



## COMMANDANT'S GLOSS



MIST, a renowned Engineering Institution focuses on developing quality technical education and research. To enrich students and faculty members with updated technical knowledge and skills, MIST regularly arranges different seminars, conferences, workshops, industrial tours and other co-curricular activities. The second half of the academic session 2018-19 was not an exception. This newsletter reflects the activities of last six months. I express my heartfelt thanks and gratitude to the editorial board for publishing MIST Newsletter regularly.

## COUNCIL OF MIST



**The 20<sup>th</sup> Council Meeting of MIST** was held on 10<sup>th</sup> December 2019 at the Institution. Honourable Education Minister Dr. Dipu Moni, MP presided over the meeting. Commandant of MIST, Major General Md Wahid-Uz-Zaman, ndc, aowc, psc, te welcomed the minister.

The Chief of Air Staff and other PSO's of Army, Navy and Armed Forces Division, VC BUP, Engineer-in-Chief, high ranking representatives from Dhaka University, BUET, Ministry of Defence, Ministry of Education, Ministry of Science and Technology were also present in the meeting.

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### GOVERNING BODY MEETING OF MIST

**Governing Body of MIST** sat for its 34<sup>th</sup> meeting on 7<sup>th</sup> November 2019. Major General Ibne Fazal Shayekhuzaman, BSP, SGP, afwc, psc, Engineer in Chief, Bangladesh Army presided over the meeting. Commandant MIST, high military officials from AFD, Services Headquarters, BUP and other high civil officials/Academicians from DU, BUET and different ministries were also present in the meeting.



### ACADEMIC COUNCIL OF MIST



The 61<sup>st</sup> and 62<sup>nd</sup> meetings of the **Academic Council of MIST** were held on 18<sup>th</sup> July and 31<sup>st</sup> October 2019 respectively. Commandant MIST Major General Md. Wahid-Uz-Zaman, ndc, aowc, psc, te chaired the meeting. Representatives from DU, BUET, Ministry of Education, Ministry of Defence, Armed Forces Division, Army, Navy and Air Force were present in the meeting.

### EDITORIAL BOARD MEETING OF MIST INTERNATIONAL JOURNAL OF SCIENCE AND TECHNOLOGY (MIJST)

**1<sup>st</sup> Editorial Board Meeting of MIST International Journal of Science and Technology (MIJST)** was held on 22<sup>nd</sup> December 2019. Commandant MIST Major General Md. Wahid-Uz-Zaman, ndc, aowc, psc, te MIST chaired the meeting. Editor in Chief Dr. Firoj Alam, members of editorial advisors, core group, and section editors were present in the meeting.







### INDUSTRIAL ADVISORY PANEL MEETING 2019

On 24<sup>th</sup> August 2019, **Industrial Advisory Panel Meeting** was organized by ME Department. Commandant MIST Major General Md. Wahid-Uz-Zaman, ndc, aowc, psc, te chaired the meeting.



### SEMINAR ON GROWING CYBER THREATS AROUND THE WORLD AND PREPAREDNESS FOR BANGLADESH



A Seminar titled **Growing Cyber Threats Around the World and Preparedness for Bangladesh** was organized jointly by AFD, Bangladesh and department of CSE, MIST on 4<sup>th</sup> August 2019. Zunaid Ahmed Palak, MP Honourable State Minister for Information and Communication Technology (ICT), Government of the People's Republic of Bangladesh and Lt General Md Mahfuzur Rahman, OSP, rcds, ndc, afwc, psc, PhD Principal Staff Officer, AFD, Bangladesh graced the occasion as the chief guest and the Special guest respectively. Commandant MIST, Major General Md. Wahid-Uz-Zaman, ndc, aowc, psc, te presided over the seminar. Two keynote speeches and two panel discussions

were held where eight distinguished speakers from various backgrounds including Director of National Data Center at BCC, Director of NTMC, CEO of SureCash, CE CAO of bKash shared their experiences and advises on cyber security. A wide range of audience from Armed Forces Division, Bangladesh Police, NSI, DGFI, Civil finance and banking sector, IT officials, Faculty members of MIST, students of CSE department, MIST and good number of school and college students were present in the seminar.

### SEMINAR ON PRESENT STATUS OF NUCLEAR ENERGY DEVELOPMENT IN BANGLADESH

Department of Nuclear Science and Engineering MIST organized a seminar on 12<sup>th</sup> September 2019 titled **Present Status of Nuclear Energy Development in Bangladesh**. Architect Yeafesh Osman, Honourable Minister, Ministry of Science and Technology, Government of the People's Republic of Bangladesh delivered his valuable speech as the chief guest. Mr. Abul Kalam Azad, Chief Coordinator of SDG Affairs, was also present as special guest. Commandant MIST, Major General Md. Wahid-Uz-Zaman, ndc, aowc, psc, te presided over the seminar.





### SEMINAR ON ADVANCES OF SHIPBUILDING AND SHIPPING IN BANGLADESH

The NAME Department, MIST arranged a seminar titled **Advances of Shipbuilding and Shipping in Bangladesh** on 26<sup>th</sup> September 2019. Mr. Khalid Mahmud Chowdhury, MP, Honourable State Minister, Ministry of Shipping had graced the event as the chief guest.

Commandant MIST, Major General Md. Wahid-Uz-Zaman, ndc, aowc, psc, te presided over the seminar.



### SEMINAR ON SUSTAINABLE ENERGY SECTORS DEVELOPMENT; IT'S CHALLENGES AND ENERGY SECURITY OF BANGLADESH AND JOB FAIR



On 01<sup>st</sup> October 2019 a seminar on “**Sustainable Energy Sectors Development; it's Challenges and Energy Security of Bangladesh**” and “**Job Fair**” was organized by Department of Petroleum & Mining Engineering of MIST. Dr. Tawfiq-E-Elahi Chowdhury, Honourable Energy Adviser to the Honourable Prime Minister, Ministry of Power, Energy & Mineral Resources, Bangladesh graced the seminar as chief guest. The keynote speeches were delivered by Engr. Md. Quamruzzaman, Managing Director (LNG Cell) Rupantarita Prakritik Gas Company Limited (RPGCL) and Engg. Sobur Hossain, Director, Total LPG Limited and Dr. Badrul Imam,

Professor, Department of Geology, Dhaka University. Major General Md. Wahid-Uz-Zaman, Commandant, MIST, Academicians, Professionals, Entrepreneurs and other high Military and Civil officials were also present in the seminar.

### SEMINAR ON LEVERAGING KNOWLEDGE AND LEADERSHIP FOR SUSTAINABLE DEVELOPMENT

Civil Engineering Department of MIST successfully organized a seminar titled **Leveraging Knowledge and Leadership for Sustainable Development** which was held on 11<sup>th</sup> December 2019. In the seminar Resource Person was Dr. Shafiq Alam, CPEng FIE Aust Int PE (Aust) Infrastructure Sustainability Specialist and Researcher Brisbane, Australia.







## SEMINAR ON NEXT GENERATION INTEGRATED TRANSPORTATION

Civil Engineering Department of MIST successfully organized a seminar titled **Next Generation Integrated Transportation** which was held on 22<sup>nd</sup> December 2019. In the seminar Resource Person was Dr Mahmudur Fatmi, Assistant Professor, University of British Columbia, Canada.



## SEMINAR ON LAND USE MODEL & MEMBRANE-BASED PROCESSOR FOR WATER RECLAMATION AND REUSE: OPPORTUNITIES AND CHALLENGES



Civil Engineering Department of MIST successfully organized a seminar titled **Land Use Model & Membrane-based processor for water reclamation and reuse: opportunities and challenges** which was held on 22<sup>nd</sup> December 2019. In the seminar Resource Persons was Dr Saifur Rahman, Associate Professor, Concordia University, Canada.

## SEMINAR ON USE OF ENGINEERING WOOD FOR BUILDING CONSTRUCTION

Civil Engineering Department of MIST successfully organized a seminar titled **Use of Engineering Wood for Building Construction** which was held on 8<sup>th</sup> December 2019. In the seminar Resource Persons was Dr Mahmud Ashraf, Deakin University, Australia.





### WORKSHOP ON NUCLEAR REACTOR CORE AND FUEL ANALYSIS

Department of Nuclear Science and Engineering, MIST successfully organized a workshop titled **Nuclear Reactor Core and Fuel Analysis** which was held on 12<sup>th</sup> to 14<sup>th</sup> September 2019. Mr. Sheikh Shahadath Hossain, Nuclear Engineer from National Research Council (NRC), Canada attended the workshop as resource person.



### WORKSHOP ON PARAMETRIC ARCHITECTURE WHY AND HOW



The Department of Architecture organized a 4 day long workshop titled **Parametric Architecture Why and How** from 01<sup>st</sup> to 04<sup>th</sup> September 2019. The workshop was conducted by Assoc. Prof. Ashik Vaskor Mannan and Lec. Md. Rashed Hasan from the Department of Architecture, American International University-Bangladesh (AIUB). Head of the Department inaugurated the workshop and presided the closing ceremony. The workshop was coordinated by Assoc. Prof. Dr. Sudipti Biswas, Department of Architecture, MIST. A total of 40 students and faculty members of Architecture department had participated in the workshop.

### WORKSHOP ON COMPUTATIONAL FLUID DYNAMICS

On 3<sup>rd</sup> August, 2019, a workshop on **Computational Fluid Dynamics** was organized by Mechanical Engineering Department. Students from all levels of ME department attended the workshop.







### SHORT COURSE ON AUTOCAD FOR ELECTRICAL SERVICES DESIGN

Computer aided electrical services design has revolutionized the aspects of energy efficiency of buildings and reduced the carbon footprint to acceptable minimum. Bangladesh in its recent days has been principally oriented in the construction of various mega structures. The short course on **AutoCAD for Electrical Services Design** organized by the department of EECE from 07<sup>th</sup> July 2019 to 24<sup>th</sup> August 2019 at the MIST premises re-iterated the same commitment. Renowned services engineer Ms Sania Sultana of 'Skill Jobs' conducted the course as the resource personnel. Students and staffs of department of EECE attended the short course.



### SHORT COURSE ON MODERN FEATURES OF AUTOMOTIVE VEHICLE AND VEHICLE INSPECTION PROCEDURE



From 23<sup>rd</sup> July 2019 to 25<sup>th</sup> July 2019, Mechanical Engineering Department organized a short course on **Modern Features of Automotive Vehicle and Vehicle Inspection Procedure**. Head of the ME Department Colonel Md Humayun Kabir Bhuiyan, psc conducted the course. Students and faculty members of ME department attended the course.

### SHORT COURSE ON BIOMEDICAL APPLICATIONS OF SOLIDWORKS

A 5 day-long short course on **Biomedical Applications of Solidworks** was organized by the Biomedical Engineering Department from 14<sup>th</sup> July to 18<sup>th</sup> July 2019. Respected Dean, Faculty of Science and Engineering MIST has graced the certificate awarding and closing ceremony as chief guest.





### CERTIFICATE COURSE ON CYBER SECURITY

A month-long certificate course on **Cyber Security** was arranged by CSE Department from 1<sup>st</sup> July to 7<sup>th</sup> August 2019. The course was attended by officers from Armed Forces, DGFI, NSI, Bangladesh Police and faculty members of CSE department.



### MOU SIGNING BETWEEN CSE DEPARTMENT, MIST AND ROBI AXIATA LIMITED



A MoU was signed on 29<sup>th</sup> September 2019 between **Department of CSE, MIST and Robi Axiata Limited**, one of the largest telecommunications and digital services company of Bangladesh. The scopes of this MoU cover collaborative projects mainly focusing on Data Analytics and Machine Learning. It also includes scopes for joint research, workshops, seminars and internship opportunities for the students. Presently, faculty members and students of CSE department are working on five projects as part of industry-academia collaboration with Robi.

### MOU SIGNING BETWEEN NSE DEPARTMENT, MIST AND BANGLADESH ATOMIC ENERGY COMMISSION

A Memorandum of Understanding (MoU) Signing Ceremony was conducted between **Department of NSE, MIST and Bangladesh Atomic Energy Commission** on 2<sup>nd</sup> December 2019.







### INSPECTION FOR RENEWAL OF ACCREDITATION OF CSE DEPARTMENT BY BAETE

CSE Department moved to the Outcome based Education (OBE) system, recognized by BAETE, IEB under Washington Accord. In this regard, an inspection was conducted from 22<sup>nd</sup> to 24<sup>th</sup> October 2019 by BAETE evaluation team lead by Professor Syed Akhter Hossain, Ph.D.



### CONSULTANCY SERVICES FOR NATIONAL PROJECT NAMED DEVELOPMENT OF OLD BURIGANGA CHANNEL BY EWCE DEPARTMENT



Honourable Prime Minister of the People's Republic of Bangladesh Sheikh Hasina has expressed her desire to take the **Old Buriganga River Restoration Project to Revive This Old Channel from Shoarighat to Rayerbazar**. Dhaka South City Corporation was given the overall responsibility to implement the project. Subsequently EWCE Department of MIST was assigned for the consultancy part of this mega project. Few meetings were held between Honorable Mayor of DSCC and Col Md Kabirul Islam, Head EWCE at the Mayor's Office. Several field visits were made and finally contract agreement was signed on 2<sup>nd</sup> December, 2019. This study aims at providing sustainable development solution for restoring the Old Buriganga channel considering the environmental, economic and social aspects.

### HYDRO-MORPHODYNAMIC FEASIBILITY STUDY AND RIVER BANK PROTECTION WORK OF SHEIKH HASINA CANTONMENT BY EWCE DEPARTMENT

EWCE Department of MIST has been involved in the **Hydro-Morphodynamic Feasibility Study and River Bank Protection Work of Sheikh Hasina Cantonment** since 2016. Commandant, MIST and Col Md Kabirul Islam visited the Cantonment on 13<sup>th</sup> October, 2019. Col Kabir gave a presentation in front of Commandant, MIST and GOC, 7 Infantry Division about the overall progress of the project on 14<sup>th</sup> October, 2019.





### THESIS JURY TO DEFEND THE FINAL GRADUATING PROJECTS

The Department of Architecture organized the **Jury to Defend the Final Graduating Projects** of the first graduating batch (Arch 1) from 23<sup>rd</sup> December 2019 to 24<sup>th</sup> December 2019. Dean of CE faculty, Head of the department, other departmental heads and faculty members were present in the jury along with invited jurors from reputed public and private universities. Renowned professional architects were also present in the jury. 17 students defended their projects successfully with praise and acknowledgement by the jurors.



### GUEST JUDGE IN ESHO ROBOT BANAI-CHANNEL I



**Esho Robot Banai** is a road show, which promotes robotics because IoT/Robotics is the next big step. IoT/robotics will change the world dramatically in next five years. This is the best time for Bangladesh to leverage the full benefit of this situation and can become one of the global hubs for robotics. Bangladesh has every potentiality to produce professionals in this field. In order to support the dream of making Bangladesh the robotic hub, the CRID USA, the Channel I and the GPH together have developed the platform to help support innovators in all levels. Dean and head of the Department of EECE, Brig Gen A.K.M. Nazrul Islam, Phd was invited to this prestigious program as a special guest judge. It was aired on Channel I as Episode#32 on 18<sup>th</sup> July 2019.

### CAMPUS HOUR

**Campus Hour** took place on 11<sup>th</sup> September 2019. On this event, various clubs took initiative to conduct different competitions. Students from every department took part in the competitions and also enjoyed a lot. Maj Gen Md Wahid-Uz-Zaman, ndc, aowc, psc, te, Commandant, MIST attended each event to encourage students regarding their participations in extracurricular activities. Campus Hour is arranged at MIST so that students can enjoy at least a day every month away from their hectic academic affairs.







### STUDENT TRAINING VISIT

#### INDUSTRIAL VISIT TO RUNNER AUTOMOBILES LTD

On 24<sup>th</sup> August 2019, the MOTOMIST Automobile Club organized an industrial visit to **Runner Automobile Ltd.** Students and faculty members of Mechanical Engineering Department attended the visit.



#### INDUSTRIAL VISIT TO ABUL KHAIR STEEL LTD. CHITTAGONG

From 26<sup>th</sup> September 2019 to 29<sup>th</sup> September 2019, Mechanical Engineering Department organized an industrial visit for the students of Level 4 to **Abul Khair Steel Ltd.** in Chittagong.

#### TRAINING VISIT TO BANGLADESH COMMUNICATION SATELLITE COMPANY LIMITED

On 03<sup>rd</sup> August 2019, a training visit to **Bangladesh Communication satellite Company Limited** was organized for students of Level-4 of Aeronautical Engineering Department of MIST. Students visited various installations and had the chance to visit the satellite control station. Students have learned a lot from this visit. They have gained a real time experience of satellite operation from the said visit.



#### TRAINING VISIT TO HELICOPTER SIMULATOR INSTITUTE (HSI), BAF AND MAINT FACILITIES OF 216 MRO(U), BAF

On 27<sup>th</sup> August 2019, a training visit was conducted to **Helicopter Simulator Institute (HSI), BAF** and main facilities of 216 MRO(U), BAF for student of Level-2 of Aeronautical Engineering Department of MIST. Students visited various area and they have learned practical knowledge. They have gained a real time experience of aircraft maintenance from the said visit.



#### A TRAINING VISIT TO JAFLONG AND LALAKHAL, SYLHET

From 01<sup>st</sup> December 2019 to 04<sup>th</sup> December 2019, a group of 25 Students (Level 1) including 04 Faculty members and Head of the Department of Petroleum & Mining Engineering Department visited **Jaflong and Lalakhal, Sylhet** on a study tour to visit hilly areas for observing different patterns of landforms including anticlines, synclines and learning about the dip strike measurement system on ground, rock layer sedimentation, geological structures and different rock properties. The tour was a great success for students as it increased their interest in petroleum industry. It also enriched their practical knowledge.





## OBSERVANCE

### OBSERVANCE OF NATIONAL MOURNING DAY

MIST observed the National Mourning day on 15<sup>th</sup> August 2019 with the deepest respect and honour on the occasion of the **44<sup>th</sup> Death Anniversary of Father of the Nation Bangabandhu Sheikh Mujibur Rahman**. The day was a public holiday and the national flag flew at half-mast. Special prayer was offered after Fajr for the departed soul of Bangabandhu. Documentary films were shown and discussion was held highlighting the struggle, achievements and contribution of the Father of the Nation. Everybody urged upon to fulfil Bangabandhu's dream of building a happy and prosperous 'Sonar Bangla'.



### BORSHA BORON 2019



The students of MIST welcomed the rainy season by a grand event titled as **Borsha Boron 2019**. This event took place at MIST Plaza. The event was facilitated by MIST Literature & Cultural Club under the supervision of the DSW. Maj Gen Md Wahid-Uz-Zaman, ndc, aowc, psc, te, Commandant, MIST attended the concert at MIST Plaza.

### FAREWELL FEST- 2019

MIST formally bid farewell to the graduates from different departments marking the last working day of their academic career at MIST. The program was officially named as the **Rag Day** and took place on 24<sup>th</sup> October 2019. Commandant MIST, Major General Md. Wahid-Uz-Zaman, ndc, aowc, psc, te graced the occasion through different activities.







## COMPETITION

### INTER DEPARTMENT FOOTBALL COMPETITION 2019

**Inter Department Football Competition 2019** took place from 21<sup>st</sup> July 2019 to 4<sup>th</sup> August 2019. Students from different departments of MIST participated in the event. Maj Gen Md Wahid-Uz-Zaman, ndc, aowc, psc, te, Commandant, MIST attended the final event as the chief guest and also distributed prizes among the winners. CE Department became the champion.



### INTER DEPARTMENT BASKETBALL COMPETITION 2019



**Inter Department Basketball Competition 2019** took place from 21<sup>st</sup> to 29<sup>th</sup> August 2019. The event was facilitated by Osmany Hall, MIST. Students from different departments of MIST participated in the event. The final match was conducted under the presence of Air Cdre Md Abdus Salam, Dean and Faculty of ME. ME Department snatched the laud.

### INTER DEPT DEBATE COMPETITION 2019

**Inter Department Debate Competition 2019** was organized by the Department of Science and Humanities from 01<sup>st</sup> to 07<sup>th</sup> August 2019. Twelve teams from twelve departments took part in the competition. After a hard contest Department of CSE won the Champion trophy and Department of NSE became Runner-up. Maj Gen Md Wahid-Uz-Zaman, ndc, aowc, psc, te, Commandant, MIST attended the final event as the chief guest and also distributed prizes among the winners of various events of the competition. Every year MIST arranges such debate competitions as a part of co-curricular activities.





### ACHIEVEMENT

#### CLASH BOTS (ROBOT FIGHT) SEGMENT OF NDITC INIT 2019

On 25<sup>th</sup> October 2019, a combined team from level-2 of Mechanical Engineering Department (Shah Md. Ahsan Siddique and Farabi Hossain) and Computer Science Engineering Department (Shafayetul Islam and Shoyeb Ahmed Tanzim). Participated and became Champion in **Clash Bots (Robot Fight) Segment of NDITC INIT 2019** which was held in Notre Dame College.



#### ROBO WAR SEGMENT OF INTERNATIONAL TELCO WARFARE 2019



On 28<sup>th</sup> November 2019, **International Telco Warfare 2019** was held in East West University. A combined team from level-2 of Mechanical Engineering Department (Shah Md. Ahsan Siddique) and Computer Science Engineering Department (Shafayetul Islam) became Champion in “Robo War” segment.

#### ROBOT FIGHT SEGMENT OF GPH ISHPAT ESHO ROBOT BANAI

On 26<sup>th</sup> July 2019, two students Shah Md. Ahsan Siddique and Farabi Hossain from level-2 of Mechanical Engineering Department participated in **GPH Ishpat Esho Robot Banai** organized by GPH Group. They became champion in Robot Fight segment of the event.







### STUDENT TO STARTUP CHAPTER 2.0

Aim of this program is to support innovation, create new employment by accelerating entrepreneurship through students. ICT division and Startup Bangladesh jointly arranged the program named **Student to Startup Chapter 2.0** where 2300+ teams participated from all over the country. Finally top 10 teams were awarded with 10 lacs taka grant each from the Bangladesh Government to execute and spread the IT based business project presented in the competition. Two students from department of EECE, Tanzim Hasan Fahim and Muhaiminul Islam Akash participated as a team, which was one of the top 10 teams.



### ROBI R-VENTURES



**Robi R-Ventures** is the flagship digital entrepreneurship platform initiated by Robi Axiata Limited (Robi), where new digital ideas are nurtured, incubated and funded. The program is being launched nationwide where any individual or a group of individuals with a viable digital business idea can submit their ideas to this platform to make an attempt at converting their dream into reality. 2226 teams participated in this event and after 4 months of competition and passing multiple stages our team dgton went to finals along with 11 other teams, where Robi offered 20 lacs taka in exchange of 25% share of the company.

### MIST BECOMES 2ND RUNNER UP AT ULAB

Team MIST Infinity from MIST selected for 2nd runner up at **University of Liberal Arts Bangladesh in EEE FEST 2019** on 6<sup>th</sup> September 2019. Abdullah All Mamun Anik student from IPE department, Md Abdul Khaled (CE), Istiak Uddin Samir(AE), Anindya Prakash (CE) has been awarded for the 2nd runner-up prize in EEE FEST 2019 in the "Project Showcasing" segment at "ULAB" for their project "Riser:A Multifunctional Robotic Crutch". Team members of this this team have received their "Certificate of Excellence" award and prize from Professor Dr. Mohammad Kaykobad (computer scientist, educator, author, and columnist from Bangladesh). The honourable guest conaratedulated the team members from MIST.





### ACHIEVEMENT

#### BEST PAPER AWARD - SEE2019

Lt Col Md. Jahidul Islam has presented a conference paper titled **Performance Evaluation of Concrete with Recycled waste Polypropylene** at 5<sup>th</sup> international conference of science, Engineering and Environment (SEE2019) Swissotel, Bangkok, Thailand which was held from 11<sup>th</sup> to 13<sup>th</sup> November, 2019 and awarded with best paper award.



#### BEST PAPER AWARD –SEES 2019



Maj Md Noman Munsif, Maj S M Nihab Ahsan & Md. Shafinur Rahman of Civil Engineering Department has been awarded with the best paper presentation award in the International Conference in SEES-2019, Kolkata, India. They presented a paper titled **Application of Low Cost Air Quality Monitoring System** under the supervision of Prof Dr Tauhid-ur-Rahman of Civil Engineering Department, MIST.

#### BEST PAPER AWARD – ICASET 2019

Maj Md. Noman Munsif of Civil Engineering Department has been awarded with the best paper presentation award in the International Conference on Advances in Science, Engineering & Technology held on 19<sup>th</sup> to 20<sup>th</sup> December 2019 in KSRM College of Engineering, Kadapa, Andhra Pradesh, India. He presented a paper titled **Relationship between Location-Wise Air Quality and Public Perception in Dhaka City** under the supervision of Prof Dr. Tauhid-ur-Rahman of Civil Engineering Department, MIST.







## CERTIFICATE OF APPRECIATION

Lt Col Khondoker Sakil Ahmed was invited as session Chair at 'ICMEN 2019' international conference on "Materials Engineering and Nanotechnology" held in Kuala Lumpur, Malaysia from 2<sup>nd</sup> to 5<sup>th</sup> December 2019. He also presented a paper titled **Wall Thickness Dependencies of Carbon Nanotube Reinforced Nano Composites** in the conference.



## CONFERENCE-GEOMATE-2019



Professor Brig Gen Shah Md. Muniruzzaman, (Retd) psc, PhD, was invited as session Chair at 'GEOMATE-2019' international conference held in Tokyo Japan, from 20<sup>th</sup> to 22<sup>nd</sup> November 2019. He also presented a paper titled **Alternative Options for Road Maintenance Management in Bangladesh under Climate Change Condition** in the conference.

## INTERNATIONAL CONFERENCE - WCEA-2019

Prof. G. M. Jahid Hasan was invited as session Chair at 'WCEA-2019' international conference on **4<sup>th</sup> World Congress on Engineering and Applications (WCEA-2019)** held in Bali, Indonesia from 17<sup>th</sup> to 18<sup>th</sup> December 2019. He also presented a paper titled **Estimation of Real Changes Along the Coastline of Bangladesh Due to Erosion and Accretion** in the conference.



## WORLD ARABIC LANGUAGE DAY 2019



Per No-31825 LDC Md. Ariful Islam of EWCE Department participated in **The Essay Writing Competition** organized by Islamic Arabic University, Dhaka on the occasion of **World Arabic Language Day 2019** and stood second among the Honors level students. He received a cheque of 50,000.00 (Fifty thousand) Tk, crest and certificate from the Honorable Minister and Deputy Minister of the Ministry of Education of the Government of the People's Republic Bangladesh.



### INTERNATIONAL CONFERENCE

Lt Col Khondoker Sakil Ahmed was invited as guest lecturer to deliver speech on advances of engineering materials at international conference held in Udayana University, Bali, Indonesia on 12<sup>th</sup> December 2019. He also presented a research paper titled **Finite Element Analysis of Rack-Pinion System of a Jack-up Rig**



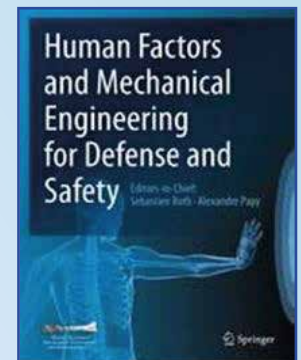
### BEST PAPER AWARD



An article titled **An IoT based Automated Door Accessing System for Visually Impaired People** authored by Lt Col Muhammad Nazrul Islam, Lec Umma Habiba and six students from CSE-16 of CSE department was presented at the 5<sup>th</sup> IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering 2019 (IEEE WIECON-ECE 2019) in Bangalore, India. This paper received the BEST PAPER award.

### JOURNAL ARTICLE PUBLISHED ON MILITARY TECHNOLOGY

An article focusing to design, development and evaluation of military applications from a HCI perspective titled **Exploring and Evaluating the Usability Factors for Military Application: A Road-map for HCI in Military Applications** is published in the **Journal of Human Factors and Mechanical Engineering for Defense and Safety** published by the Springer Nature. The article is written by Col Md Abdur Razzak (former PG student) and Lt Col Muhammad Nazrul Islam (faculty officer) of CSE department.



### A SCHOLARSHIP OF THE GERMAN ACADEMIC EXCHANGE SERVICE



Lecturer Md. Foysal Rabbi of BME department has recently completed a 3 month internship in Germany as part of the agreement under the MoU with Gono University. The expenses regarding the internship program has been covered by **A Scholarship of the German Academic Exchange Service**.





### ARTICLE PUBLISHED

- An article titled "Chakuri-Bazaar - A Mobile Application for Illiterate and Semi-Literate People for Searching Employment" written by Islam, M.N., Ahmed, M.A., Islam, A. K. M. N. has been accepted by International Journal of Mobile Human Computer Interaction, Vol 12 (2). (WoS / ESCI / Scopus Indexed)
- An article titled "A Machine Learning Based Intelligent System for Predicting Diabetes" written by Khan, N.S., Muaz. M.H., Kabir, A., Islam, M.N. has been accepted by International Journal of Big Data and Analytics in Healthcare (IJBDAH), Vol. 4(2).
- An article titled "Exploring and Evaluating the Usability Factors for Military Application: A Road-map for HCI in Military Applications." written by Razzak, M.A and Islam, M.N. has been accepted by Human Factors and Mechanical Engineering for Defense and Safety, Springer. (Scopus Indexed).
- An article titled "An Efficient Tool for Learning Sign Language for Vocally Impaired People." written by Islam, M. N., Hasan, A.M.S., Anannya, T.T., Hossain, T., Ema, M.B.I., Rashid, S.U. has been published on In: Awan et al. (Eds.) Mobile Web and Intelligent Information Systems, MobiWIS 2019, Lecture Notes in Computer Science, vol 11673, pp. 41-53, Springer, Cham. (WoS/Scopus Indexed).
- An article titled "Towards Developing an IoT based Gaming Application for Improving Cognitive Skills of Autistic Kids." written by Hasan, U.H., Islam, M.F., Islam, M.N., Zaman, S.B., Anuva, S. T., Emu, F.I., & Zaki, T. N. has been accepted in proceedings of the 12th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2020), 23-26 March, 2020, Phuket, Thailand.
- An article titled "Exploring the Design Considerations for Developing an Interactive Tabletop Learning Tool for Children with Autism Spectrum Disorder" written by Hasan, N. & Islam, M. N. has been accepted in proceedings of the International Conference on Computer networks, Big Data and IoT (ICCBI 2019), 19-20 December, 2019, Madurai, India.
- An article titled "A Conceptual Framework for Improving Privacy in Mobile Operating Systems." written by Munim, K. M., Islam, I., & Islam, M. N. has been accepted in proceedings of the International Conference on Innovation in Engineering and Technology 2019 (ICIET-2019), 23-24 December, 2019, Dhaka, Bangladesh.
- An article titled "A Proposed Secure Mobile Money Transfer System for SME in Bangladesh: An Industry 4.0 Perspective." written by Islam, I., Munim, K. M., Islam, M. N., & Karim, M. M. has been accepted in proceedings of the International Conference on Sustainable Technologies for Industry 4.0 (STI-2019), 24-25 December, 2019, Dhaka, Bangladesh.
- An article titled "An IoT based Automated Door Accessing System for Visually Impaired People" written by Barsha, F. L., Tasneem, Z., Mojib, S., Afrin, M., Jahan, N., Tasnim, M., Habiba, U., & Islam, M.N. (2019) has been published in proceedings of the 5th IEEE international Women in Engineering (WIE) Conference on Electrical and Computer Engineering 2019 (IEEE WIECON-ECE 2019), 15<sup>th</sup> to 16<sup>th</sup> November, 2019, Bangalore, India. (Received Best Paper Award).
- An article titled "A Wearable System for Path Finding to Assist Elderly People in an Indoor Environment." written by Jahan, M.R., Aziz, F.I., Ema, M.B.I., Islam, A.B. & Islam, M.N. (2019) accepted in proceedings of the 20<sup>th</sup> International Conference on Human Computer Interaction (Interaction 2019), ACM, 25-28 June, 2019, Basque Country, Spain.



### ARTICLE PUBLISHED

- An article titled "An Intelligent Assistive Tool for Alzheimer's Patient." written by Omar, K.S., & Islam, M.N. et al. (2019), accepted in proceedings of the 1st International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT-2019), IEEE, Dhaka, Bangladesh.
- An article titled "Towards Developing an Intelligent Wheelchair for People with Congenital Disabilities and Mobility Impairment" written by Hossain, T., & Islam, M.N. et al. (2019) accepted in proceedings of the 1st International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT-2019), IEEE, Dhaka, Bangladesh.
- An article titled "Towards Developing an Intelligent Automated Water Pumping System for Dhaka City" written by Munim, K.M., Islam, I., Sarker, M. & Islam, accepted in the proceedings of the 1st International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT-2019), IEEE, Dhaka, Bangladesh
- An article titled "Applying Brain-Computer Interface Technology for Evaluation of User Experience in Playing Games" written by Diya, S. Z., Prama, R. A., Rahman, I. I., Islam, A.B., & Islam, M. N. published in Proceedings of the International Conference on Electrical, Computer and Communication Engineering (ECCE), P. 1-6, 7-9 February, 2019, Cox's Bazar, Bangladesh.
- An article titled "A Machine Learning Approach to Predict Autism Spectrum Disorder" written by Omar, K. S., Mondal, P., Khan, N. S., Rizvi, M. R. K. & Islam, M. N. published in Proceedings of the International Conference on Electrical, Computer and Communication Engineering (ECCE), P. 1-6, 7-9 February, 2019, Cox's Bazar, Bangladesh.
- An article titled "Towards Developing a Mobile Application for Illiterate People to Reduce Digital Divide." written by Ahmed, M.A., Islam, M.N., Jannat, F., & Sultana, Z. Published in Proceedings of the International Conference on Computer Communication and Informatics (ICCCI -2019), January 23 – 25, 2019, P. 1-5, IEEE, Coimbatore, INDIA.
- Capt Nazmus Saquib, ME Department of MIST while studying abroad published a Journal Paper on 30 October 2019 entitled "A Critical Review of CO2 Capture Technologies and Prospects for Clean Power Generation" in "Energies". The publisher was MDPI.
- Lecturer Mahmudul Hoq, Lecturer Imtiaz Taimoor, Professor Dr. Dipak Kanti Das from ME Department of MIST submitted a Conference Paper on "Construction and Performance Analysis of an Earth-Air-Pipe Cooling System" which was presented on 17 December 2019, in 4th International Conference on Mechanical, Industrial and Materials Engineering 2019, RUET, Rajshahi, Bangladesh (ICMIME2019).
- Lecturer Farhan Chowdhury Asif, ME Department of MIST published a Journal Paper as a co-author on 22 August 2019 titled as "Structural and Electrical Properties of Copper Doped Lanthanum Manganite NPs" in "Results in Physics". The Publisher was Elsevier.
- Lecturer Fahim Mahtab Abir, ME Department of MIST published a conference paper as a co-author on 18 July 2019 entitled "Numerical Analysis of Marangoni Effect on Natural Convection in two-layer fluid structure inside a two-dimensional rectangular cavity" in API conference. The publisher was API Publishing.
- Two students from level-4 of ME Department, Asif Ahmed and Nasim Iqbal published a Conference Paper on 22 December 2019 titled "Thermo-Mechanical and Optical Characteristics of Cold-Rolled Copper with Natural Melting Impurities" in 13th International Conference on Mechanical Engineering 2019, BUET, Dhaka, Bangladesh (ICME2019).