



Technology for Advancement

MIST newsletter

Military Institute of Science and Technology

16th Year

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Issue 30

COMMANDANT'S GLOSS



I am very much pleased that MIST is publishing its 30th issue of newsletter. MIST has been striding ahead with its motto "Technology for Advancement" with success and pride. In the 1st half of this year many academic, social and administrative events took place. Among those, laying of Foundation Stone of MIST Faculty Tower Building 3 & 4 by the Chief of Army Staff General Abu Belal Muhammad Shafiul Huq SBP, ndc, psc was the most significant one. I express my heartfelt thanks and gratitude for the sincere effort of the faculties and officials to make the MIST as "Centre of Excellence". The editorial board of MIST Newsletter deserves appreciation for portraying the progress of MIST.

INAUGURATION OF FOUNDATION PLAQUE OF MIST FACULTY TOWER BUILDING- 3 & 4



Honorable Chief of Army Staff General Abu Belal Muhammad Shafiul Huq, SBP, ndc, psc laid the Foundation stone of MIST Faculty Tower Building- 3 & 4 on 21 May 2017. All military and others High Officials, Commandant and all faculty member of MIST were present in the ceremony.

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DEVELOPMENT OF POP UP TGT AND FIRING RESULT AUTOMATION SYSTEM (FRAS) BY R&D WING, MIST



Under the supervision of headquarters ARTDOC, R&D Wing of MIST innovated Digital Pop Up Target system and Firing Result Automation System (FRAS) which are of great use for military training. It was presented before the Honorable Chief of Army Staff General Abu Belal Muhammad Shafiul Huq, SBP, ndc, psc on 18 April 2017 at Saver Cantonment. The system have been already introduced in Bangladesh Army and these are very effective to increase firing efficiency of the soldiers during peace time.

19th RAISING DAY OF MIST



19th Raising Day of MIST was observed on 16 June 2017. The day started with the hoisting of national and MIST flag. Special prayer and Iftar party were arranged on the day. All military and civil officials and employees of MIST were present on the occasion.

52th & 53rd ACADEMIC COUNCIL MEETING



The 52th & 53rd meetings of the Academic Council of MIST were held on 26 January & 27 April 2017 at MIST respectively. Commandant MIST Major General Md Abul Khair, ndc, PEng chaired the meeting. Representatives from DU, BUET, Ministry of Education, Ministry of Defence and Ministry of Finance, Armed Forces Division, Army, Navy and Air Force were present in the meeting.

29th MEETING OF GOVERNING BODY



The 29th meeting of the Governing Body of MIST was held on 18 May 2017 at MIST. Commandant MIST Major General Md Abul Khair, ndc, PEng 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.

"15th GRADUATION CEREMONY-2017"



The **15th Graduation Ceremony** of MIST was held on 01 March 2017 at MIST. Honorable Minister, Ministry of education, Mr. Nurul Islam Nahid, MP graced the occasion as the Chief Guest and handed over BSc Engineering certificates to the newly graduates. Commandant MIST Major General Md Abul Khair, ndc, PEng, presided over the ceremony. Chiefs of three Services, Members of Parliament, High Commissioners, Ambassadors, Secretaries of different Ministries, Vice Chancellors of different universities, civil and military high officials, academicians and guardians of the newly graduates were present in the ceremony.

The Honorable Minister congratulated all new graduates and praised MIST authority for maintaining a good standard of education.

A total of 306 students (civil - 258 and military-48) were conferred degrees at the ceremony. Shoyon Panday of Aeronautical Engineering Department was awarded Osmany Memorial Gold medal for best academic result.

"ROBOLUTION- 2017"



Robolution-2017 was held on 04 March 2017 organized by MIST Robotics Club in association with the Department of EECE of MIST. Architect Yeafesh Osman, Honorable Minister Ministry of Science, and Technology was the Chief Guest. Almost 1300 students from 37 universities, schools & colleges were present in the event. There were total 7 segments. MIST earned the championship in Solid Works competition and Runner up in Battle of Bots.

"ARCHITECTURE FEST-2017"



The architecture festival of the Department of Architecture, MIST- **Architecture Fest 2017** was held on 15 & 16 February 2017 at MIST. Mr Anwar Hossain Manju, MP Honorable Minister, Ministry of Environment and Forest was present as the Chief Guest in the Festival. In this event around 150 participants from 20 different educational institutions participated and highlighted about prevention of adverse effect of rapid urbanization. Among others Ar. Md Foyez Ullah, Prof. Dr. Khandakar Shabbir Ahmed, Dr. Tapan Kumar Dhar, Ar. N R Khan, Ar Nahas Khalil and Prof. Dr. Sheikh Sherajul Hakim attended as the Keynote Speakers at the inauguration of the program. The festival was followed by a Student Competition.

"MIST PROJECT FAIR-2017"



Research and Development (R&D) wing of MIST organized **MIST Project Fair-2017** on 26 February 2017. Dean, MIST Brigadier General K M Salzar Hossain, ndc, psc graced the occasion as Chief Guest. A team of three external members from BUET and eighteen internal members of MIST worked in the project evaluation committee. Twelve teams of different departments with their innovative research work participated in this fair. "Cost Effective Advanced Battlefield Command System" of five student (CSE department) was awarded as the best project.

LAUNCHING CEREMONY OF "ACADEMIC SESSION 2016-17"



Launching of Academic Session 2016-2017 was held on 25 January 2017. Commandant, MIST welcomed all the young engineering students including their guardians in this ceremony. There were interactive session of the guardians with MIST authority and orientation with MIST campus. Academic Session 2016-17 started from 29 January 2017. More than 570 students (both military and civil) joined MIST in level-1 in different disciplines. The disciplines are CE-19, CSE-17, EECE-15, ME-15, AE-9, NAME-5, BME-3, Arch-3, NSE-3, EWCE-3, IPE-2 and PME-2.

INAUGURATION CEREMONY OF "MOTOMIST AUTOMOBILE CLUB"



Country's first ever formal automobile club has been introduced in MIST under the guidance of Department of Mechanical Engineering named **MOTOMIST**. Inaugurating ceremony was held on 29 April 2017 where Chairman, BRTA Director, BRTA and Chairman, Runner Group were present. Newly established Automobile Lab of ME Department was also formally introduced in the occasion.

OBSERVANCE OF BIRTHDAY OF THE FATHER OF THE NATION



MIST organized a special programme in observance of the 98th Birth anniversary of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman on 17 March 2017. It started with munajat after Fazar prayer. Still photographs on Bangabandhu and liberation war were displayed. A discussion was arranged under the arrangement of Head, PME Department, Col Nasir Uddin Ahmed. Biography of Bangabandhu and his significant contribution to the Independence of Bangladesh were focused in the programme.

1st INTERNATIONAL CONFERENCE ON "MECHANICAL ENGINEERING AND APPLIED SCIENCE (ICMEAS-2017)"



First International Conference on **Mechanical Engineering and Applied Science (ICMEAS-2017)** was jointly organized by Faculty of Mechanical Engineering, MIST and Department of Mechanical Engineering, BUET in 22-23 February, 2017. More than 150 authors participated in that conference from home and abroad. Along with others, keynote speech was presented by Professor Stephen D. Butt, Memorial University of Newfoundland, Canada in the inaugural ceremony. Honorable Minister Mr Amir Hossain Amu, MP Ministry of Industry was the Chief Guest of that ceremony.

LECTURE SESSION ON "SCOPE OF IPE IN MANUFACTURING INDUSTRIES"



A lecture session on Scopes of IPE in Manufacturing Industries was held at MIST on 18 April 2017. Engr Mr Tapash Kumer Mojumder, Executive Director, Walton Hi-Tech Industries Ltd. was the speaker in that event. He gave his valuable speech on recent advancement of manufacturing technologies and addressed the areas where IPE engineers can show their brilliance in manufacturing industries. The objective of the program was to familiarize the students with modern manufacturing processes and make them concerned about current roles and responsibilities of IPE graduates in manufacturing sector.

"CAREER BRIEF" FOR BIOMEDICAL ENGINEERING STUDENTS



BME Department organized a **Career Brief** on 20 April, 2017 at MIST. The brief was presented by two specialists from the two different arenas (Electro Medical Instruments and Medical Informatics) of medical technologies. The programme was chaired by the respected Commandant, Major General Md. Abul Khair, ndc, PEng, MIST. Brig. Gen. Md Tajul Islam (Retd), a veteran electro-medical engineer, Mr. Minarul Islam, from Augmedix-Bangladesh, presented the comparative study on newer generation of global medical informatics sector. The aim of this workshop was to educate and encourage the participants about their future job market. The students were inspired from the briefing session.

INTERACTIVE SESSION ON "STUDENT PROFESSIONAL AWARENESS & APPEARANCE"



Student of IEEE department of MIST successfully arranged the seminar titled **Student Professional Awareness and Appearance** on 12 April 2017. The event focused on the 'Students' Professional Awareness & Appearance and how to response to the challenges smartly. The speaker motivated the participants about getting passionate to what they like. The seminar also covered importance and ways of making a resume/CV properly. The session was really inspiring to the students.

WORKSHOP ON "ADVANCE BRIDGE DESIGN-2017"



The Department of Civil Engineering (CE) of MIST organized a workshop on **Advance Bridge Design-2017** on 09 January 2017. Professor Dr. Nur Yazdani from The University of Texas Arlington, USA conducted the course as the resource person. A total of 60 participants took part in the session which included participants from different universities, professionals from government and non-government organizations. Professor Dr. Nur Yazdani delivered a series of lectures associated with bridge design with the context of Bangladesh. Besides, practical software application like MIDAS, Seismostruct, Response-2000 and SAP-2000 were also demonstrated side by side.

WORKSHOP ON "REGARDING DEVELOPMENT OF PROFESSIONAL KNOWLEDGE ON HVAC SYSTEM"



A day long workshop was arranged by Department of Mechanical Engineering on 6 April 2017 titled "**Regarding Development of Professional Knowledge on HVAC System**". Renowned specialist on this system, Engr Belal Ahmed conducted the session on cooling load calculations, duct design etc. Students and faculty members of MIST attended that workshop.

WORKSHOP ON "ABET ACCREDITATION"



The Department of Civil Engineering (CE) of MIST organized a workshop on **ABET Accreditation** on 02-03 January 2017. Professor Dr. Nur Yazdani from The University of Texas Arlington, USA conducted the workshop as the resource person. Participants from different universities, professionals from government and non-government organizations joined the workshop.

TRAIN THE TRAINERS COURSE OF BRITISH COUNCIL AT MIST



A professional course for the faculty members of MIST was conducted by British Council, Dhaka under the arrangement of Science & Humanities Department from 12-14 June 2017. Total 30 Faculties (both military & civil) attended the course. Participants were trained on modern teaching methodology and learner-centered approach in this course. British Council awarded certificates for the participants at the end of the course.

CERTIFICATE AWARDING CEREMONY FOR SHORT COURSES ON "ELECTRICAL SERVICES DESIGN AND MICRO-CONTROLLER AND ROBOTICS"



Two Short Courses on **Electrical Services Design** and **Micro-Controller and Robotics** were conducted by EECE Department of MIST. The closing and certificate awarding ceremony was held on 19 January 2017. Professor Dr. Md. Saiful Islam VC, BUET was the Chief Guest and Major General Md Abul Khair, ndc, PEng Commandant MIST was present in the ceremony as Special Guest.

CERTIFICATE AWARDING CEREMONY SHORT COURSE ON "OCCUPATIONAL SAFETY HEALTH AND INDUSTRIAL MANAGEMENT"



Certificate awarding ceremony of a short course on **Occupational Safety Health and Industrial Management** was conducted by CE Department of MIST. The closing and certificate awarding ceremony was held on 22 March 2017. Major General Muhammad Habibur Rahman Khan, ndc, psc Executive Chairman, BEPZA was the Chief Guest in the ceremony.

SHORT COURSE ON "RETROFITTING OF STRUCTURES-2017"



The Department of CE organized a short course on **Retrofitting of Structures** from 18-20 March 2017. Professor Dr. Raquib Ahsan from BUET was the principal resource person for the course. A total of 60 participants took part in the sessions which included participants from BMA, MES, faculties and Level-4 students of MIST. The course was planned to enhance the professional knowledge. This course focused on understanding, assessing and designing structures related to retrofitting. At the end of the course Maj Gen Md Abul Khair, ndc, PEng, Commandant, MIST handed over certificate to the participants.

TRAINING ON "CYBER SECURITY AND E-FILING SYSTEM FOR BEPZA PERSONNEL"



A training on **Cyber Security and E-Filing Systems for BEPZA Personnel** was arranged by the Department of CSE from 27 March to 01 April 2017 where 42 employees from BEPZA attended the training. Classes were conducted by experts and professionals from industries in the field of cyber security and e-filing systems.

DELEGATION VISIT

VISIT OF 58 FSO COURSE



The No 58 Flight Safety Officers' course of FSI, BAF Visited MIST to conduct theoretical and practical classes on aerodynamics jointly with AE Department of MIST. The 18 member FSO team visited MIST on 18 January 2017.

VISIT OF FLYING INSTRUCTORS SCHOOL (FIS)

A team of officers from Flying Instructor School (FIS) of BAF visited AE Department of MIST on 16 MAY 2017. The FIS TEAM comprising 18 members (15 student officers and 03 Instructors) attended classes on CFD simulation and aircraft engines. It was a very fruitful event for them to visit MIST.



ORIENTATION TRAINING VISIT OF BCS & BJS-69

A 67 member team of 69th batch of BCS & BJS officers visited MIST on 08 March 2017. The team was briefed on different activities and facilities of MIST. After the briefing, they visited MIST premises including library, classrooms and laboratories.



VISIT OF INDIAN TEAM

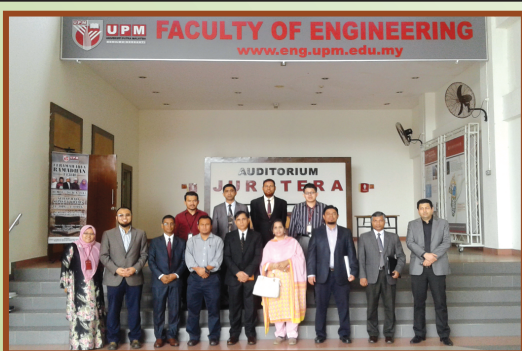
A team of two professors and 7 students from the Department of Library and Information Science of the University of Calcutta, India visited MIST Central Library on 09 May 2017.



FACULTY VISIT

VISIT OF MIST FACULTY TEAM TO MALAYSIA & THAILAND

A team of faculty members of MIST led by Commandant MIST Major General Md Abul Khair, ndc, PEng visited University Putra Malaysia (UPM), University of Malaya (UM) and Asian Institute of Technology (AIT), Thailand from 14-20 June 2017.



STUDENTS TRAINING VISIT

TRAINING VISIT AT CMH DHAKA



On 15 February 2017, the BME Department of MIST visited CMH Dhaka with their all 3 batches of total 118 students for a scheduled training visit. The visit was a bright opportunity for the participants to explore their future probable workspace at a glance. On arrival to the site, the participants and the faculty members were welcomed and briefed by Lt Colonel Minhaj Ahmed, OIC EME Repair Cell, CMH. Afterwards, the participants, divided into four groups, visited the medical imaging unit, prosthetics unit, hospital laundry management unit, instrumentation and maintenance workshop along with hospital management system unit. Finally, Colonel Alamgir, Deputy Comdt, CMH Dhaka, addressed the future graduates with encouraging remarks.

TRAINING VISIT TO M & U CYCLE LTD

Faculty and the students of IPE department visited to M & U cycle Ltd on 08 April 2017. Students explored the industrial aspects of bicycle manufacturing and they gathered real-time experiences over automation, manufacturing line, quality inspection and so on.



TRAINING VISIT TO TITAS GAS FIELD AND OFFICE OF BANGLADESH GAS FIELD COMPANY LIMITED (BGFCL)



On 22 April 2017 a group of 53 students (Level-1 & 2) including 4 faculty members and Head of Petroleum and Mining Engineering Department visited Titas Gas Field and office of Bangladesh Gas Field Company Limited (BGFCL) on a study tour to observe the process plant and learn about the gas production, transmission & distribution system and plant management. The tour was a great success for students as it increased their interest in petroleum industry. It also enriched their practical knowledge.

TRAINING VISIT TO BANGLADESH MACHINE TOOLS FACTORY (BMTF)

Faculty and the students of IPE department paid an industrial visit to Bangladesh Machine Tools Factory (BMTF) on 22 April, 2017. The objective of the industrial visit was to help the students acquire practical knowledge on industrial manufacturing and automation processes. Students explored the assembly process of automobiles, manufacturing of electric poles & different kinds of shoes.



COMPETITION

INTER-DEPARTMENT CULTURAL COMPETITION & NOBIN BORON-2017

Inter-Department Cultural Competition & Nobin Boron-2017 was organized by Admin Wing on 05-09 February 2017. A total of 08 teams participated in this Competition. CSE Department and EECE Department became the Champion and Runner up respectively.



INTER-DEPARTMENT ATHLETICS COMPETITION- 2017

Inter-Department Athletics Competition- 2017 took place on 12-16 February 2017 organized by Admin Wing. Participants from all Departments put up their best to win with enthusiasm. There were 100 M Sprint, 200 M Race, 400 M Race, 4 x 100 M Relay Race, 4 x 200 M Relay Race, Discuss Throw, Short-Put, Long Jump and High Jump for male and female athletes. CSE Department became the champion and AE Department became runner-up.



INTER DEPARTMENT CRICKET COMPETITION- 2017

Inter Department Cricket Competition- 2017 was arranged on 19-28 February 2017 in MIST. A total of 08 teams participated in this Competition ME Department become the Champion of this tournament for fourth time in a row and CSE Department become the Runner up in the tournament. Brigadier General Md. Zakir Hossain, ndc, psc, te, Director, Student Welfare graced the closing ceremony as the Chief Guest.



FESTIVITY

BOSHONTO UTSHOB-2017

A half day celebration program for the students of MIST titled **BOSHONTO UTSHOB-2017** was organized by MIST Literature & Cultural Club on 17 February 2017 under the supervision of MIST authority. Almost two thousand students attended and participated in this event. Brigadier General Md Abdul wohab, ndc, PEng, Director, Research and Development graced the Cultural Programme as the Chief Guest.



BANGLA NEW YEAR-1424

Pohela Baishakh the Bangla new year-1424 was celebrated in a festive mood by all students, faculties and staffs of MIST. A walking rally was organized by the students of Osmany Hall. Major General Md Abul Khair, ndc, PEng. Commandant, MIST inaugurated the "Baishakhi Mela" at the MIST play Ground. All members of MIST and their families celebrated the auspicious moments of our bangla tradition and heritage with enthusiasm and enjoyment.



ACHIEVEMENT OF STUDENTS

"NATIONAL WOMEN'S HACKATHON-2017"

Two teams from the students of level-4 of the department of CSE participated in the event of 'National Women's Hackathon-2017'. It was organized under the initiative of ICT Division with the assistance of Women in Digital Bangladesh held from 10-11 February 2017. One of the two teams won the championship title under 'Empowerment' category and the other was the first runner-up under the category of 'Agriculture'. Along with medals, winners were rewarded with 50,000 taka and 30,000 taka respectively.



"INTERNATIONAL YOUTH EXCHANGE PROGRAMS -2017"



Shahrima Jannat Oishwee, a student of level-4 of the department of CSE participated and represented Bangladesh in 'International Youth Exchange Programs' held in Sri Lanka from 29 January to 07 February 2017 where she was awarded with the certificate by the Minister of Foreign Affairs and Minister of Finance of Sri Lanka.

"DAFFODIL INTERNATIONAL UNIVERSITY APP CONTESTS-2017"

Three teams from the students of level-4 of the department of CSE participated in the event of 'DIU App Contest-2017' which was organized by Daffodil International University, held on 19 & 20 May 2017. Among them, 'Hack_slash' team won the championship title under 'Business' category for developing an Android app named "Bua.com". Team members Afrida Anjum Aesha, Afsana Khan and Juthi Sarkar Aka were rewarded 20,000 taka prize money along with gift boxes.



"OPEN DESIGN COMPETITION"



Kona



Abir

Department of Architecture, MIST organized an open Design Competition (a one day design charrette) in February during Arch-Fest 2017. Students of Level 1 and 2 from different universities participated in the competition. A jury board of renowned architects evaluated the designs and two of MIST students, Showkat Ara Jahan Kona from Level 2 and Hasibul Hasan Abir from Level 1, were awarded with 2nd and 3rd prize respectively.

ACHIEVEMENT OF FACULTY

ACCEPTANCE OF RESEARCH PAPER IN "ICRIIS-2017"

A research paper on 'Security Threats for Big Data: A Study on Enron E-mail Dataset' written by a faculty member Maj Muhammad Nazrul Islam, PhD, Sigs and 3 students of CSE-13 of the Department of CSE was accepted in the 5th International Conference on Research and Innovation in Information Systems (ICRIIS-2017) held in Malaysia.



PARTICIPATION IN "SMART @WORK-2017"



Among 36 applicants, German Federal & State Governments selected 21 applicants worldwide for full scholarship and Major Mohammad Nazrul Islam, faculty member of the department of CSE was selected alone from Bangladesh. Major Mohammad Nazrul Islam had the opportunity to participate in a course on Dresden International Spring School on Human Technology Cooperation (Smart @Work-2017) organized by School of Engineering Science of Technische University at Dresden, Germany from 5-11 March 2017 and he was awarded with a certificate.

ACHIEVING "FULBRIGHT SCHOLARSHIP"

Lecturer Tahmida Hossain Shimu from Department of Civil Engineering of MIST has received the very prestigious J. William Fulbright Award to pursue her Masters in Texas A&M University-College Station in USA from Fall-2017. This is the first time for the MIST students and a very rare opportunity for engineering students. It is to mention that amongst the Fulbright scholarship holders, 54 received Nobel Prize and other 82 received Pulitzer Prize. She is a graduate from CE-13 batch of MIST and working as a lecturer in CE Department since her graduation.



ATTENDING "AN INTERNATIONAL WORKSHOP"



Lec Tazrin Islam

In the last term, Lecturer Tazrin Islam, Department of Architecture MIST attended an international workshop organized by IIT Kharagpur in Kolkata on Landscape Urbanism. The workshop was focused for the development of the canals in Kolkata city. She received both Best Project Presentation Award and Certificate of Merit for significant performance in the workshop.

ACHIEVING "M PHIL DEGREE "



Maj Md Golam Mostafa

For the thesis work on "Chemical and Biological Studies on the Pigments of Tomato (*Lycopersicon esculentum* Mill) and Litchi (*Litch Chinensis* Sonn.) of Bangladesh", Major Md Golam Mostafa, GSO-2, HQ of MIST was awarded with M Phil degree from the Dhaka University.