).
- K. M. Daiyan, Ahmed Mustakim, and Shaiokh Bin Abi, "An Improved Design of Low Power High Speed Configurable Logic Block Using 90nm CMOS Technology", 7th International Conference on Computing Methodologies and Communication (ICCMC), Erode, India, 2023.
- K. M. Daiyan, Ahmed Mustakim, and Shaiokh Bin Abi, "An Energy Efficient Architecture of Configurable Logic Block Using Pass Transistor for FPGA", 3rd International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT), Chhattisgarh, India, 2023.
- K. M. Daiyan, Shaiokh Bin Abi, A. B. M. Harun-ur Rashid, and MSA Shawkat, "A Comprehensive Study of the Prospects of Terahertz Range Spoof Surface Plasmon Polariton Interconnect for Interchip Data Transmission", IEEE Access, 2023.
- R. Tasnim Rupoma, W. Bin Ataur Rahman Akash and M. Golam Mostafa, "Improved Channel Model of UAV to UAV Millimeter Wave Link Under Hovering Fluctuations and Doppler Effect," 2023 International Conference on Device Intelligence, Computing and Communication Technologies, (DICCT), pp. 575-580 Dehradun, India, 2023.

## CONFERENCE PAPER

### ME DEPARTMENT

- Article title “Coalescence and Detachment Dynamics of Dual Droplets in a Confinement for Fuel Cell Application” Lecturer Anik Sarker with 3 other co-authors. Published on 5th February 2023 at the 4th International Conference on Recent Advancement in Mechanical Engineering (ICRAME).

### BME DEPARTMENT

- Nymphia Nourin, Paromita Kundu, Sk Saima, Asst Prof Dr. Md Asadur Rahman “GLCM and HOG Feature-Based Skin Disease Detection Using Artificial Neural Network” Proceedings of International Conference on Information and Communication Technology for Development: ICICTD 2022.
- Syeda Umme Ayman, Al Arrafuzzaman, Asst Prof Dr. Md Asadur Rahman “Subject Dependent Cognitive Load Level Classification from fNIRS Signal Using Support Vector Machine” Proceedings of International Conference on Information and Communication Technology for Development: ICICTD 2022
- Asst Prof Akid Ornob & 3xCo-Author “Towards smartphone based complete blood cell estimation from blood smear images” IEEE-ICECCT 2023 5th International Conference on Electrical, Computer, and Communication Technologies.

## BOOK CHAPTER

### BME DEPARTMENT

- Pranta Ray, Prof Dr. Md Enamul Hoque, M Azam Ali has published a Book Chapter titled Sodium alginate nanoadsorbents for wastewater treatment: synthesis and characterizations in Publisher Elsevier.
- Syed Zubair Ali, Md Khalid Nahian, Prof Dr. Md Enamul Hoque has published a Book Chapter titled Extraction of Cellulose from agro-industrial Wastes in Publisher Elsevier.
- Foysal Anwar, Asrafuzzaman, Kazi Faiza Amin, Prof Dr. Md Enamul Hoque has published a Book Chapter titled Tools and Techniques for Characterizing Sustainable Hydrogels in Publisher Elsevier.
- Zayed Bin Zakir Shawon, Moshir Rahman Khan, Nusra Akter Takia, Tausif Hasan Khan, Ayesha Rahman, Prof Dr. Md Enamul Hoque has published a Book Chapter titled Structure-property-function relationships of Sustainable Hydrogels in Publisher Elsevier.

## BOOK PROCEEDING

### BME DEPARTMENT

- Saadman Kabir, Ananta Banik, Moshfiq-U-Saleheen Chowdhury, Jannatul Ferdaus & Maj Md Ashrafuzzaman, PhD, EME has published a Book Proceeding titled “Development of Wearable and Portable Cardiac Arrest Prediction System” in International Journal Springer, Singapore.



Chief Patron : Brigadier General Md Wahidul Islam, SUP, ndc, psc  
Acting Commandant, MIST

Editor in Chief : Brigadier General Md Towhidul Islam, PBGM, BGBMS, ndc, afwc, psc  
Director Research and Development, MIST

Editor : Lieutenant Colonel Md Faizul Kabir, psc, Engrs  
General Staff Officer-1 (Research), MIST

Published By : Research and Development Wing, MIST

Address : Mirpur Cantonment, Dhaka-1216

Web Site : [www.mist.ac.bd](http://www.mist.ac.bd)

e-mail : [info@mist.ac.bd](mailto:info@mist.ac.bd)