ASCE INDIA SECTION

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1.0 ASCE-IS Southern Region's Technical Events

Event 1:

Dr. Anil K Kar, President ASCE-IS, delivered an insightful lecture on 'Durability of Concrete Structures through Surface Protection by Waterproofing' at the Indian Institute of Technology Hyderabad (IITH) on February 9th, 2012. Dr. Kar began by sharing his vast experience in different facets of structural engineering before he dealt in-depth with the core topic. His talk was interspersed with several interesting success stories in difficult field conditions on tackling waterproofing issues.

Dr. Kar's lecture brought into sharp focus the importance of waterproofing key structural elements, which are often neglected during construction and thereafter. The lecture was followed by a lively interactive, question and answer session. Dr. Kar wished all the ASCE student members success in their future endeavours and urged them to participate in the various technical events that ASCE-IS has lined up for them, and increase their repertoire of knowledge in their chosen field.

Event 2:

An ASCE International Student Chapter was inaugurated at IISc, Bengaluru on 24th Feb 2012. Present during the occasion was Prof. Gajanan Sabnis, Dist. Member of ASCE, along with Prof. C S Manohar, Head, Dept of Civil Engineering, and other faculty members. About 50 graduate students registered and attended the inaugural function. Prof. Sivakumar Babu, Regional President, ASCE-IS-SR initiated the event, following which Prof. Sabnis and Prof. Manohar addressed the gathering. Both the distinguished speakers highlighted the importance and advantages of opening and operating an ASCE International Student Chapter. Prof. J M Chandra Kishen, M.ASCE shared his experiences when he used to be a student member of ASCE at the University of Colorado, Boulder, USA. The session concluded with Dr. Sireesh Saride's, Joint Secretary, ASCE-IS-SR, proposing the vote of thanks followed by a student-faculty interaction.

Event 3:

A one-day conference on Geosyn-thetic Lining Solutions and Related Issues' was conducted by ASCE-India Section, Southern Region in association with the Department of Civil Engineering, IISc, Bengaluru; Indian Chapter of International Geosynthetics Society, New Delhi; Karnataka Geotechnical Centre of Indian Geotechnical Society, Bengaluru; and The Masterbuilder. The conference drew enthusiastic response with about 150 delegates from the academia and industry participating in the event. Prof. Sivakumar Babu welcomed the distinguished guests and speakers from India and Germany.

In his inaugural address, the Chief Guest on the occasion, Mr. N. Lakshmana Rao Peshve, Chief Engineer, Karnataka Neerivari Nigam Limited (KNNL) highlighted the importance of such conferences. "The conference could not have been better timed, with the growing importance of geosynthetic lining solutions in civil engineering projects and pointed out how lining issues, are especially important in canals, an area of his expertise" Mr. Peshve said during his speech. The Guest of Honor, Prof. B. R Srinivasa Murthy, Member, Task Force Govt. of Karnataka, released a book authored by Mr. Malcolm Steinberg and Prof. Gajanan Sabnis on 'Geomembranes and the Control of Expansive Soils' during the conference. Prof. B N Raghunandam, Chairman, Division of Earth Sciences

Release of Proceeding at ASCE - GLS Conference

IISc, Prof. C S Manohar addressed the invitees. This was followed by the release of the proceedings by the Chief Guest. Dr. Sireesh Saride, Joint Secretary, ASCE-IS-SR proposed the vote of thanks on behalf of the organizing committee. The following papers were presented during the proceedings of the conference:

Morning Session:

1. Development of Lining Systems for Groundwater Protection by Dr. G. Heerten, NAUE GmbH & Co. KG, Germany
2. Good-better-best HDPE Geo-membranes in Engineered Geo-environmental Applications by Dr. H. Zanzinger, SKZ – German Plastics Center, Germany
3. Geosynthetic Lining Systems in Engineered Landfills-An Indian Perspective by Prof. G.V Rao and Dr. RSS Sasidhar
4. Performance of Composite Covers of Landfills Subjected to Differential Settlements: Centrifuge Study by Prof. BVS Viswanadham, PV Divya

Afternoon Session:

5. Organically Modified Bentonite as a Part of Geosynthetic Clay Liner System by Prof. PV Sivapullaiah and Ms. Vandana Sreedharan
6. Durability and Long-Term Performance of High Density Polyethylene Geo-membranes by Dr. D N Arnepalli and AA Rejoice
7. Solid waste management issues and practices in Karnataka by Dr. H N. Chanakya
8. Integrity and Stability of Geosynthetic Clay Liners as Barrier Systems by Prof. GVL Sivakumar Babu, Sandeep Kumar Chouksey, & P Lakshmikanthan
9. Use of Geo-membrane in Highways in Expansive Soils by Mr. Malcolm Steinberg and Prof. Gajanan Sabnis

Dr. Babu addressing the audience at VIT

Presence of ASCE IS in Geo-Congress 2012

10. Use of Geosynthetics in Canal Lining by Annapoorni Iyer and Shabana Khan

The presentations during the conference were related to the development of lining systems for ground water protection, HDPE geo-membranes in engineered geo-environmental applications, geosynthetic lining systems in engineered landfills, use of organically modified Bentonite in GCLs, performance of high density polyethylene geo-membranes, integrity and stability of GLCs, and use of geo-membranes in highways with expansive soils. Along with the technical presentations, the conference also saw manufacturers of geosynthetic lining material give a few corporate presentations.

The conference provided an ideal platform for sharing practical experiences and knowledge in the field of geosynthetic lining systems. Deliberations during the conference saw innovative thoughts being bounced on how to address issues related to geosynthetic lining systems. The discussion and feedback session, ~~lead~~ led by Mr. Pradeep, Secretary, ASCE-IS-SR, summarized the topics covered during the day and helped participants draw their respective broad -based roadmap for the future course of action on issues pertaining to the field.

2.0 ASCE-IS SR in Geo-Congress 2012

On 19th march 2012, ASCE student chapter was inaugurated in VIT University, Vellore (TN). It is well known that VIT is one of the highly rated engineering colleges with a deemed university status in the country. The function was presided by Chancellor of VIT University Dr G Viswanathan who stressed on the importance of Civil Engineering in day to day life.

This event was inaugurated by Prof. Dr. G L S Babu. Dr. Indumati Nambi, Assistant Professor IIT Madras and ASCE-EWRI President, who was present in the function pointed out the need of Civil Engineering students to look beyond the areas of construction and urge them to start working in the area of water and wastewater treatment. Prof. Babu in his inaugural address enlightened the audience with the vision of ASCE and how the student body can get benefitted if they are ASCE members. Mr. Sankar Viswanathan, Vice-President (Administration), Dr S Narayanan, Pro-VC and Dr A Santhi, Director SMBS also addressed the gathering. The first and second year civil engineering students who brought laurels to VIT University in recently concluded Civil Tech Fest held in IIT Madras were given mementos by dignitaries. Mr. Korek Kashyap, President ASCE VIT student chapter gave the welcome speech and Shouvik Bhattacharya, Vice-President, ASCE VIT Student Chapter gave vote of thanks. The student chapter has been quite active after the inauguration in organizing many technical programmes and technical visits.

Geo-Congress 2012 is an annual conference of ASCE and was organized by the Geo-Institute, ASCE on the theme State of art and practice in Geotechnical Engineering in Oakland in California during 25-29 March 2012. It had distinguished lectures named after Professors Terzaghi, Peck and Seed, 32 State of the Art and State of the Practice invited lectures, 5 special Panel and Seminar Sessions, and 48 Technical Sessions providing over 400 presentations on the latest advances in research and application. It had also 8 Short Courses and 200+ poster presentations in geotechnical theory and practice. Over 1400 delegates were present in the conference. From India, about 30 faculty members and students from Institutes such as IISc, IITs and universities participated in the conference.

About 26 papers were presented in the conference from Indian side and all the papers received good attention and appreciation in the conference. Papers were presented on variety of topics such as ground improvement techniques, reliability of strip foundations, centrifuge modeling, liquefaction potential, rock joint analysis, seismic hazard estimation, stability of mine slopes, soil nailing, geogrid foundations, constitutive modeling of municipal solid waste (MSW), organically modified clays for geo environmental applications, tunnels etc. Prof. G (IISc, Bangalore), Prof. J N Mandal, Prof. D. Choudhary of IIT Bombay, Dr. Sumanat Haldar (IIT Bhuvaneswar), Prof. Priyanka Ghosh and N R. Patra of IIT Kanpur. Prof. Illamparuthy of Anna University, Chennai and many students from the above institutions participated in the conference. Prof. Babu also organized a special session on beneficial reuse of waste and recycled materials in sustainable geotechnical construction in the Conference.

3.0 ASCE-IS Western Region's Technical Talk

ASCE India Section Western Region organized a lecture on "Finite Element Method, Material Modeling, and Application" by Prof. Chandrakant Desai, Ph.D., Distinguished Member of ASCE on April 17, 2012 (6.00 pm) at VJTI, Mumbai.

Mr. Arvind Shah, Regional President, ASCE-IS WR, first invited the Chief Guest and main speaker Prof. Chandrakant S Desai and other dignitaries on the dais and requested Mr. Ravindra Ringshia, Joint Secretary/ Treasurer of ASCE-IS-WR to conduct the meeting. On his request, Mr. Shah offered welcome bouquet to Prof. Desai.

Mr. Shah then briefly talked about the history of ASCE and its activities in India and around the world. Audience was also informed about the setting up of ASCE India Section and its four regions. Mr. Shah outlined the recent activities carried out by Western Region, e.g. technical lectures by Dr. Ashok Kakde on rehabilitation of structures on December 23, 2011 and by Eric Reuman on Preload precast prestressed concrete water tanks on January 01, 2012 in collaboration with the Institute of Engineers Maharashtra Centre.

ASCE-IS WR Officers with Dr. Desai (4th from Right)

He also talked about the upcoming International Seminar on latest development in Civil Engineering design and construction. Lastly, Mr. Shah invited the attendees to join ASCE and avail the benefits of its knowledge database and association of an International Civil Engineering Community.

Prof. Ravi Sinha of IIT-Bombay welcomed Prof. Desai to the meeting and described his illustrious career. He informed that Prof. Desai is a Regent's Professor (Emeritus) of Department of Civil Engineering Mechanics, University of Arizona, Tucson, Arizona, USA. Currently, he is a visiting faculty of Indian Institute of Technology, Gandhinagar, Gujarat (IIT GN). Prof. Desai is the recipient of a number of national and international awards for his outstanding contribution to engineering profession. The body of his research, publications and professional work had been original and had changed directions for research, teaching, and design applications of certain areas in Civil and other engineering disciplines. Dr. Desai had authored 22 books and published 320 papers in various journals.

Prof. Desai started his lecture with the finite element method, material modeling and application in detail with examples and application in the various fields of engineering design. He stated that the finite element method originated from the need for solving complex elasticity and structural analysis problems in civil and aeronautical engineering. The finite element method (FEM) is a numerical technique for finding approximate solutions of partial differential equations (PDE) as well as integral equations. His lecture emphasized computer methods and their use in civil engineering. Prof. Desai introduced finite element methods for analysis, design, construction, simulation of sequences of construction, maintenance and rehabilitation.

He stressed vital importance of nonlinear behavior of materials like soils, rocks, concrete, metals and alloys, testing and modeling for realistic solutions by FEM. He further outlined applications and predictions by FEM for problems involving static and dynamic (earthquake) loading as in pile foundations, reinforced earth retaining walls, underground cavities (tunnels) in Himalayas; seepage and stability analysis of dams and riverbanks.

The lecture which continued for more than an hour was followed by question-answer session. The audience took great interest as the Q&A session had to be curtailed for lack of time. The meeting was attended by more than 50 people including ASCE members, eminent engineers, academicians and was very well appreciated by this engineering fraternity. Dr. Narendra Patel presented flowers to several eminent engineers who graced the occasion including Mr. Satish Dhupelia, President-ACI India Section, Prof. Mahua Chakraborty, Head-Structural Engineering Department VJTI and other dignitaries. Lastly, Mr. Ringshia concluded the session with a vote of thanks to all and requested audience to join the dinner and fellowship.