

COMMANDANT'S MESSAGE



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 is 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 2021-22 is not an exception. The 40th issue of this newsletter reflects those activities of last six months. I express my heartfelt thanks and gratitude to the editorial board for publishing MIST Newsletter regularly.

INAUGURATION CEREMONY OF MIST CYBER RANGE LAB

The State Minister for ICT, Zunaid Ahmed Palak, MP inaugurated the first ever Cyber Range Lab in Bangladesh on 10th April 2022. The lab is the first of its kind in the history of the country's educational institutions. This has been sponsored and set up under the supervision of the ICT Division. This is a state of the art facility which houses modern devices, equipment, and technology from Cyber bit, Singapore.



MIST JOB FAIR-2022



Faculty of Civil Engineering of MIST organized a Job Fair titled MIST Job Fair-2022 from 12 to 13 March 2022. The Job Fair-2022 was inaugurated by the chief guest Mr. Tipu Munshi, MP, Honorable Minister, Ministry of Commerce, Government of the People's Republic of Bangladesh.

FACULTY DEVELOPMENT PROGRAM -2022



MIST Faculty Development Program- 2022 was held on 16 to 20 January 2022. Many prominent guest speakers from academia and industry shared their knowledge in various sessions.

VISIT OF SENIOR SECRETARY, MOD



DELEGATIONS



Defence Advisor of Indian High Commission on 04 January 2022



Commandant BNA on 19 May 2022



Director EME on 10 May 2022

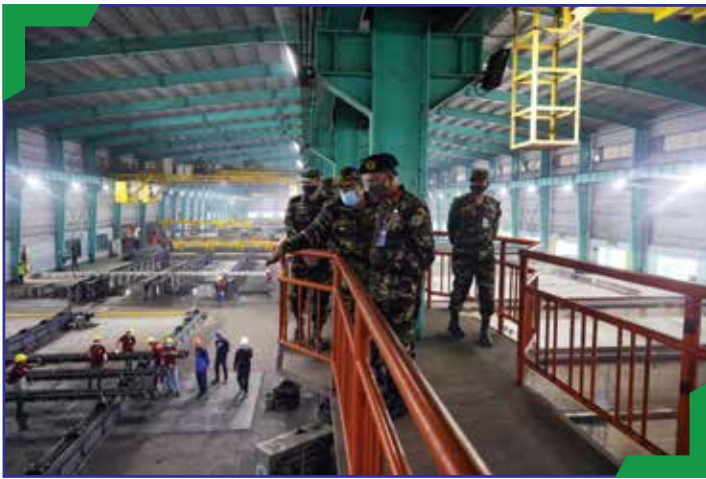


Foreign guest, Dipl-Ing, (FH) Ioan Pauliuc, Biomedical Engineer from Germany has visited the BME Laboratory, MIST on 20 January, 2022.



Orientation Training visit by BCS & BJS-77 on 03 March 2022

COMMANDANT'S VISIT



Commandant, MIST visited BMTF and BDP on 10 and 11 February, 2022.

MoU SIGNING



MIST signed a MoU with Armed Forces Medical College (AFMC) to conduct the medical admission test of AFMC for the next 5 years.



MIST signed a MoU with Aspire to Innovate (a2i), ICT Division on 12 June, 2022.



MIST signed a MoU with Fair Group on 30 June 2022



GOVERNING BODY MEETING OF MIST



MIST held its 39th Governing Body Meeting on 28 June, 2022. Major General Md Wahid-Uz-Zaman, BSP, ndc, aowc, psc, te, Commandant, MIST presided over the meeting.

ACADEMIC COUNCIL OF MIST

The 70th & 71st Academic Council Meeting of MIST were held on 23 January and 19 April 2022 respectively. Major General Md Wahid-Uz-Zaman, BSP ndc, aowc, psc, te, Commandant MIST chaired the meeting. Representatives from Ministry of Education, Ministry of Defence, Armed Forces Division, three Service Headquarters and representatives of BMA, BNA, BAFA, BUET & DU were present in the meeting.



WEBINAR ON NUCLEAR PROJECT MANAGEMENT AND ITS SAFETY, SECURITY AND SAFEGUARD



Department of NSE has successfully organized a webinar on “Nuclear Project Management and its Safety, Security and Safeguard” on 12 January 2022.

WORKSHOP ON ROADMAP TO CYBER SECURITY IN FINANCIAL SECTOR: INDUSTRY-ACADEMIA COLLABORATION

A workshop on “Roadmap to Cyber Security in Financial Sector: Industry-Academia Collaboration” was held on Saturday 11 June 2022 at MIST. The workshop was arranged by the Cyber Security Wing of the newly established Center for Advanced Computing and Research (CACR) at MIST.



DISCUSSION SESSION BY CACR, MIST



The Centre for Advanced Computing and Research (CACR) arranged a discussion session titled Perspective of AI towards Fourth Industrial Revolution in Bangladesh: Industry-academia Collaboration on 12 June 2022 at MIST. Commandant, MIST graced the occasion as the chief guest

SESSION CHAIR OF NATIONAL CONFERENCE

On 5th April 2022, Colonel Syed Mahfuzur Rahman, Head, Department of BME conducted an engrossing session of national conference on the topic “4IR highlighting Master Trainer Training in Mechatronics and Automation Technology” as session chair.



RESEARCH METHODOLOGY COURSE



Newly introduced Research Methodology Course was held on 08 & 09 April 2022 in MIST. The course was conducted by the internal faculty members of MIST and external experts. In one of the session, the guest speaker was Major General Md Emdad-UI-Bari, OSP, ndc, psc, te (retd). Level-4 students and nominated faculty members were present.

TRAINING AND LECTURE SESSION



A training session on Dialysis was held at NIPRO JMI Dialysis Centre Ltd in presences of the faculty members of BME Department, MIST.



On January 04, 2022, a special Lecture Session for faculties of the Department of Computer Science and Engineering was conducted.



Major General Ibne Fazal Shayekhuzaman, BSP(BAR), SGP, afwc, psc, Commandant DSCSC presented a Motivational Speech for MIST students on 17 April 2022.



Department of PME successfully organized a special guest lecture on Natural Gas Exploration and Prospect of Bangladesh on 13 June 2022.



Department of Civil Engineering of MIST organized a Training Course On “Professional Building Design as per BNBC 2020” on 20 to 24 March 2022. Undergraduate and Postgraduate students of CE Department have attended this course.

SEMINAR: CE DEPARTMENT

Faculty of Civil Engineering of MIST organized a webinar title: Approches For Highway Bridge Type Selection on 13 April 2022. Dr. Nur Yazdani, PE, FASCE, FACI, FSEI, Professor and Former Chairperson of Civil Engineering Department, University of Texas at Arlington, USA delivered his speech as key note speaker.

Lt Col Khondaker Sakil Ahmed, PhD, PEng, CEng of Department of Civil Engineering of MIST Delivered a keynote speech in a webinar title: Earthquake Resistant Design of RC Structures according to BNBC 2020 organized by BSRM Ltd on 26 February 2022. Practicing Engineers of Chattogram Division, Civil Engineering Students and Inhouse Engineers of BSRM participated the webinar.

CERTIFICATION COURSE ON SHIP DESIGN SOFTWARE



The Department of Naval Architecture and Marine Engineering (NAME) organized a Certification course on Ship Design Software (Maxsurf and Rhinoceros) from 21 to 30 March 2022.

ADVISORY COMMITTEE MEETING



4th Advisory Committee Meeting of Architecture Department on 17 February 2022



2nd Industrial Advisory Panel Meeting of Mechanical Engineering Department on 31 May 2022



Industry-Academia Bridging Meeting-2022 of EECE Department on 12 May 2022



4th Advisory Committee Meeting of AE Department on 04 June 2022

ACCREDITATION



BAETE Evaluation Team Visit to EECE and ME Department from 5 to 7 June 2022



BAETE Evaluation Team Visit of AE Department from 8 to 11 June 2022

LAUNCHING CEREMONY OF BSc AND POST GRADUATE PROGRAM



MIST hosts 2022 BSc Engineering Batch Launching Ceremony on 25 April 2022



MIST's 2022 Post Graduate Batch Launching Ceremony on 05 June 2022.

LAUNCHING CEREMONY OF THE ONLINE VERSION OF MIJST JUNE-2022 ISSUE



MIJST June 2022 Online Version Launching Ceremony on 26 June 2022.

BOOK UNVEILING



Unveiling of An Aid to Construct Residential Building by the Chief of Army Staff on 27 March 2022



Title: Thesis Writing Guideline



Title: Research Methodology Fundamentals



Title: The MIST Pioneers by CE Department



Title: IPE Technical Paper



OBSERVANCE

CELEBRATION OF BIRTH ANNIVERSARY OF THE FATHER OF THE NATION BANGABANDHU SHEIKH MUJIBUR RAHMAN AND NATIONAL CHILDREN'S DAY-2022



Observance of the 102nd Birth Anniversary of Father of the Nation and National Children's Day on 17th March 2022 organized by Science & Humanities Department.



Observance of the Genocide Day-2022



MIST Celebrated Independence Day-2022 on 26 March 2022.

WORLD ENVIRONMENT DAY-2022



World Environment Day was celebrated on 05 June 2022 by EWCE Department and MIST Environment Club.



CLUB ACTIVITIES

INAUGURATION OF MIST READERS CLUB



Maj Gen Md Wahid-Uz-Zaman, BSP, ndc, aowc, psc, te Commandant of MIST inaugurated MIST Readers Club on 27 April 2022 at MIST Cafeteria.

ONLINE ESSAY WRITING COMPETITION-2022

Online Essay Writing Competition-2022 on the occasion of 102nd Birth Anniversary of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman and National Children's Day-2022 was held on 17 March 2022.

**জাতির জনক
বঙ্গবন্ধু শেখ মুজিবুর রহমানের
জন্মবার্ষিকী এবং জাতীয় শিশু দিবস
উপলক্ষে অনলাইন প্রবন্ধ প্রতিযোগিতা**

বিষয়: পিতৃদের বন্ধু হওয়া

শ্রেষ্ঠ পুরস্কার মূল্য: ২০,০০০ টাকা

জানা প্রশ্নের পক্ষে সময়ে ৯-ই মার্চ রাত ১১-১২ ঘটিকা

• অংশগ্রহণকারী: সকল সামগ্রিক এবং বেসামরিক শিক্ষার্থী
• জন্য প্রশ্নের ঠিকানা: office@rsw.mist.ac.bd

আয়োজক: ডায়ালগসেইট অ্যান্ড স্টুডেন্টস ওয়েলফেয়ার মিলিটারি ইনস্টিটিউট অব সায়েন্স এন্ড টেকনোলজি

DRAWING COMPETITION-2022



Literature and cultural club of MIST organized Drawing Competition- 2022 on the occasion of Independence and National Day-2022 held on 26 March, 2022.

INDEPENDENCE DAY PROGRAMMING CONTEST-2022



MIST Computer Club (MCC) organized an onsite Independence Day Programming Contest- 2022 for Level-1 MIST students on 27 March, 2022.

CAD COMPETITION AND MECHANICS OLYMPIAD-2022

MIST Automotive Club of Mechanical Engineering Department hosted CAD Competition & Mechanics Olympiad on 27 April, 2022.



BUPITC PRESENTS INTRA BUP MIST VALORANT GAMING TOURNAMENT

A.S Jahin from ME Department grabbed the Runner-up position in the BUPITC Presents Intra-BUP-MIST Valorant Gaming Tournament. The tournament was organized by BUP InfoTech Club. 16 teams participated in the tournament.



JUNIOR PROGRAMMING CONTEST-2022



On its 2nd inaugural ceremony, the talent hunt program arranged a junior-level programming contest for the Level-2 students of the Department of CSE, MIST. The winner was Zarif Zeisan Mustafa, an enthusiastic student from CSE-21.

BUP ENVIRONMENTAL FEST-2022



TEAM IGNITER' from the IPE Department participated and won the prize of 2nd Runner-Up at 'BUP Environmental Fest 2022' in project idea showcasing, organized by Bangladesh University of Professionals (BUP) on 25 May 2022. The team is comprised of Maisha Rahman Chaity Nazmul Hossain Khan and Sanjida Islam and which was supervised by Major Adib Bin Rashid and Lecturer Modassir khan Nayeem.

BANGABANDHU INTER DEPARTMENT CULTURAL COMPETITION-2022

Bangabandhu Inter-Department Cultural Competition-2022 was held from 16 to 19 May 2022 under the supervision of DSW Wing. EECE Department becomes the champion of the competition.



INTER DEPARTMENT VOLLEYBALL COMPETITION-2022



Inter-Department Volleyball Competition-2022 was held from 01-09 June 2022 under the supervision of DSW Wing. EECE Department became the champion and ME department became the runner-up team. Lt Rezwanul Kaium from ME-18 received the best player award for his outstanding performance.



OTHER ACTIVITIES

CALL ON (EID-UL- FITR)



The Chief of Army Staff attended the call on (Eid-ul-Fitr)

NOBIN BORON-2022



CAMPUS HOUR

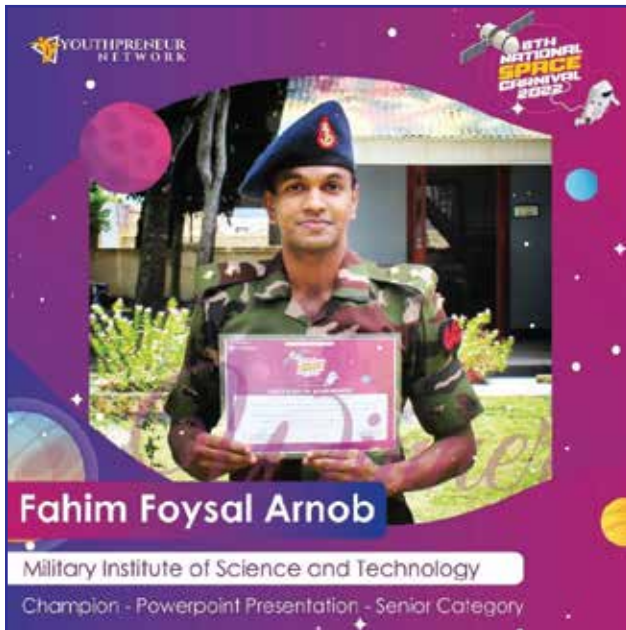


MISTIAN PUBLIC SERVERS' HUB GET TOGETHER-2022



ACHIEVEMENTS

6TH NATIONAL SPACE CARNIVAL 2022



Lt Fahim Foysal Arnob from ME-16 grabbed the Championship in the 6th National Space Carnival-2022 in the segment of PowerPoint Presentation arranged by Youthpreneur Network. This competition called for designs from the students all across the country.

UNIVERSAL ROVER CHALLENGE '22

Following its stellar success in the 2021 University Rover Challenge, Mongol Barota, led by Shafayetul Islam, a student of Level-4 of the Department of CSE, tackled the competition in 2022 with a more potent arsenal, with the rover PHOENIX 2.0 as its centerpiece. The remarkable streak of the last year continued as the team qualified as a finalist after the first stage of the competition, the System Acceptance Review (SAR). For its second time in a row, with the highest SAR score of 92.85 out of 100 among all other universities in the country, the team became one of the 36 finalists among a record 99 teams competing this year.



ANATOLIAN ROVER CHALLENGE '22



For the first time in 2022, the Space Exploration Society (UKET) is organizing the Anatolian Rover Challenge on the premises of Istanbul Technical University between the 22nd and 25th of July. Owing to its list of successful participation in different competitions throughout the years, Mongol Barota was handpicked and invited to take part in the challenge. The ARC offers a unique life-like space experience with a storyline of voyaging through Mars, the Moon, and the Earth.



ELEVATED AS A SENIOR MEMBER OF THE IEEE



In recognition of professional standing, the officers and board of Directors of the IEEE elevated Brig Gen A K M Nazrul Islam, PhD to the grade of Senior Member of the IEEE.

SELECTION FOR HIGHER EDUCATION RESEARCH SCHOLARSHIP IN CANADA

Maskuda Akter, Roll: 0418110012 from MSc Engineering Programme of CE Department is selected for higher education research scholarship at Lakehead University, Canada for a duration of six months. During this period she will go through academic activities focusing a joint venture research programme between MIST and Lakehead University. She will receive accommodation, transportation and daily allowances for the entire duration from the Lakehead University, Canada.



THE CONSTRUCTION OF LOW COST HOUSING IN FLOOD



EWCE Department of MIST conducted a feasibility study for the construction of low cost housing in flood prone areas of Roumari upazila in Kurigram district. Accordingly, a model house was designed and built which is suitable for flood affected areas of Bangladesh. The special feature of the two-storey house is that it can be easily formatted and relocated during the flood.

BEST SCIENTIFIC AWARD



“Best Scientific Award” was won by Lecturer Tahura Hossain and her team for the paper entitled “Comparison of Blood Rheological Models in Patient-specific Left Coronary Arteries with Varying Degrees of Stenosis” in the “AI & Computational Modelling” category presented at the 6th Kuala Lumpur International Conference on 29th July 2021. The conference was organized by the Biomed2021 committee of the University of Malaya. The paper was later published on Springer publication on April, 2022.



ARTICLES PUBLISHED

JOURNAL

CE DEPARTMENT

- Professor Dr. G M Jahid Hasan and Lec Naila Matin has published a journal article titled as “Intertidal bathymetry and foreshore slopes derived from satellite images for static coasts”, Regional Studies in Marine Science, Elsevier, Vol 51, 2022, <https://doi.org/10.1016/j.rsma.2022.102233>, (Impact Factor: 1.624, Site Score: 2.3).
- Lt Col Khondaker Sakil Ahmed, PhD, PEng, CEng and Lec Samia Zakir has published a journal article titled as “Predicting bearing capacity of double shear bolted connections using machine learning” in Engineering Structures (IF 4.471, Cite Score 7.7), Vol 251 Part A, of Elsevier. <https://doi.org/10.1016/j.engstruct.2021.113497>.
- Lt Col Khondaker Sakil Ahmed, PhD, PEng, CEng and Lec Samia Zakir has published a journal article titled as “Machine Learning-Based Failure Mode Identification of Double Shear Bolted Connections in Structural Steel” in Engineering Failure Analysis Structures (IF 3.114, Cite Score 5.3), Vol 139 of Elsevier. [10.1016/j.engfailanal.2022.106471](https://doi.org/10.1016/j.engfailanal.2022.106471).
- Lt Col Md Jahidul Islam, PhD, Kamrul Islam, Md Shahjalal, Ehsani Khatun, Sumaiya Islam, Anika Binte Razzaque has published a journal paper titled as “Influence of different types of fibers on the mechanical properties of recycled waste aggregate concrete. Construction and Building Materials (Q1, IF: 6.141). Article ID 127577, Volume 337, 2022. <https://doi.org/10.1016/j.conbuildmat.2022.127577>.
- Lt Col Md Jahidul Islam, PhD, Hoque Md Niaz Haque, Md Shahjalal has published a journal paper titled as “Mechanical and Durability Properties of Concrete Containing Polypropylene as a Partial Replacement of Coarse Aggregate” Journal of Building Engineering (Q1, IF: 5.318). Article ID 104597, 2022. <https://doi.org/10.1016/j.job.2022.104597>.
- Lt Col Md Jahidul Islam, PhD, Tasnia Ahmed, Fahad Bin Imam, Md Ifaz, M. and Md Hamidul has published a journal paper titled as “Flexural and Impact Behavior of Textile Reinforced Concrete Panel” International Journal of Protective Structures. <https://doi.org/10.1177/20414196221095250>.
- Lt Col Md Jahidul Islam, PhD, has published a journal paper titled as Comparative Study of Concrete with Polypropylene and Polyethylene Terephthalate Waste Plastic as Partial Replacement of Coarse Aggregate” Advances in Civil Engineering. Advances in Civil Engineering, vol. 2022, Article ID 4928065, 13 pages, 2022. <https://doi.org/10.1155/2022/4928065>.



CSE DEPARTMENT

- Article titled “ Analyzing the Global Impact of COVID-19 Vaccination Progress: Insight from an Exploratory data analysis “ written by Prof. Dr. Md. Mahbubur Rahman and others, is published in Human Vaccines & Immunotherapeutic, 2022 (IF: 3.452).
- Article titled "Phoenix: Towards Designing and Developing a Human Assistant Rover" written by Prof Dr. Md. Mahbubur Rahman, Asst. Prof Dr. Md. Akhtaruzzaman and others is published in IEEE Access, 2022, (IF: 3.367)
- An article titled “An Efficient Authentication Scheme for Secured Service Provisioning in Edge-enabled Vehicular Cloud Networks towards Sustainable Smart Cities” written by Prof Dr. Mahbubur Rahman and co-author(s) is published in Sustainable Cities and Society(IF=7.59).
- Article Titled “UVC-PURGE: A Novel Cost-effective Disinfection Robot for combating COVID-19 Pandemic” written by Lt Col Muhammad NazrulIslam and co-author(s) is published in IEEE Access, 2022 (IF : 3.367).
- Article titled “IoT-based Serious Gaming Platform for Improving Cognitive Skills of Children with Special Needs.” written by Lt Col Muhammad Nazrul Islamof and co-author(s) is published in Journal of Educational Computing Research, 2022. (IF: 3.088).
- Article titled “Digital intervention to reduce counterfeit and falsified medicines: A systematic review and future research agenda” written by Leclyolita Islam and Lt Col Muhammad Nazrul Islamand co-author(s) is published in Journal of King Saud University-Computer and Information Sciences, 2022 (IF: 13.473).
- Article titled “Developing a Novel Hands-free Interaction Technique based on Nose-Teeth for Accessing the Smartphone”, written by Lt Col Muhammad Nazrul Islam and Lec Md Shadman Aadeeb of CSE Department and co-author(s) is published in IEEE Access, 2022 (IF: 3.367).
- Islam, M.N., Mustafina, S.N., Mahmud, T. et al. published an artical titled Machine learning to predict pregnancy outcomes: a systematic review, synthesizing framework and future research agenda. BMC Pregnancy Childbirth 22, 348 (2022). <https://doi.org/10.1186/s12884-022-04594-2>.



EECE DEPARTMENT

- Md Mizanuzzaman, Hussain Nyeem, and Md Faisal Kader. "Automatic Abnormality Detection and Estimation in Small Arms Barrel–A New Software-Based System for Bangladesh Army." Bangladesh Armed Forces Journal (2022).
- Md, Mizanuzzaman and Hussain Nyeem, Bangabandhu satellite-1: A remarkable feat of a nation. Bangladesh Armed Forces special issue journal on birth centenary of Bangabandhu. Center for Open Science; 2022 Feb 12. <https://doi.org/10.31235/osf.io/tkdj9>.
- Md. Saif Hasan Onim, Hussain Nyeem, Koushik Roy, Mahmudul Hasan, Abtahi Ishmam, Md. Akiful Hoque Akif and Tareque Bashir Ovi, "Blpnet: A New Dnn Model and Bengali Ocr Engine for Automatic License Plate Recognition", SSRN Electronic Journal, January 2022.
- M. S. H. Onim, M. W. K. Arnob, A. D. Pooja, and H. Nyeem, "Vehicle detection and localization in extremely low-light condition with generative adversarial network and yolov4," SSRN Electron. J., 2022.
- M. D. Islam, M. A. Islam, R. N. Sajjad and M. R. Khan, "A Techno-Economic Analysis of Bifacial Panels Under Soiling in South-Asian Urban Area", in IEEE Region 10 Symposium (TENSYP), pp.1-5, 2022.
- Nazrul Islam, Hasan, ASM Monjurul, Kabir, Md. Ahsan, Prottasha, Fatema Zerine, Samin, Abrer Mohsin, Shoumik, Shadman Sakib, and Andrea Trianni. "Energy Management practices, barriers, and drivers in developing countries: an exploratory insight from pulp and paper industry". Journal of Energy for sustainable development, March 2022 (Under Review).
- Md Ahsan Kabir, Faija Farjana, Rukhsana Choudhury, Ahmed Imrul Kayes, Omar Farrok, Md Sawkat Ali "Net-metering and Feed-in-Tariff Policies for the Optimum Billing Scheme for Future Industrial PV Systems in Bangladesh", Alexandria Engineering Journal, Under review.
- R. Islam, K. Liu, Z. Wang, Md. Soyaeb Hasan, Y. Wu, S. Qu, and Z. Wang "Strain-induced Electronic and Optical Properties of Inorganic Lead Halide Perovskites APbBr₃ (A= Rb and Cs)." Materials Today Communications, Vol. 31, pp. 103305-15, 2022.
- A. Ahnaf, T. H. Orpa, M. I. Rizu and S. Sumon, "An IoT Based Healthcare Solution Using ESP32With Local and Public Data Clouding", 2022. [Under Review].
- S. Tahsin and M. I. Rizu, "Performance Analysis and Optimization of Triple Junction Tandem Organic Solar Cell via Optical and Electrical Modelling", 2022. [Under Review].



ME DEPARTMENT

- Article Name: Feasibility Study of Offshore Solar Energy near the Coastal Area of Bangladesh
Published by Assistant Professor Golam Mostofa of ME department with 2 co-authors. Published on 28 February 2022 at American Journal of Science, Engineering and Technology.
- Article Name: UVC-PURGE: A Novel Cost-effective Disinfection Robot for combating COVID-19 Pandemic.
Published by Lecturer Shah Md. Ahasan Siddique of ME department with 11 co-authors. Published on 30 March 2022 at IEEE Access, Impact factor= 3.367 and SJR Rank = Q1.
DOI: 10.1109/ACCESS.2022.3163243.
- Article Name: Computationally expedient photovoltaic power forecasting: A LSTM ensemble method augmented with adaptive weighting and data segmentation technique.
Published by Assistant Professor Muammer Din Arif of ME department with 4 co-authors. Published on 15 April 2022 at Journal: Energy Conversion and Management 258, 115563 Collaboration research with University of Western Australia, Perth, Australia Q1 (Tier 1, Elsevier), Impact factor 9.709.
- Article Name: Phoenix: Towards Designing and Developing a Human Assistant Rover.
Published by Lecturer Shah Md. Ahasan Siddique of ME department with 15 co-authors. Published on 21 April 2022 at IEEE Access, Impact factor= 3.367 and SJR Rank = Q1. DOI: 10.1109/ACCESS.2022.3170908.

AE DEPARTMENT

- Lecturer Debanan Bhadra, AE Department of MIST, published a journal paper as the first author in an Elsevier Journal “Materials Today: Proceeding” (Cite Score: 1.8) on September 2021. Debanan Bhadra, Nikhil Ranjan Dhar, Study of the delamination factor and taper angle in drilling of natural fiber reinforced epoxy nanocomposite materials, Materials Today: Proceedings, Volume 60, Part 1, 2022, Pages 686-693

NAME DEPARTMENT

- A research paper of Lecturer Md. Daluar Hussain Sumon, NAME Dept, MIST has been published as first author in a Q1 Category Elsevier Journal “Ocean Engineering” (Cite Score=5.6, IF=3.795, H-index=100, ranking it 1 out of 16 Elsevier journals in Naval, Ocean, & Marine Engineering), Volume 249, April 2022, Article 110889. The title of the article is “Numerical Assessment of the Scale Effects on the Propulsive Performances of a Ship With Gate Rudder System”.



BME DEPARTMENT

- Article titled “Advances in Nanomaterial-Based Platforms to Combat COVID-19: Diagnostics, Preventions, Therapeutics, and Vaccine Developments” written by Niaz Mahmud, Muzahidul I. Anik, M. Khalid Hossain, Md Ishak Khan, Shihab Uddin, Md. Ashrafuzzaman and Md Mushfiqur Rahaman is published in ACS Applied Bio Materials Journal.
- Article titled “Electrospinning Techniques, Effects of Process Parameters, and Their Applications” written by Balaji Ayyanar Chinnapan, Marimuthu Krishnaswamy, Huaizhong Xu, Md Enamul Hoque is published in the International journal Polymers.
- Article titled “Development and in-vitro characterization of HAP blended PVA/PEG bio-membrane” written by Sankar Rajan, K. Marimuthu, C. Balaji Ayyanar, Md Enamul Hoque is published in the Journal of Materials Research and Technology.
- Article titled “Face Masks to Combat Coronavirus (COVID-19)—Processing, Roles, Requirements, Efficacy, Risk and Sustainability” written by Md Zillur Rahman, Md Enamul Hoque, Md Rubel Alam, Md Abdur Rouf, Saiful Islam Khan, Huaizhong Xu, and Seeram Ramakrishna is published in the “Polymers” Journal.
- Article titled “Fabrication, Characterization and In Vitro Assessment of Laevistrombus canarium-Derived Hydroxyapatite Particulate-Filled Polymer Composite for Implant Applications” written by Balaji Ayyanar Chinnappan, Marimuthu Krishnaswamy, Mugilan Thanigachalam, Huaizhong Xu, Saiful Islam Khan, Md Enamul Hoque is published in the “Polymers” Journal.
- Article titled “COVID-19 and the Sustainability of Agricultural Extension Models” written by Enock Siankwilimba, Jacqueline Hiddlestone-Mumford, Bernard Hang’ombe Mudenda, Chisoni Mumba, Md Enamul Hoque is published in the International Journal of Applied Chemical and Biological Sciences.
- Article titled “Fabrication, Characterization and In Vitro Assessment of Laevistrombus canarium-Derived Hydroxyapatite Particulate-Filled Polymer Composite for Implant Applications” written by Chinnappan, B. A., Krishnaswamy, M., Thanigachalam, M., Xu, H., Saiful Islam Khan, & Hoque, M. E. is published in the “Polymers” Journal.

IPE DEPARTMENT

- Adib Bin Rashid, Md. Faisal Kader, published a paper titled 2022. Performance Analysis of an Automated Biodiesel Processor. Environmental and Climate Technologies 26, 84–97.
- A paper published by R.K.A. Bhalaji, Bathrinath Sankaranarayanan, Shahriar Tanvir Alam, Niamat Ullah Ibne Hossain, Syed Mithun Ali, Koppiahraj Karuppiah, 2022. A decision support model for evaluating risks in a collaborative supply chain of the medical equipment manufacturing industry. Supply Chain Forum: An International Journal 23, 1-25.



CONFERENCE PAPERS

CE DEPARTMENT

- Lt Col Khondaker Sakil Ahmed, PhD, PEng, CEng, Mohana Kawser, Rezvi Ahmed, Rishath Sabrin, Samia Zakir, Afia Farzana: A DISPLACEMENT BASED DESIGN APPROACH FOR SEISMIC ASSESSMENT OF FLAT SLAB STRUCTURE WITH CORE SHEAR WALL. 7th International conference on Structural Engineering and Concrete Technology, Canada 10-12 th April 2022.
- Lt Col Khondaker Sakil Ahmed, PhD, PEng, CEng, Mohana Kawser and Rezvi Ahmed has published a Conference Article titled as “A DISPLACEMENT BASED DESIGN APPROACH FOR SEISMIC ASSESSMENT OF FLAT SLAB STRUCTURE WITH CORE SHEAR WALL” in 6th ICCESO, Khulna, Bangladesh, February 2022.
- Asst Prof Nur Mohammad Shuman, Masoud, N., Mohammad Sadik, K., Alzeghoul, O. and Henry Kini, C., 2022, March has published a conference paper titled “Vetiver Grass Performance on a Distressed Highway Slope of High-Plastic Clay under Excessive Rainfall” In Geo-Congress 2022 (pp. 268-278).

CSE DEPARTMENT

- Prof. Dr. Md. Mahbubur Rahman and others. (2022), “Exploring Word2Vec Embedding for Sentiment Analysis of Bangla Raw and Randomized Text,” 3rd International Conference on Data Science and Applications, Jadavpur University, Kolkata, India.
- Prof. Dr. Md. Mahbubur Rahman and others. (2022). “Network Intrusion detection using UNSW_NB15 dataset: Stacking Machine learning based approach”, 2nd International Conference on Advancement in Electrical and Electronic Engineering (ICAEEE 2022), Department of EEE, DUET.
- Lt Col Muhammad Nazrul Islam and co-authors. (2022). Obesity and Mental Health during the COVID-19 Pandemic: Prediction and an Exploration of their Relationship. In proceedings of the International Conference on 4th Industrial Revolution and Beyond (IC4IR), Dhaka, Bangladesh.
- M. Akhtaruzzaman and co-authors. (2022) A Comparative Analysis among Three Different Shortest Path-finding Algorithms, 3rd International Conference of Emerging Technologies 2022, Belgaum, India.
- Lec NafizImtiaz Khan, Lt Col Muhammad Nazrul Islam and co-authors. (2022). Exploring Design Attributes and Development of an Acoustic VR Game to Improve Ethical Values of Visually Impaired People. In Proceedings of the IEEE 7th International Conference for Convergence in Technology (I2CT 2022), Pune, India,
- Lec M. M. Rushadul Mannan, Prof Dr. Md. Mahbubur Rahman and co-authors. (2022). “An Approach Towards Video Captioning in Bengali”, International Conference on “Artificial Intelligence and Machine Learning (IAIM-2022), Sathyabama Institute of Science and Technology”, Chennai, India.



EECE DEPARTMENT

- M.-U.-S. Chowdhury, A. Tahmid, M. A. Azmain, M. S. Chowdhury, and Md. Hossam-E-Haider, “Exponential Smoothing Technique in Filtration of Distorted Radar Signal,” International Conference for Advancement in Technology (ICONAT), Goa, India, Jan. 21~22, 2022.
- M.-U.-S. Chowdhury, A. Tahmid, M. A. Azmain, M. S. Chowdhury, and Md. Hossam-E-Haider, “Evolution of Algorithms Proposed for Airborne Low RCS Target Detection,” International Conference for Convergence in Technology (I2CT), Pune, Maharashtra, India, April. 07~09, 2022.
- M.-U.-S. Chowdhury, A. Tahmid, M. A. Azmain, M. S. Chowdhury, and Md. Hossam-E-Haider, “Design and Implementation of Real Time Radar Data Transmission System utilizing MATLAB”, International Conference for Convergence in Technology (I2CT), Pune, Maharashtra, India, April. 07~09, 2022
- M. A. Azmain, A. Tahmid, M.-U.-S. Chowdhury, M. S. Chowdhury, Md. Hossam-E- Haider, “Prediction of Rainfall in Bangladesh: A Case Study of the Machine Learning”, International Conference for Convergence in Technology (I2CT), Pune, Maharashtra, India, April. 07~09, 2022.
- Syma Afsha, Mahmudul Haque, and Hussain Nyeem. "Machine Learning Models for Content Classification in Film Censorship and Rating." 2022 International Conference on Innovations in Science, Engineering and Technology (ICISSET). IEEE, 2022.
- Mahmudul Haque, Syma Afsha, and Hussain Nyeem. "Developing BrutNet: A New Deep CNN Model with GRU for Realtime Violence Detection." 2022 International Conference on Innovations in Science, Engineering and Technology (ICISSET). IEEE, 2022.
- Parag Choudhury, Reazuddin Fahim, Md. Soyaeb Hasan and Sunjida Sultana, “Performance Analysis of GaAs DG-JLMOSFET: Impact of Gate Oxide and Its Thickness” IEEE Region 10 Symposium (TENSYP-2022), Bombay, July 2022. (Accepted on 17 April 2022).
- Tareque Bashir Ovi, Sauda Suara Naba, Dibaloke Chanda, Md. Saif Hasan Onim, “A Transfer-Learning Based Ensemble Architecture for ECG Signal Classification”, Proceedings of IEEE Region 10 Symposium (TENSYP2022), Mumbai, India, June. 2022.
- Md Wahiduzzaman Arnob, Arunima Dey Pooja, and Md Saif Hassan Onim, “A Combined PCA-MLP Network for Early Breast Cancer Detection,” Proceedings of 2022 IEEE 2ND Asian Conference on Innovation in Technology (ASIANCON2022), Pune, India, August 2022
- Roy, K. & Chanda, D. A Robust Webcam-based Eye Gaze Estimation System for Human-Computer Interaction in 2022 International Conference on Innovations in Science, Engineering and Technology (ICISSET) [Accepted] (2022).

AE DEPARTMENT

- Captain Shanjida Akter Instructor CI- C, AE Department of MIST, Presented a research paper on 22 April 2022 IEEE sponsored second International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2022) held in SSTC Bhilai, India.

BME DEPARTMENT

- Md Enamul Hoque, Md Abdul Alim Shuvo, Shifat Al Hasnayeem Riham has published a conference Article titled as “Design and Development of a Cost-Effective Prosthetic Leg” in the 4th IEEE Eurasia Conference on Biomedical Engineering, Healthcare and Sustainability 2022 (IEEE ECBIOS 2022), 27-29 May, 2022, Tainan, Taiwan.



BOOK

BME DEPARTMENT

- Md Enamul Hoque, R. Kumar, Ahmed Sharif edited a full Book titled “Advanced Polymer Nanocomposites: Science, Technology and Applications” published in Publisher Elsevier.
- Senthil Muthu Kumar Thiagamani, Md Enamul Hoque, Senthilkumar Krishnasamy, Chandrasekar Muthukumar, Suchart Siengchin edited a full Book titled “Vibration and Damping Behavior of Biocomposites” published in Publisher CRC press.

BOOK CHAPTER

BME DEPARTMENT

- Md. Ashrafuzzaman, Md. Mahmudul Haque Milu, Anika Anjum, Farzana Khanam, and Md. Asadur Rahman published a book chapter titled “Big Data Analytics Techniques for Healthcare; Big Data analytics for Healthcare Datasets, techniques, Life Cycles, management and Applications” in the book series of Academic Press, Elsevier (Chapter 10, pp. 149-162, 2022).
- Omanin Siddiqua Prova, Faiza Ahmed, Jafrin Sultana and Md. Ashrafuzzaman* published a book chapter titled “Big medical data analytics for diagnosis; Big Data analytics for Healthcare Datasets, techniques, Life Cycles, management and Applications” in the book series of Academic Press, Elsevier (Chapter 10, pp. 111-124, 2022).
- Md. Ashrafuzzaman, A.S.M Adib Hasan Rihat, Md. Sharif Hossain, Mohammad tareq Alam published a book chapter titled “The Impact of Social Media and Digital Marketing on Consumer Behavior, Handbook of Research on Consumer Behavior Change and Data Analytics in the Socio-Digital Era” in the book series of IGI Global Publisher pp. 275-294, 2022.
- Habibul Islam, Md Enamul Hoque, Carlo Santulli published a book chapter titled “Polymer Nanocomposites for Biomedical Applications” in the book series of Publisher Elsevier.
- Mamun Rabbani, Sharjis Ibne Wadud, Md Enamul Hoque published a book chapter titled “Polymer Nanocomposites for Microelectronic Devices and Biosensors” in the book series of Publisher Elsevier.
- Kazi Faiza Amin, Asrafuzzaman, Ayeman Mazdi Nahin, Md Enamul Hoque published a book chapter titled “Polymer Nanocomposites for Adhesives and Coatings” in the book series of Publisher Elsevier.
- Muhammad Ifaz Shahriar Chowdhury, Yashdi Saif Autul, Sazedur Rahman, Md Enamul Hoque published a book chapter titled “Polymer Nanocomposites for Automotive” in the book series of Publisher Elsevier.
- Asrafuzzaman, Kazi Faiza Amin, Aungkan Sen, Md Enamul Hoque published a book chapter titled “Polymer Nanocomposites for Energy” in the book series of Publisher Elsevier.
- Adib Bin Rashid, Md Enamul Hoque published a book chapter titled “Polymer Nanocomposites for Defense Applications” in the book series of Publisher Elsevier.
- Habibul Islam, Md Enamul Hoque published a book chapter titled “Polymer Nanocomposites for Packaging” in the book series of Publisher Elsevier.



BME DEPARTMENT

- Md. Rubel Alam, Tarikul Islam, Md. Reazuddin Repon and Md Enamul Hoque published a book chapter titled “Carbon-based polymer nanocomposites for electronic textiles (e-textiles)” in the book series of Publisher Elsevier.
- Md Sarif Sakaeyt Hosen, Md Jaynal Abedin, Md Enamul Hoque published a book chapter titled “Factors Affecting the Vibration and Damping Characteristics of Polymer Composites” in the book series of CRC Press.
- Muhammad Ifaz Shahriar Chowdhury, Yashdi Saif Autul, Md Enamul Hoque published a book chapter titled “Free Vibration and Damping Properties of the Pineapple Leaf Fiber- and Sisal Fiber-Based Polymer Composites” in the book series of CRC Press.
- Md Mahmudul Haque Milu, Anika Anjum, Md Asadur Rahman, Md Enamul Hoque published a book chapter titled “Influence of Compatibilizer on Free Vibration and Damping Behavior of Polymer Biocomposites” in the book series of CRC Press.
- Nabila Ali, Md Enamul Hoque published a book chapter titled “Bionanocomposites in the Automotive and Aerospace Applications” in the book series of Publisher Springer.
- Hosen M.S.S., Abedin M.J., Hoque M.E., Rahman M.Z. published a book chapter titled “Influence of Moisture Absorption on Physico-Chemical Properties of Natural Fiber-Based Hybrid Composites” in the book series of Publisher Springer.
- Hosen M.S.S., Hoque M.E., Rahman M.Z., Sagadevan S. published a book chapter titled “Aging Effects on Mechanical Properties of Biocomposites with Recycled Polymers” in the book series of Publisher Springer.
- Mamun Rabbani, Md Sharjis Ibne Wadud, Md Enamul Hoque published a book chapter titled “Polymer nanocomposites for microelectronic devices and biosensors” in the book series of Woodhead Publishing.
- Md Zillur Rahman, Md Enamul Hoque, Md Rubel Alam, Md Abdur Rouf, Saiful Islam Khan, Huaizhong Xu, Seeram Ramakrishna published a book chapter titled “Face Masks to Combat Coronavirus (COVID-19)—Processing, Roles, Requirements, Efficacy, Risk and Sustainability” in the book series of Woodhead Publishing.

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