



MIST newsletter

Military Institute of Science and Technology

17th Year

Jul - Dec 2018

Issue 33

A/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 2017-18 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.

FOUNDATION STONE LAYING CEREMONY OF MIST OFFICERS' MESS AND BOQ



Honourable Chief of Army Staff General Aziz Ahmed, BSP, BGBM, PBGM, BGBMS, psc, G laid the foundation stone of MIST officers' mess and BOQ on 13 December 2018. All military high officials, commandant and all faculty members of MIST were present in the ceremony.

Address : Mirpur Cantonment, Dhaka-1216

Web Site : www.mist.ac.bd

e-mail : info@mist.ac.bd

Chief Patron : Cdre M Munir Hassan, (E), BN
A/Commandant, MIST

Editor in Chief : Colonel Molla Md. Zubaer, te
A/Director Research and Development, MIST

Editor : Lieutenant Colonel Muhammad Sanullah, psc, Engrs
General Staff Officer-1 (Research), MIST

Asst Editor : Major Mohammad Shawkat Ali, Sigs
General Staff Officer-2 (ARSTC), MIST

GOVERNING BODY OF MIST

The 32nd meeting of the **Governing Body of MIST** was held on 11 December 2018 at MIST. Commandant Major General Md Abul Khair, ndc, PEng, MIST presided over the meeting. Engineer in Chief Bangladesh Army, Major General Md Siddiqur Rahman Sarker, SGP, hdmc, psc, higher officials from civil and military, representatives from DU, BUET and BUP were present in the meeting.



ACADEMIC COUNCIL OF MIST



The 58th meeting of the **Academic Council of MIST** was held on 4 October 2018 at MIST. Commandant Major General Md Abul Khair, ndc, PEng, MIST 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.

INDUSTRIAL ADVISORY PANEL MEETING OF CSE DEPARTMENT

1st meeting of **Industrial Advisory Panel (IAP)**, Department of Computer Science and Engineering was held on 24 July 2018 at MIST. Air Cdre Md. Afzal Hossain, ndc, psc, Dean ECE faculty and Head department of CSE, MIST chaired the meeting. The panel was composed of Dr. Mohammad Kaykobad, Professor, department of CSE, Bangladesh University of Science & Technology (BUET), high officials of various industries and universities.



INDUSTRIAL ADVISORY PANEL MEETING OF EECE DEPARTMENT

On 17 November 2018 an **Industrial Advisory Panel Meeting** was successfully organized by EECE department, MIST. High officials from renowned institutions and organizations like BTRC, BPDB, DESCO, BREB, PGCB, BES, BAEC, BUET, DU, Walton, Ulkasemi shared their valuable insight about adapting the existing engineering curricula in order to endure industrial relevance on both national and global scale was the main concern of the meeting.



4th INTERNATIONAL CONFERENCE ON "ELECTRICAL ENGINEERING AND INFORMATION AND COMMUNICATION TECHNOLOGY (ICEEICT 2018)"



4th International Conference on Electrical Engineering and Information and Communication Technology (ICEEICT 2018) was successfully organized by EECE department, MIST from 13 to 15 September 2018. Architect Yeafesh Osman, Honourable Minister, Ministry of Science and Technology, Govt. of People's Republic of Bangladesh was present as the chief guest for the inauguration ceremony. The three day long festive conference was enriched with events like paper presentation, project display, keynote speeches on different important engineering topics and industrial exhibition.

SEMINAR ON “CLOUD COMPUTING”



A seminar on **Cloud Computing** was organized by CSE and AE department, MIST on 19 November 2018. Honourable Chief of Air Staff, Bangladesh Air Force, Air Chief Marshal Masihuzzaman Sernibat, BBP, OSP, ndu, psc was present as chief guest in the seminar where commandant MIST, Maj Gen Md Abul Khair, ndc, PEng delivered the welcome address. Akhtar Hossain, Senior Enterprise Solutions, Architect of Amazon Web Service in Microsoft Platform Team was the keynote speaker.

SEMINAR ON “DEVELOPING AWARENESS ON PROTECTION FROM LIGHTNING AND THUNDERSTORM”



On 9 August 2018, EECE department, MIST successfully organized a seminar entitled **Developing Awareness on Protection from Lightning and Thunderstorm**. Engineer Mosharraf Hossain, MP, Honourable Minister, Ministry of Housing and Public Works, graced the event with his presence as a chief guest. This daylong seminar was arranged to increase awareness on lightning disasters and to impart knowledge on designing buildings with proper protection.

SEMINAR ON “NATIONAL POWER AND ENERGY WEEK 2018”

A seminar on **National Power and Energy Week** was successfully organized by EECE department, MIST on 14 August 2018. Representatives from Power cell, Ministry of Power, Energy and Mineral Resources encouraged everyone present in the seminar to participate in different events of the Power week like project presentation and programming competition.



SEMINAR ON “LANDSLIDE AND GROUND MOVEMENT EFFECTS ON ONSHORE AND OFFSHORE STRUCTURE”



A Seminar on **Landslide and Ground Movement Effects on Onshore and Offshore Structure** was organized by CE department on 12 July 2018. Dr. Bipul Hawlader, Professor, Memorial University, Canada was the invited speaker in the session. Approximately 60 faculty members and students joined the seminar.

SEMINAR ON “MECHANICAL BEHAVIOR OF HIGH TEMPERATURE CERAMICS FOR SPACE APPLICATIONS”

Seminar on **Mechanical Behavior of High Temperature Ceramics for Space Applications** was arranged by AE department on 31 July 2018. Dr. Ashfaq Adnan, Assoc Prof, department of Mechanical and Aerospace Engg, University of Texas, USA was the keynote speaker for the event. All the faculty members and students of ME and AE department joined the program which helped them to gather knowledge and will help to conduct future research on this topic.



SEMINAR ON “REGENERATIVE MEDICINE AND THE PROGRESS OF THIS TECHNOLOGY IN BANGLADESH”



On 26 July 2018, BME Department organized a Seminar on **Regenerative Medicine and the Progress of this Technology in Bangladesh**. Respected commandant Major General Md. Abul Khair, ndc, PEng, MIST graced the occasion as the chief guest. Speeches were delivered by guest speaker Dr. Azaduzzaman and Prof. Dr. Enamul Haque, department of BME, MIST. Students of all levels of BME department along with all faculty members and Brigadier General Md. Shahidul Alam, Dean faculty of Science and Engineering attended the seminar. The seminar held in two sessions. The chief guest Dr. Asaduzzaman from the Atomic Energy Commission (AEC) delivered his speech in the first session. The next session was a hand on practice and learning session on 3D printing technology and its contribution to regenerative medicine.

SEMINAR ON “VVER TECHNOLOGY BASED NUCLEAR POWER PLANT AND PREPARATION FOR NEWCOMER COUNTRIES”



A seminar on **VVER Technology Based Nuclear Power Plant and Preparation for Newcomer Countries** was arranged by NSE department on 19 July 2018. Head of NSE department Colonel Abu Zafor Mohammad Salahuddin delivered his welcome address. Tashlykov Oleg, Ph.D, Engineer M Ali Zulquarnain and Dr. Shafiqul Islam were present as invited speakers.

WORKSHOP ON “OUTCOME BASED EDUCATION”

One day Workshop on **Outcome Based Education** was organized by department of CE, MIST. Assistant Professor Dr Md Ashrafal Alam, department of CE, University of Asia Pacific conducted the workshop on 11 July 2018. Approximately 60 faculty members and students joined the session.



A daylong workshop titled **Outcome Based Education** was arranged on 11 August 2018 by department of CSE, MIST. Assoc Prof Dr. A K M Muzahidul Islam, department of Computer Science and Engineering, University of Liberal Arts Bangladesh (ULAB) attended as resource person of Board of Accreditation for Engineering and Technical Education (BAETE), Bangladesh for conducting the workshop. All faculty members of department of CSE and interested faculty members of other departments of MIST participated in the workshop.

A Workshop on **Outcome Based Education** was successfully organized by EECE department, MIST on 3 August 2018. Prof. Dr. Salekul Islam, Head of CSE department, United International University (UIU), representative of BAETE, shared his perceptions and highlighted the benefits of outcome based education compared to the existing education system.



One day Workshop on **Outcome Based Education** by Dr. Wan Hamidon Wan Badaruzzaman, Malaysia was held on 27 November 2018. Approximately 60 faculty members and students joined the program.

TRAINING ON “OUTCOME BASED EDUCATION”



AE department of MIST arranged a day long on-site training on **Outcome Based Education (OBE)** on 28 July 2018. Prof Dr. Anisul Haque conducted the said training as BAETE resource person. All the faculty members of AE department joined the program.



ME department of MIST arranged a day long training on **Outcome Based Education (OBE)** on 31 August 2018. Professor Dr. A.K.M. Nurul Amin Head, department of MPE, Ahsanullah University of Science & Technology was the Resource person of the training session.

WORKSHOP ON “TOWING TANK-SHIP MODEL TESTING FACILITY AND ITS PROSPECT IN BANGLADESH”



On 12 September 2018 Naval Architecture and Marine Engineering department hosted a Workshop on **Towing Tank-Ship Model Testing Facility and Its Prospect in Bangladesh**. Mr. Shaun Malcolm Ross, Marine specialist consultant & marine Hydrodynamics Business Manager of Cussons Technology UK was present as a chief guest and key note speaker of the workshop.

WORKSHOP ON “CLOUD COMPUTING”

A workshop on **Cloud Computing** was organized by the department of CSE on 24 July 2018 at MIST. Representative from Bangladesh Research and Education Network (BdREN) conducted the session. BdREN is considered as a key player in high performance network providing connectivity among education and research institutions in both public and private sectors. Faculty members and post graduate students of department of CSE participated in this workshop.



SHORT COURSE ON “AUTOCAD FOR ELECTRICAL SERVICE DESIGN”

AutoCAD for Electrical Service Design entitled short course was successfully organized by EECE department, MIST on 19 July 2018. Participants got a total insight on this important drafting software, which is used across a wide range of industries, mainly for designing buildings and planning towns.



PRESENTATION ON “CAREER TALK AND QUALITY ASSURANCE”



On 20 September 2018 Naval Architecture and Marine Engineering department hosted a Presentation titled **Career Talk and Quality Assurance**. In the above mentioned seminar Rear Admiral Riazuddin Ahmed, (E), ndu, afwc, pse, BN (Retd) and Professor Dr. Rafiqul Islam, NAME department, BUET delivered their valuable speeches as guest speakers.

SHORT COURSE ON “RAPID PROTOTYPING TECHNOLOGY: A ROBUST PLATFORM FOR ADVANCED ADDITIVE BIOMANUFACTURING”

BME department organized a short course on **Rapid Prototyping Technology: A Robust Platform for Advanced Additive Biomanufacturing**. The short course was initiated on 15 July 2018 and was completed on 19 July 2018 spanning a 5 days in total. Level-4 students of BME department got a wonderful opportunity to be familiarized with the concept of 3D printing and how it may be implemented to construct a complete 3D object in an additive manner.

The certification awarding and closing ceremony held on 19 July 2018 was chaired by the respected commandant Major General Md. Abul Khair, ndc, PEng, MIST.



BIOMEDICAL ENGINEERING FESTIVAL 2018

On 4 October 2018, BME department organized its very first departmental festival featuring events including project competition and poster presentation, solidworks competition, bio-olympiad, cultural event and flash mob. The fest was chaired by the respected commandant Major General Md. Abul Khair, ndc, PEng, MIST. Prof Dr. K Siddique-e Rabbani, department of Biomedical Physics and Technology, Dhaka University attended the event as the special guest. Being the first of its kind, BME Fest-2018 marked a successful day for celebrating innovative ideas, projects, competition, co-curricular activities and eventful enjoyment for BME department.



GUEST LECTURE ON “APPLICATION OF HIGH-STRENGTH STEEL IN HIGH-STRENGTH CONCRETE COLUMNS”



Guest lecture on **Application of High-Strength Steel in High-Strength Concrete Columns** was successfully organized by CE department, MIST on 29 July 2018. Mr. Ahsan Parvez, Postdoctoral Fellow in the School of Civil and Environmental Engineering's Centre for Infrastructure and Safety (CIES), UNSW, Sydney, Australia was present as chief speaker. Approximately 60 faculty members and students joined the session.

A MOTIVATIONAL SESSION

A Motivational Session was conducted by directorate of student welfare on the following dates 22, 24, 26 July and 30 August by Dr. Mahtab Khanam, Professor, department of Educational & Counseling Psychology, University of Dhaka. The goal of these sessions was to highlight the mental anxiety of student life and control external emotions to achieve desired success and concentrate on studies. The students are hopeful to contribute to the betterment of the country after attending these sessions.



ON-CAMPUS RECRUITMENT “SAMSUNG R&D AND IN NAZTECH INC LTD”



Department of CSE, MIST organized an **On-Campus Recruitment Session** for software engineer position in Samsung R&D and Naztech Inc Ltd with the fresh CSE graduate students of MIST on 18 October and 27 December 2018. A total of 126 students had participated in two sessions. These recruitment sessions were conducted by the top-tier officials of Samsung R&D and Naztech Inc Ltd.

PARTICIPATION IN “TECHNOLOGICAL ASPECTS OF AES 2006 (VVER-1200)”

Train The-Trainer Course for University Faculty Members
Technological Aspects of AES 2006 (VVER-1200)
Development of Nuclear Curricula on VVER Technology.
Lt Col Md. Altab Hossain, PhD Instructor CI-A from NSE department, MIST participated the course. The course was held from 10 July to 21 July 2018 in Obninsk, Russia.



PARTICIPATION IN IEEE WIECON-ECE 2018



The department of Electrical Engineering, Kasetsart University (EE-KU) in collaboration with IEEE Bangladesh and IEEE Thailand Section organized the 4th IEEE International Women in Engineering (WIE) Conference on **Electrical and Computer Engineering 2018 (IEEE WIECON-ECE 2018)**. The conference was held in Pattaya, Chonburi, Thailand on 14-16 December 2018. Brig Gen Mohammad Khalil-Ur-Rahman, psc, te, the then director of DSW attended the conference along with students from different departments of MIST.

PRE-ACCREDITATION VISIT



One day **Pre-Accreditation Visit** by Professor Siti Hawa Binti Hamzah, Malaysia was held on 3 November 2018. She visited all laboratories of CE faculty. Commandant, Dean and all faculty of CE attended the session.

STUDENTS TRAINING VISIT

From 8 December 2018 to 3 January 2019, a group of 25 students (Level-3) including 4 faculty members of department of Petroleum and Mining Engineering visited Barapukuria Coal Mine and Maddhapara Hard Rock Mine, 10 Gas fields, 5 LPG Companies on an Industrial Training. The Visit was a great success for students as it increased their interest in industry. It also enriched their practical knowledge.



Students of all levels of BME department were taken to attend a training visit at National Institute of Traumatology and Orthopedic Rehabilitation (NITOR), Dhaka, to observe and learn about the latest technology used in orthopedic surgery on 1 August 2018.

On 3 August 2018 students from Level-1 of Mechanical Engineering department paid a daylong visit to Milnars Pumps Ltd. During their visit they had the chance to explore different types of pumps, their characteristics, manufacturing and performance. This short trip helped the students to relate their theoretical knowledge with the hands-on industrial experience.



OBSERVANCE

OBSERVANCE OF “NATIONAL MOURNING DAY”

MIST observed the **National Mourning Day** on 15 August 2018 with the deepest respect and honour on the occasion of the 43rd 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'.



MECHANICAL DAY 2018



Amid sheer enthusiasm and festive mood **Mechanical Day 2018** was observed on 24 October 2018. The day is observed to strengthen the brotherhood among ME department students, highlighting the achievements of ME department. Daylong program included a frolicsome rally from MIST plaza guided by Dean of faculty of ME, Head of ME department and senior faculty members, cake cutting session, jolly cultural program followed by Mechanical Engineering Olympiad.

RAG DAY 2018

MIST formally bid farewell to the graduates from different departments of MIST marking the last working day of their academic life at MIST. The program was officially named as the **Rag Day** and took place on the 24 to 25 October. Major General Md. Abul Khair, ndc, PEngg, commandant, MIST graced the occasion through different activities. A 'Blood Donation Camp' also took place during the 2 daylong programs. On the last day, a grand cultural ceremony marked the end of the festivities.



COMPETITION

INTER DEPARTMENT DEBATE COMPETITION 2018

Inter Department Debate Competition 2018 was held from 3 September to 10 September 2018. All the 12 departments of MIST participated in this competition. After a hard contest CSE department won the trophy of Champion and NSE department became Runner-up of this competition. Brig Gen Md Shahidul Alam Dean faculty of Science and Engineering graced the program as chief guest.



“ANKUR 2018” AN INTER-UNIVERSITY CULTURAL COMPETITION



ANKUR 2018 an inter-university cultural competition was organized by Literature and Cultural Club of MIST under the supervision of Science and Humanities department on 2 September 2018 at the university premises. Respected Artist Hashem Khan graced the occasion as the chief guest. A good number of students from different public and private universities attended the program. Brig Gen Mohammad Khalil-Ur-Rahman, psc, te, DSW MIST was also present in the festival to encourage the student. A team of BME department students achieved the position of 1st Runner Up in the "Rongmeshali" segment of Aunkur 2018.

“BANGLALINK ENNOVATORS 2.0”



'Ennovators' is a digital idea competition arranged by 'Banglalink' which creates a platform for university students to generate their own digital ideas and make an impact in the real challenges faced in this modern world. **Banglalink Ennovators 2.0** campaign was held on 5 September 2018 at MIST. Distinguished speakers from Team Banglalink encouraged the students regarding different aspects of the event. The road show for this event was facilitated by MIST Career Club.

Banglalink Ennovators is a inter university innovation competition. Students from IPE department have taken part in this competition. In order to reach the top three, the participants had to go through 4 rounds to become one of the top three.



ACHIEVEMENTS

AWARDED WITH DAAD FELLOWSHIP

Prof. Dr. Md. Tauhid Ur Rahman of CE department has been awarded with prestigious DAAD fellowship to present paper in International Conference on Climate Change and Water Security from 2 to 5 December 2018 in Nairobi, Kenya.



BNCC SCHOLARSHIP PROGRAM 2018



Abdullah Al Mamun Anik, student of IPE department has got BNCC scholarship. BNCC stands for Bangladesh National Cadet Corps. It is a part of Bangladesh Military and recognized as 2nd line defense. It is a combined force of army wing, naval wing and air force wing.

RESEARCH ARTICLES

A scientific article by Professor, Dr. Md. Tauhid Ur Rahman of Civil Engg. dept of MIST on 'Evaluation of climate-induced waterlogging hazards in the south-west coast of Bangladesh using Geoinformatics' has been published in the journal of 'Environmental Monitoring and Assessment' (Impact Factor 1.69) by Springer in April. The details of this paper can be found elsewhere (Environ Monit Assess, 2018, 190: 230. <https://doi.org/10.1007/s10661-018-6591-9>).

Research Associate Jannatul Ferdous of Climate Change lab has been awarded with a research grant of 80,000 BDT for the research on 'Impacts of Cyclone Disasters and the Adaptation Mechanism of Local People in the South-Western Coastal Region of Bangladesh' under the Ministry of Science and Technology, for the fiscal year July 2017 to June 2018. Prof. Dr. Md. Tauhid Ur Rahman is the supervisor of this project.

Maj. Abdur Rashid, a Civil Engg. graduate of MIST has been awarded with the highly prestigious MSc leading to PhD in Environmental Engg. Research scholarship at the National University of Singapore for August 2018 session. Maj. Rashid was supervised by prof. Dr. Md. Tauhid Ur Rahman.

ESTABLISHMENT PROGRESS



Construction of Utility Building



Construction of Tower Building-3 & 4



Construction of Hard Standing Road (Near Building No-14) has been done



Renovation of Building No-505 has been done



Work Station has been established in Tower-2, 12th floor



Construction of Female Officer's Gym (Building-540, Ground Floor) has been done