

Seminar/ Workshop/ Training

Seminar on Slope Protection Using an Eco-Friendly System

AUST Civil Engineering Society (ACES) successfully organized a seminar titled “Slope Protection Using an Eco-Friendly System” on 31st March, 2019 at the seminar room adjacent to Vice-Chancellors office. The keynote speaker of this event was Mohammad Shariful Islam, PHD, Professor, Department of civil engineering, BUET. Honorable Vice-Chancellor, Prof. Dr. A.M.M. Safiullah, Head of the Civil Engineering Department, Prof. Dr. Sharmin Reza Chowdhury, along with other faculty members were present in this seminar.

The seminar can be broken down to three parts. In the first part speaker Prof. Shariful Islam discussed the problem of river erosion in Bangladesh and the typical measures taken to prevent it. He also presented the reasons behind the failures of these measures.

In the second part of the seminar, a method adopted by different countries including Netherlands, Thailand was discussed, where long rooted grass and shrubs such as ‘*Vetiver: Chrysopogon zizanioides*’ are used to protect slopes, which is a cheaper and eco-friendlier option. He also discussed about its various other benefits towards the environment, economy, agriculture and so on.

Later, Prof. Shariful Islam motivated the students by sharing his experiences in helping rural people and also Rohingya refugees by using vetiver in securing hilly slopes and river banks.

Following is a brief summary of the speech given by Prof. Shariful Islam:

Bangladesh, a country of many rivers and a very long coastline, is frequented by natural disasters due to its unique geological location. As the embankments, river banks and other hydraulic structures act as the first line of defense against cyclonic storm surges and floods, they experience the most severe damage. Most parts of the country remain inundated for 4 to 6 months of the year that loosen the earthen slopes resulting in erosion of the slopes. One of the major maintenance challenges of rural roads, bridge approaches and embankments in Bangladesh is protection of respective slopes. From a strict economic point of view, cost of protecting embankments is high and the national budget for such works is never sufficient which confines rigid structural protection measures to the most acute sections, never to the full length of coastline and embankment. Many countries are effectively using naturally grown vetiver grass (*vetiveria zizanioides*) to protect embankment slopes. Several projects were undertaken in Bangladesh for evaluating the effectiveness of vetiver in riverbank/slope protection and land development. Field trials for slope protection against rain-cut and wave action using vetiver have been undertaken in different geographical locations such as coastal zone, *haor* area and river bank erosion prone area. It is found that vetiver grows in different soils (saline and non-saline) and geographic locations (flood plain, coastal zone, *haor*). All the results indicate that vetiver grass plantation enhances the safety of embankment slopes against natural forces such as rain-cut erosion, flood and cyclonic storm surge and wave action. Success of field trials has given

confidence to the local people and policy makers in the country. Large scale field trials are being undertaken with the cooperation of Government and NGOs. From all these long term researches, it is evident that vetiver system is a strong alternative to the expensive solutions for protecting embankments from the damages due to increased sea level rise, cyclone and flood. Integrated slope protection incorporating hard and bio-engineering solutions would be beneficial for the slope protection of Brahmaputra river basin.

Following this informative yet encouraging speech, Our honorable Vice-Chancellor, prof. Dr. A.M.M. Safiullah and Prof. Dr. Sharmin Reza Chowdhury, Head of CE Department advised the students to follow Prof. Shariful Islam's message and footprint.



Prof Shariful Islam giving speech before the audience



Prof. S. Reza Chowdhury, Head, Department of CE sharing his thoughts with others



Prof A. M. M. Safiullah, VC, AUST delivering his speech



VC, AUST handing over crest to seminar speaker

Seminar/ Workshop/ Training

Seminar on Bridge Engineering Practice in Bangladesh

As part of co-curricular activities, AUST Civil Engineering Society (ACES) organized a seminar on “Bridge Engineering Practice in Bangladesh” on 3rd February, 2018 at the seminar room adjacent to Vice-chancellor’s office. The seminar started at 10:30 AM and it was well attended by the honorable Head of Department of Civil Engineering, all the faculty members and students of final year (Level-4 Term-1 and Level-4 Term-2) of Civil Engineering Department. The speaker of the seminar was Md. Zahedul Islam who is the Executive Engineer (Bridge) of LGED. The first session was a presentation on “Introducing LGED & Design and Construction Practice of Bridge”. The second session was a presentation on “Feasibility study and Sub soil Investigation for Bridge”. Prof. Dr. A.M.M. Safiullah, Vice-Chancellor, Ahsanullah University of Science and Technology (AUST) was present in the seminar at the end of second session. He delivered a valuable speech at the end of the seminar and distributed crest to the speaker. The seminar ended at 2:00 PM.



Prof. Dr. A.M.M. Safiullah, Vice-Chancellor, AUST at the seminar on “Bridge Engineering Practice in Bangladesh”



Prof. Dr. A.M.M. Safiullah, Vice-Chancellor, AUST delivering speech



Prof. Dr. A.M.M. Safiullah, Vice-Chancellor, AUST distributing crest to the speaker



Part of audience attended the seminar

Seminar on “Earthquake Vulnerability of Structures in Bangladesh and Design Considerations”

As part of co-curricular activities, AUST Civil Engineering Society (ACES), Ahsanullah University of Science and Technology organizes different programs from time to time. In keeping with this trend, recently, such a program titled 'Civil Job Fiesta 2017' was arranged on 1st August, 2017 by ACES at AUST campus premises. The day-long program included a seminar and a motivational session. Vice Chancellor Prof. Dr. A.M.M Safiullah was present as chief guest and Prof. Dr. Md. Mahmudur Rahman was Chairman of the seminar. The seminar took place in Prof. Dr. M. H. Khan Auditorium premises in the presence of a vibrant crowd. For the technical seminar portion, Prof. Dr. Raquib Ahsan from BUET was the keynote speaker. For the motivational speech section, Ayman Sadiq (founder of Ten Minutes School) was the keynote speaker. Ayman Sadiq was given the floor in the first half. He shared his views on writing CV. He tried to motivate students to take part in extra-curricular activities as much as possible without hampering regular studies. In the second half of the program, Prof. Dr. Raquib Ahsan delivered his in-depth speech conforming to the title of the seminar. Dr. Raquib emphasized on the importance of performing dynamic analysis for important structures of the country. Dr. Ahsan also talked about vulnerability, hazard and risk in the context of earthquake. Besides, Dr. Ahsan mentioned steps to be considered while designing structures for earthquake. After Dr. Raquib Ahsan finished his speech, the program ended with vote of thanks from the chairman of the seminar Prof. Dr. Md. Mahmudur Rahman, Head, Dept. of CE.



Seminar on "Slope stabilization using Recycled Plastic Pin & Magic Box for Subsurface Investigation"

The seminar was organized by AUST Civil Engineering Society (ACES). The seminar speaker was Mr. Asif Ahmed, PhD candidate from University of Texas at Arlington, USA. Prof. Dr. A.M.M. Safiullah, Vice-chancellor of AUST graced the seminar as chief guest. The seminar was chaired by Prof. Dr. Md. Mahmudur Rahman, Head of the Department of Civil Engineering, AUST. Faculty members along with the students from final year of Civil Engineering Dept. were present in the seminar. Asif Ahmed organized his presentation in two sections. He shared his innovative idea to use plastic material as reinforcement for improving slope stability which contributes mainly to recycle wastes at landfill. Second presentation included using "magic box" for resistivity imaging by applying small electric currents across electrodes. Different values of resistivity can be used to identify different types of soil.



Seminar on “Recent Trends in Bridge Engineering: Bangladesh Experience”

The seminar titled “Recent Trends in Bridge Engineering: Bangladesh Experience” was arranged by the department of CE, AUST and sponsored by Crown Cement on 13 January, 2016 at Dr. M. H. Khan Auditorium, AUST. The speakers were Prof. Dr. Tahsin Reza Hossain, Department of CE, BUET; Prof. Dr. A. F. M. Saiful Amin, Department of CE, BUET and Prof. Dr. Anwarul Mustafa, Department of CE, AUST. The seminar was chaired by Prof. Dr. Md. Mahmudur Rahman, Head, Department of CE. Prof. Dr. M. H. Khan, Advisor and Founder VC, AUST was the chief guest and Prof. Dr. A. M. M Safiullah, Vice-Chancellor, AUST was present as special guest in the seminar. Faculties from BUET and AUST, guests from outside and final year students of CE department attended the seminar.



Seminar on “Water Resources in Bangladesh: Issues, Challenges and Role of Water Sector Professionals”:

Water resources engineering is one of the important branch of Civil Engineering (CE), has properly given emphasis in our CE curriculum. As a part of regular knowledge dissemination program, a seminar was arranged by the CE Dept. on 8 August, 2015 about a Water Resources Engineering topic titled “Water Resources in Bangladesh: Issues, Challenges and Role of Water Sector Professionals”. The speaker was Prof. Dr. Md. Abdul Matin, Department of CE, AUST. The seminar was chaired by Prof. Dr. Md. Mahmudur Rahman, Head, Department of CE. Prof. Dr. A. M. M Safiullah Vice Chancellor, AUST was the chief guest. Faculties and students of CE department attended the seminar.



Seminar on “Higher Study opportunities in North America”

A seminar named “Higher Study opportunities in North America” was held on 9th may 2015 in room 2A06 of Department of Civil Engineering. The speakers were Md. Rashedul Kabir, Lecturer of CE dept. of AUST and Mr. Towsif Hossain, Ex-student of AUST. They got scholarship in UBC, Canada. They shared their language proficiency test, emailing to professors, application procedures and research assistance ship and fellowship opportunities in Canadian university. Final year students of CE department were present in that seminar.

‘Seminar on Alkali Silica Reaction (ASR) potential test

Dr. Latifee delivered a seminar titled “Miniature Concrete Prism Test – A New Test Method for Evaluating the ASR Potential of Aggregates and the Effectiveness of ASR Mitigation Measures” at the Seminar Room of Ahsanullah University of Science and Technology on 29th November, 2014. Existing test methods to assess alkali-silica reactivity of aggregates such as the accelerated mortar bar test (AMBT) has been shown to be less than satisfactory due to excessive false-positive and false-negative test results. While the concrete prism test (CPT) test is considered to be a more reliable alternative, the unusually long test duration (1 or 2 years, depending on the purpose) renders it unsuitable for routine evaluation of materials. This seminar presented a new test method—the miniature concrete prism test (MCPT) that addresses the shortcomings of both the AMBT and the CPT test methods. The aggregates, thirty three in total from USA and Canada, studied in this project were selected based on their established field performance. The MCPT method has been found reliable to assess aggregate reactivity and this method could be used for job mixture evaluation for ASR expansion potential.

Seminar on “Technical Briefing on Paint”

A seminar on “**Technical Briefing on Paint**” was arranged by the Civil Engineering Community of AUST on 25th June, 2014 at the seminar room. The speaker was Mr. Shahjahan Ahmed, Technical Director of Roxy Paint. Some senior ex student were presented that day.



Short presentation on ‘Crack Repairing of Bangabandhu Multi-purpose Bridge’

A short presentation on “Crack Repairing of Bangabandhu Multi-purpose Bridge” was arranged on 23th June, 2014 by the Head of the department Prof. Dr. Anwarul Mustafa. Mr. Mashfiqul Islam, Assistant Professor, delivered very resourceful information on ‘Crack Repairing of Bangabandhu Multipurpose Bridge’. All faculty members were present that presentation program.



Seminar on “Higher Studies Abroad”

A Seminar on “Higher Studies Abroad” was held at seminar hall of AUST on 18th June, 2014. The speakers were Mr. Mudasser Siraj Rafi, Lecturer of CE Dept., AUST and MS. Sharmin Sultana, Lecturer of CE Dept., AUST, The speakers gave a very valuable presentation on higher studies on different countries of the world.



Seminar on “Optimal Design and Operation of RO Desalination System for Making Freshwater”

A Seminar on “Optimal Design and Operation of RO Desalination System for Making Freshwater” was held on 10th June, 2014 in Seminar Hall of AUST, The speaker was Prof. Dr. Iqbal M. Mujtaba, School of Engineering & Informatics, University of Bradford, UK.



Seminar on ‘Wastewater Treatment Technology

A seminar was arranged on 5th March, 2014 presented by the Professor Dr. Jun Nakajima, Ritsumeikan University, Japan. The speaker delivered very resourceful information on ‘Bio-filter technology’. All faculty members were present on that seminar program.



Training on STAAD Pro

A training program was held on STAAD Pro at CAAD Lab of Civil Engineering Laboratory on 24th February, 2014. The speaker was Engr. Snehashish Bhattacharjee (Tushar), Senior Executive, Civil Engineering Software Division, Overseas marketing Corporation (Pvt.) Ltd. He was ex-student of CE department of AUST.



Seminar on ‘Concrete Technology and BASF Admixture Systems’

A seminar was arranged on 8th February, 2014 presented by the BASF Bangladesh Limited. The speaker delivered very resourceful information on ‘Concrete Technology and Admixture’.



Seminar on ‘Post Tensioning and Force Monitoring of Structures’

A seminar was arranged on 5th February, 2014 by Dr. Shahidul Islam, HQ Technical Services, Dywidag-Systems International USA. The speaker delivered very resourceful information on ‘Post Tensioning and Force Monitoring of Structures’

‘Urban storm water management concept, theory, facility design criteria and urban storm water management strategies and best management practices’:

A seminar was arranged on 23rd November, 2013. The speaker of the seminar was Dr. Shah Alamgir, senior Engineer and Technical Advisor of the Community Infrastructure Directorate, Canada. He delivered valuable speech on ‘Storm water management’.

Autodesk Robot Structural Analysis Professional 2014 Software:

A seminar was arranged on 23th November, 2013 by Win-Win Infosys Ltd. Final year students and some faculty members were present at the seminar.

Seminar on ‘Review of Post Tensioned Extra Dosed Bridge Design in Context of Bangladesh’

A seminar on ‘Review of Post Tensioned Extra dosed Bridge Design in Context of Bangladesh’ was organized by the Department of Civil Engineering in the seminar hall of AUST on 24th January, 2013. The speaker was Head of the Department of Civil Engineering, Prof. Dr. Md. Anwarul Mustafa. Final year students of the department attended the seminar and they got vast idea about Extradosed Bridge. This design technique was first applied in Bangladesh in Shah-Amanat Bridge on Karnafuli River.



Seminar on ‘Construction safety learning from failure’:

A seminar on ‘Construction safety learning from failure’ was organized in seminar hall of AUST on 18th July, 2012. It was a great honor for the CE department that the speaker was the Honourable Vice Chancellor of AUST- Dr. A. M. M. Shafiullah. Students of fourth year attended the seminar. The speaker gave his presentation very nicely and described about the safety of construction with giving

example of some structures failed for unsafe construction work. A photograph had been taken after the presentation ceremony where the Speaker, VC sir was seen with the faculty members of CE dept.



Seminar on “Higher study abroad”

A seminar on “Higher study abroad” was organized by department of Civil Engineering on 18th July. Speakers were Mr. Yafee Muntasir, Mr. S. M. Ashfaqul Hoq, Mr. Shahedur Rahman & Mr. A K M Abir. Final year students of Department of CE attended the seminar.