

ASET AUGUST - 2016

EVENT REPORT

Event Name: One day Workshop on Advances in Construction Technology & Management

Date: 10th August 2016

Venue: B-Block Auditorium, AUH

Organized By: Department of Civil Engineering, ASET

Faculty Coordinator(s): 1. HOD, Department of Civil Engineering, ASET- Dr. R.K. Malik

2. Assistant Professor, Department of Civil Engineering, ASET- Ms. Sakshi Gupta

3. Assistant Professor, Department of Civil Engineering, ASET- Mr. Ankit Batra

4. Assistant Professor, Department of Civil Engineering, ASET- Mr. Mr. Lalit Kumar

5. Assistant Professor, Department of Civil Engineering, ASET- Ms. Harsimranjit Kaur Romana.

Participation:

1. No. of Faculty Members:15

2. No. of Students: 191(*list attached*)

Introduction

Construction Technology and Management has been offered here at Amity University with the mission to promote intellectual, social and ethical development of civil and construction engineers, to create and communicate engineering concepts and technology. It is an amalgamation of civil engineering and construction management. Today, the construction industry requires not only engineers but also the managers who shall engage in economically viable construction work, research, innovation and development providing state-of-the-art solutions to problems of industries and communities. Also, they facilitate the process of *construction* planning, and ensure efficient and timely implementation of infrastructure projects.

Aim/Objective/Purpose of the Event

This guest lecture series was organized to promote challenging and developmental activities in the field of Construction Technology & Management. The research in such field and amalgamation of the field work and technology being employed has an exponential growth throughout the globe. This is to provide opportunity to the researchers, academicians, students, practitioners and managers to discuss their ideas to know about the latest developments, emerging trends and share their experiences in the field of Construction Technology & Management to synthesize relevant best practices.

Highlights of the Event

1. The Head of the Department, Civil Engineering and the Head of the Department, Mechanical engineering concurred with the guest speakers and discussed about focusing on various thrust areas relating to Construction Technology & Management. He also laid emphasis on the need of facilitating extensive research in core areas.
2. At the onset, during the networking tea all the faculties and the guest speakers discussed upon the importance of Construction Technology and Management and how the bridging of gap between the industries and institution can take place.
3. To begin with the event lamp lightening ceremony was carried out by the dignitaries and then the HOD Civil Engineering, HOD Mechanical Engineering and HOD ECE extended a floral welcome to all the esteemed guests.
4. Dr. R.K Malik, Professor & Head, Department of Civil Engineering, ASET apprised the august gathering by his welcome address and sharing with us the importance of this program.
5. To begin with the lectures, Mr. Arnab Bhattacharya & Mr. Rajiv Sharma from Fluor Daniel India Pvt. Ltd. enlightening each one with the Advances in Modular Construction Techniques. Following are areas were covered during their interactive talk along with some videos: Difference between prefabrication and modular construction, Difference between stick built and offsite construction,

Uses and scope of modular construction, Process of making and transporting modules, Facility management of modules, Design requirements of modules, Cost benefit analysis of modular construction, Standards and zoning considerations for modules, Challenges in modular construction in India and the applications of modules in diverse sectors. The student and faculty queries were taken up after the end of the lecture.

6. The second thought-provoking lecture for the day was delivered by Mr. Amit Gupta on Recent Trends in Technology – Concrete Plastic Cut-off Walls– Foolproof Seepage Barriers in Deep Foundations. His main emphasis was laid on hydropower engineering. He discussed the following topics in details with reference to the live projects that he had been a part of: Sources of renewable energy, Types of hydropower, Importance of dams and waterfalls, Status of hydropower energy in the world, SWOT analysis of hydropower energy, Comparative analysis of various countries with respect to hydropower sustainability, Economics of hydropower and energy bill, Theory of deep excavations and Applications of plastic concrete. The student and faculty queries were taken up after the end of the lecture.
7. The third and the last lecture in the workshop was delivered by Prof. (Dr.) K. N. Jha, IIT Delhi on an emerging topic of interest titled Design and Techniques for Safety in High Rise Buildings-Focus on Temp. Structures-Formwork. He extensively discussed the emerging topic and mainly focused on the formwork which plays an important role in construction. The thrust areas discussed by him included the status of formwork in country and failures in temporary structures, types of innovative formwork like slab formwork, climbing formwork, flying formwork etc., implication of quality of formwork, safety analysis in large construction projects, theory of shoring, importance of bracings, Design of multi-flex girder slab, Design of MIVAN formwork, Case studies of formwork failure and the analysis of CB system and RCS formwork. At the end of the lecture all the queries were taken by Prof and helped the students build up a more clear understanding about the form work.
8. At the end of the session, Dr. R K Malik, Professor and Head, Dept. of Civil Engineering, ASET conveyed a vote of thanks.

Outcomes of the Event

1. To direct students about the latest technologies used in prefabrication and modular construction around the world.
2. To have an industry- institute interaction and build up cordial relations.
3. From the lecture by Mr. Arnab and Rajiv, the importance of modularization and the various emerging issues in prefabrication were learned. The restrictions for transporting modules, cost benefit and value benefit analysis of modularization,, advantages and limitations of modular construction, role of manager in communication process, role of project team in executing the planned stuff and real time practices were acquired by the students and research scholars. Students also related the safety aspects from the video and could understand the need for safety at site.
4. With the knowledge shared by Mr. Amit Gupta, the students could relate to the practical aspects and working conditions at site. The students learned about the management of hydropower project, financing of hydropower project, feasibility of hydropower project in underdeveloped countries, commercial hydropower facility and the environmental provisions and restrictions in hydropower project. This was of great importance and interest to the construction management, structures and environmental engineering students.
5. The seminar by Prof. (Dr.) K N Jha was intensely delivered and the students showed majestic curiosity with dynamic participation. Through his lecture, the students could relate to the importance of formwork in construction. Through the thought-provoking lecture by Dr. Jha, the students learned about the value and cost of formwork in construction, types of latest formwork and their applicability in project, economics of safety and formwork, aspects of formwork design and its reusability, scenario of construction accidents in developing countries and the case studies of failures of construction projects due to inadequate safety.
6. The students showed great interest with active participation and the topic was really useful for all students.

Conclusion

Overall, it was an overwhelming experience where the dignitaries/guest speakers shared their insights and gave new perspectives which can lead to further sustainable action and fruitful interactions.

Glimpses of the event(Photographs)



