

ASSOCIATION NEWS

Activities of the Association of Engineers, India during July-December, 2013

Since its inception in the year of 1919, The Association of Engineers, India has been being actively engaged in different engineering and technical activities apart from publishing its Journal regularly. Total number of Corporate and Non-Corporate (i.e., Associates and Institutional) Members are 958. During July-December 2013, some important activities of the Association are given below.

- The Association provided a design of Rain Water Harvesting scheme to Prof. Dr. Santanu Das, Editor, and the installation was successfully done in July 2013 for using it for drinking purpose at his residence at Kalyani, Dist. Nadia, West Bengal.
- Inauguration of the Advanced Diploma course on 'Industrial Safety' for the new batch admitted was held on August 31 2013. Teachers present welcomed the new entrants to this course, and narrated good opportunity of students who would successfully complete the course. There is a good demand of safety personnel, and students would most likely get placement.
- On September 14, 2013, a lecture Seminar on 'Bridge Scour: Analysis and Remedial Measures', was arranged by the Association of Engineers, India at its Training Centre at Salt Lake City, Kolkata. Dr. Rajib Das and Er. Subhashis Das of the School of Water Resources Engineering of Jadavpur University, Jadavpur, Kolkata discussed on different aspects of bridge scour, that is erosion of river bridge, and their remedial measures.
- Like previous years, the Teachers' Day was celebrated by the students of Advanced Diploma in Industrial Safety on September 29, 2013. Students felicitated teachers of this course and others with flower bouquet and gift. They spelt out the role of teachers of this course in building up their career. They also recalled teachers of their schools and colleges for acquiring knowledge and good qualities within oneself. The President, Prof. Dr. Madhusudan Bhattacharyya, delivered an enlightening talk with a call to become a good safety personnel, and to practice honestly what is being taught. The Honorary Secretary of the Association, Er. S.N. Basu Roy, Principal of the Training Centre, Er. Samir Kumar Nag and Vice-Principal of the Training Centre, Er. Sushanta Kumar Alley, and other teachers of the Advanced Industrial Safety course shared their experience in different industries with the students and others. This solemn event ended with a happy note.

Regular courses were conducted by the Association during the last half of 2013 as briefed hereunder:

Association News.....

- Advanced Diploma course on ‘Industrial Safety’ was conducted that is affiliated to the West Bengal State Council of Technical Education.
- Vocational Training Programme on ‘Construction Supervisor’ was conducted in its Ordinary (O) Level and Advanced (A) Level. Both of these courses are affiliated to West Bengal State Council of Technical Education.

The Association conducts short courses, custom-made training programmes, workshops and lecture seminars, detail of which may please be found out in the Association website, www.aeindia.org.

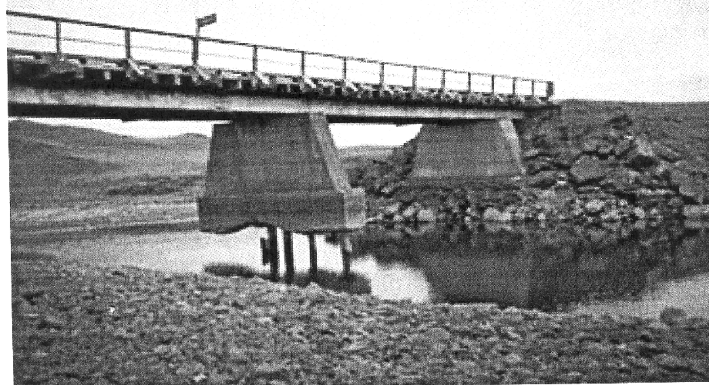
Honorary Secretary

NEW ENROLMENT

Sl. No.	Name	Grade	Date of Election
1.	Er. Ashtam Kumar Sau	(LF)	24.10.2013
2.	Er. Bhaskar Chakraborty	(LF)	24.10.2013
3.	Er. G. Saravana Kumar	(LM)	24.10.2013
4.	Er. Manish Joshi	(F) (valid for 1 year up to 24.10.2014)	24.10.2013
5.	Universal Board for Industrial Quality and Unique Education	(L Inst. M)	24.10.2013

**Members are requested to send their contact email,
telephone and mobile numbers and
any change of address to the Association.**

REPORT



A typical view of bridge scour

On September 14, 2013, a lecture Seminar on ‘Bridge Scour: Analysis and Remedial Measures’ was arranged by the Association of Engineers, India at its Training Centre at Salt Lake City, Kolkata. Dr. Rajib Das and Er. Subhashis Das of the School of Water Resources Engineering of Jadavpur University, Jadavpur, Kolkata delivered lectures on the occasion.

Dr. Rajib Das first discussed about the meaning of bridge scour that resulted in lot of accidents in the past. Bridge scour is deformation and wear of bridge piers. It can be a general scour or local scour. A local scour can be a clear water scour or live bed scour. However, general scour occurs due to change in characteristics of a river. Vortex formed around a bridge pier promotes scour. Horse shoe vortex and wake vortex are caused by different mechanisms of water flow pattern, and experimental observations on effects of these on scour was discussed by Dr. Das. He also discussed different parameters that can affect bridge scour, such as size, shape, spacing, number, and orientation of pier, extent of river bed sedimentation with size of sand particles and stone pieces, water flow condition, type of fluid, unsteadiness of river flow, etc.

Er. Subhashis Das first reviewed different research works carried out in the past on bridge scour and related issues. He spoke on different experimental works done at Jadavpur University to find out the effect of different shapes of pier on vortex formation and subsequent bridge scour. He also analyzed different velocity components of water flow around bridge pier to evaluate the suitable shape of it to reduce bridge scour significantly. The results can also be used for the assessment of dredging effect.

A live question–answer session held after the two lectures indicated the interest created among the audience.

Prof. Dr. Santanu Das
The Editor