

**ISSMGE FOUNDATION**  
**REPORT ON CONFERENCE ATTENDANCE**

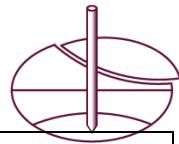
<b>Your Name:</b> MANDEEP RAJ PANDEY	<b>Your Organization:</b> Indian Institute of Science, IISc	<b>Date of report:</b> 26 <sup>th</sup> August 2016
<b>Conference Title:</b> Geo-Chicago 2016 : Sustainability, Energy and the Geo-environment	<b>Location of Conference:</b> Sheraton Grand Chicago, 301 East North Water Street, Chicago, IL 60611	<b>Dates of Conference:</b> August 14-18, 2016

**What you learned:**

As a young researcher, I gained a lot from the conference. The conference covered a wide area of topics, ranging from laboratory characterizations to the field applications of various ground improvement techniques. In addition, the conference helped me a lot in understanding the recent advancements in landfill engineering, the soil containment using barrier and advancement in those barrier systems. Also, modern concept of interdependency of different field of science was vaguely demonstrated when researchers explained their work in the areas of Nanomaterials and Bio-remediation. The various case studies explained by the working professionals added immensely to my limited knowledge of real field application of those researches carried out in lab. There is a huge gap between the research carried out in the controlled environment and their application in the heterogeneous environment.

Coming to the research topic I presented, the title of my paper was “Geotechnical Properties of Lime Treated Gypseous Soil with Fly Ash – A Microlevel Study”. I presented the paper on 15<sup>th</sup> of August, Monday in Session C41 | Ground Improvement, Part I. The session was co-ordinated by Professor Baskhar Chittoori and Professor L. Sebastian Bryson. The number of people attending the session was appreciable. The audience was very proactive and there were a lot of positive feedbacks and discussions after my presentation. The works that would have added more values to the current research, the possible ways forward and what were little loopholes in the research were amongst the major issues discussed and I consider myself very fortunate to have got valuable inputs from the well renowned researchers and the working professional on the area that I worked on. After the session, I got a chance to discuss in detail about the possible future works with Dr. Satya N. Varadhi, a Senior Project Manager from Parsons. I will always try and make most of his comments and suggestions on the research.

The discussions with Professor Mario Manassero about the recent trends and research in the field of GCL barriers were very interesting. I am very much thankful to Professor A (Malek) Bouazza of Monash University and Dr. Ing. Francesco Mazzieri of Universita Politecnica delle Marche for their valuable inputs in the area of my current research interest. Thanks are due to Professor Kristine M. Sample-lord of Villanova University for her suggestions regarding the experimental procedure and research



approach.

Further, keynote lectures from Professor Craig H. Benson, Professor Mario E. Manassero, and Professor John L. Daniels provided insights to the sustainability and geo-environment. The varied sessions also included the areas like waste disposal, risk assessment, geo-hazards and energy geotechnics.

Regarding the other experiences I had, the exhibitors were well versed with their products and principles. I would like to mention Steve B. Jaques from MORETRENCH and Daniel Ruffing from Geo-Solutions in particular who were very much experienced and clear in their approach. I learned a lot from them in terms of the field application of the civil engineering knowledge that we learn from reading the books. I am happy to have met young and talented researchers like Ahmed (PhD Scholar at Queen's University), Fang (visiting PhD Scholar at UIC), Sampurna (PhD Scholar at Michigan University), Riya (PhD Scholar at IIT-Delhi), Shweta (PhD Scholar at Clemson) and Xenia (PhD candidate at GeorgiaTech). After the conference, I also got chance to explore the city of Chicago, its famous Architectural Beauty and vast collections of the masterpiece in the museums. I also got to enjoy massive yearly event of Chicago, Air and Water Show 2016 from the North Avenue Beach of the Lake Michigan.

Here, I would like to take this opportunity to thank ISSMGE Foundation for the support and the grant without which I would not have been able to explore the conference.

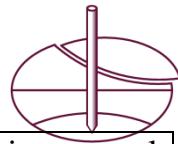
#### ***People you met:***

I got a chance to meet dignitaries from all over the world in the conference, including the Professors, young researchers and the working professions. Few of them are listed below:

- 1) Prof. Krishna R. Reddy, Conference Chair (UIC, USA)
- 2) Prof. Mario Manassero ( Politecnico Di Torino, Italy)
- 3) Prof. A (Malek) Bouazza, Chair of ISSMGE TC215 on Environmental Geotechnics (Monash Universiy, Australia)
- 4) Prof. Kristin M. Sample-Lord (Villanova University, USA)
- 5) Prof. Anirban De (Manhattan College, USA)
- 6) Prof. John L. Daniels (University of North Carolina at Charlotte, USA)
- 7) Prof. James M. Tinjum (University of Wisconsin-Madison, USA)
- 8) Steve B. Jaques (Area Manager for MORETRENCH, NJ, USA)
- 9) Daniel Ruffing (Engineering Manager at Geo-Solutions, USA)

#### ***Main features of conference:***

*Geo-Chicago 2016: Sustainability, Energy and the Environment* held in Chicago, August 14-18, 2016, provided a unique opportunity to highlight recent advances, new directions, and opportunities for sustainable and resilient approaches to design and protect infrastructure and the environment. The five days of conference (including an Indo-US Workshop on Sustainability on 18<sup>th</sup> August) was very well organized. The



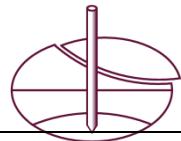
workshop started with a short course on Vertical Barriers for Geoenvironmental Applications by Prof. J. Evans on 14<sup>th</sup> August. The Conference Welcome Address was on 15<sup>th</sup> August at 8:30 am by Conference Chair Prof. Krishna R. Reddy and was followed by Keynote Speech from Prof. Craig H. Benson and Prof. Mario E. Manassero. Altogether there were 6 Keynote lectures and more than 350 papers were accepted for publications. The papers were divided into five Geotechnical Special Publications (GSPs).

The major highlights of the conference were the Sessions Honoring Legends I and II where honourees were Prof. David E. Daniel and Prof. Robert M. Koerner respectively.

The posters presented during the lunch breaks were also equally informative. The exhibitors were very helpful and described their products and services in details. The type of products they have and the services they provide to tackle even the complex geotechnical problems were very innovative and interesting.

***Your comments on the conference:***

The main theme of the conference being the Sustainability, Energy and Geo-Environment, I confidently can say that the organizers did a fair justice to the theme in terms of the session divisions and in terms of the quality of the paper selected for the conference. Kudos to all involved in this, directly and indirectly. I extend my gratitude to Professor Krishna Reddy, conference chair for his excellent guidance and Helen Cook of ASCE for her continuous support. The Indo-US Workshop on 18<sup>th</sup> August was very helpful in bringing the researchers from two different parts of the world together. There was profound exchange of knowledge and hopefully a good collaboration is yet to follow for better geotechnical and geoenvironmental researches.



**Please attach short report (maximum 400 words) suitable for publication in the ISSMGE Bulletin:**  
**Geo-Chicago 2016**  
*Sustainability, Energy and the Geoenvironment*  
Chicago, Illinois | August 14-18

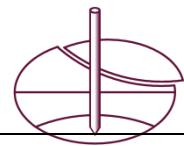
The conference was organized by the Geoenvironmental Engineering Committee of the Geo-Institute (G-I) of the American Society of Civil Engineers (ASCE). The conference was aimed at providing a unique opportunity to explore recent advances, new directions and opportunities for sustainable and resilient approaches to design and protect infrastructure and the environment. The conference theme, “Sustainability, Energy, and the Geoenvironment”, was delivered in six tracks (1. Sustainability and Resiliency, 2. Energy, 3. Geoenvironmental Systems, 4. Materials and Resource Conservation, 5. Waste Management and Remediation and 6. Policy and Regulations) which were broad enough to encompass the spectrum of sustainable geoenvironmental engineering practice and research.

On 14<sup>th</sup> August, prior to the main conference, a short course was held on the topic “Vertical Barriers for Geoenvironmental Applications” by Prof. Jeffrey C. Evans and Daniel G. Ruffing. The conference got underway on 15<sup>th</sup> August with welcome speech by the Conference Chair Prof. Krishna R. Reddy which was followed by two Keynote Lectures by Prof. Craig H. Benson and Prof. Mario E. Manassero. After a short coffee break, there were five parallel sessions. All the sessions were observed by a good gathering of people who had come there to explore new ideas and innovation in the field of geoenvironmental engineering. After lunch, there was a session for honouring Prof. David E. Daniel along with other four parallel sessions which was followed by a short break. Then was the session for honouring Prof. Robert M. Koerner, also with other four parallel sessions. The end of the day was marked with the Award Ceremony.

Next day, on 16<sup>th</sup> August, the day started with two keynote lectures by Nathan J. Snorteland (P.E.) and Prof. John L. Daniels respectively. After the short break, there were 5 concurrent sessions; followed by lunch. The lunch was followed by other set of 5 concurrent sessions, a short coffee break and another 5 concurrent sessions. The end of the day was marked by fun event at the ballpark (Cubs vs. Brewers at Wrigley Field).

Third day of the conference (17<sup>th</sup> August) started with two keynote lectures by Prof. Michel Aubertin and Marc Tuchman. Each day of the conference was divided into three parts with each part having five concurrent sessions. The lunch on the final day was dedicated towards discussion among the researchers and practising engineers about what would be the possible ways forward to bridge the gap between academics and applications followed by comments and suggestions by front-runners of the field. All the days, the breaks were dedicated exploring the exhibitors and posters presented.

Finally, on 18<sup>th</sup> August, to bring the researchers from different parts of the world together, Indo-US Bilateral Workshop was held with an objective of establishing linkage between Geoenvironmental Practices and Sustainability.



**Photographs from Conference:**

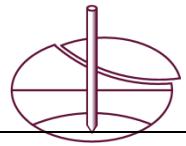


With Professor Mario E. Manassero



With Professor Jeffery C. Evans, Professor John L. Daniels and Professor GL Sivakumar Babu (from right to left)





With the participants of Indo-US Bilateral Workshop