

A Bulletin of the
Indian Geotechnical Society

IGS NEWS

Vol. 44 No. 1

Editor : Prof. Chandan Ghosh

January - March, 2012



The President's Message

Dear Fellows/
Members,

Season's greetings!
One more IGC has

gone by leaving nostalgia about the same. But it was not just an ordinary IGC but an extra ordinary one at that in the whole annals of IGS as vouchsafed by many eminent members who attended. IGS- Kochi Chapter left an indelible mark may be unlikely to be surpassed by any other chapter for many years to come. Kudos to Prof Babu T. Jose and his able team which has strived very hard and earned it. Delhi should pull up their socks now!

Preceding the IGC-11, we had a grand Indo-Japanese workshop on "Advances in Earthquake Geotechnical Engineering" ably organized. More than 120 delegates were registered for the day long activity. This too was memorable one and the plans are afoot to publish the proceedings of this workshop as a special publication by Springer. It is a matter of satisfaction, that the collaboration between IGS and JGS is on a strong footing and heading for mutual growth.

I am happy to share the news that under the recent MOU between IGS and Korean Geotechnical Society, we are planning to have a one day

workshop on "Urban Geotechnical Engineering" during IGC-12 at Delhi. A team of experts led by the President of KGS will be contributing in this. Watch for the details!

In my earlier message I mentioned about the possible new avatar of our journal (IGJ). The Springer will publish and circulate the journal hence forth. I hope our members and subscribers would welcome the new look journal both in content and outlook. I am delighted to inform that all members of the Society will access the journal electronically now.

Brisk job is going on revamping our web portal with face page for each member and features like twitter and Blog to be eventually introduced. I repeat online voting by all our members is my priority as we aim for a paper-less Society. You will see the

election schedule soon on our website giving details. E- Library is another priority area and all IGS publications shall be made available under this umbrella.

A long cherished Student Membership has been introduced from this year onwards with affordable fees with all membership amenities. I hope our student community would welcome the same whole heartedly.

The IGS-Ferrocot Terzaghi Oration will be delivered by Prof. Kerry Rowe on 5th Oct'12 in Delhi. IGC-2012 and Terzaghi Oration, both prestigious events in IGS calendar are being organized by our IGS Delhi Chapter. I appeal to all Fellows/Members to join, support and make these events a grand success.

Prof. K.S.Rao

34th IGS ANNUAL LECTURE 2012



The prestigious
34th IGS Annual Lecture 2012
shall be delivered by
Professor B.R. Srinivasa Murthy,
Professor Emeritus, IISc, Bangalore
during IGC-2012, New Delhi
(Dec.13-15, 2012).

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A BRIEF REPORT ON THE INDIAN GEOTECHNICAL CONFERENCE, IGC-2011 (Geochallenges)

The Golden Jubilee conference of the Indian Geotechnical Society, Indian Geotechnical Conference, IGC-2011 (Geochallenges) was held at Gokulam Convention Centre, Kochi, Kerala during 15-17 December, 2011. The conference was organized jointly by the Kochi Local Chapter of Indian Geotechnical Society and Cochin University of Science and Technology (CUSAT), Kochi, Kerala. This is the first time in the history of IGS, an IGC was conducted in Kerala, that too, by one of the youngest Chapters of the Society formed barely two years back.

The inaugural ceremony of the 53rd Annual General Session and the conference was held in the morning of December 15, at the Terzaghi Hall of the Gokulam Convention Centre with traditional welcome to all delegates. The conference was inaugurated by Vice Admiral K.N.Sushil, Flag Officer Commanding-in-Chief of the Southern Naval Command, Kochi who spoke on the complex nature of the Kochi soil and expressed his appreciation on the selection of the main theme of the conference "Soft Clay Engineering" as the most appropriate to the challenges faced by the geotechnical engineers in coastal belt of Kerala. The Guest of Honour, Mr.A.P.M.Mohammed Hanish, IAS, Managing Director of the Roads and Bridges Development Corporation of Kerala Ltd. also pointed to the need for deliberations and solutions of complex geotechnical problems faced in the state while releasing the souvenir of the Indian Geotechnical Conference-2011. Prof. K.S. Rao, the President of IGS delivered his presidential address highlighting developments of the Society level and also the specific area which requires concerted research needs to meet the future Challenges. The Proceedings and CD containing the Technical papers were released by Prof.A. Sridharan. IGS Awards were presented to the winners. Felicitations were offered by Mr.Cherian

Varkey, National President of the Builders Association of India and Mr.Arvind Verma, CMD of AIMIL Ltd., the leading Geotechnical Instrumentation company.

The Technical exhibition was inaugurated by Prof.Askar Zussupbekov, Vice President of the International Society of Soil Mechanics and Geotechnical Engineering. All facets of Civil Engineering discipline was on display at the exhibition with good representation from the natural geotextile sector.

The 33rd IGS Annual Lecture was delivered by Prof.Manoj Datta, immediately after the inaugural session. A record number of 681 delegates registered in IGC -2011.

The conference proceedings in two volumes contain invited papers and 254 contributory papers selected by a rigorous review process in 4 stages from 381 abstracts received, covering the various themes such as Soft clay engineering, Developments in geotechnical laboratory testing, Field investigations in difficult sub-soil conditions, Foundations in problematic soils, Rehabilitation of foundations of old structures, Earthquake engineering, Innovations in ground improvement, Geosynthetics with natural and synthetic fibers, Deep excavations, Earth retaining structures, Landslides and Slope stability, Environmental Geotechnics, Remote sensing and GIS applications, Numerical and physical modeling, Rock engineering, tunneling and underground constructions and Case studies in geotechnical engineering. The most significant and note-worthy aspect of this Conference is that all the 254 contributed papers have been reviewed by a panel of 65 experts from India and abroad under the chairmanship of Prof.A.Sridharan.

IGC 2011 had invited speakers from Japan, Korea, Iran, Khazagstan, UK, United States and Australia. All the 14 invited papers were presented in 5

plenary sessions held in the Terzaghi Hall. The 254 published contributory papers were presented in 14 parallel sessions held in three different halls-viz the Terzaghi Hall, the Rankine Hall and the Casagrande Hall,

The first day of the conference, witnessed the signing of the technical collaboration agreement between the Indian Geotechnical Society and the Korean Geotechnical society, signaling a new era of international co-operation in R&D, similar to the agreement already in force with the Japanese Geotechnical Society who had brought a good number of delegation to IGC-2011. Both Presidents Prof. K.S. Rao and Prof. Y.S. Jang exchanged the signed MOUs ushering a new beginning.

The Annual General body meeting of IGS was held in the evening. The programme on the first day ended with a Banquet Dinner and a musical evening of gazals held at the picturesque Bolgatty Palace Hotel, in the middle of the Kochi backwaters. A separate companion's programmes were also organized all days.

A fine cultural programme representing the fine arts of Kerala was organised on the evening of the second day of the conference.

The three day conference concluded with a valedictory function in the evening of 17th December 2011 presided over by the President, IGS. The Chairman Prof. Babu T. Jose and his entire team was congratulated by the Society with floral bouquet by IGS.

On behalf of the Organising committee, I thank each and everyone for their whole hearted support and cooperation for making the Indian Geotechnical Conference -2011, a grand success.

Dr. Benny Mathews Abraham,
Organising Secretary, IGC - 2011
and
Prof. K.S. Rao, President, IGS

Brief Report on Indo - Japan Workshop in Earthquake Geotechnical Engineering

held at Hotel Central Park, Kochi on 14th Dec 2011

The first Indo - Japan Workshop on Geotechnical Engineering organized jointly by the two of Asia's oldest geotechnical societies, Japanese Geotechnical Society (JGS) and Indian Geotechnical Society (IGS) was the outcome of several decades of interaction that culminated into official MOU signing ceremony between the two societies in Hong Kong on 23rd May 2011 during the 14th Asian Regional Conference. The MOU was signed by Prof. K. S. Rao, President of IGS and Prof. Osamu Kusakabe, President of JGS in the presence of other senior members of the two societies. India and Japan have always enjoyed excellent relationship and interaction in every field and this new venture will reinforce the activities in the field of geotechnical engineering in the two countries.

As the first activity of MOU between the two societies, it was proposed to hold a joint workshop in 2011 and IGS took initiative to host the First Indo Japan Workshop just before the national conference IGC 2011 at Kochi. Japan is affected by frequent earthquakes. Last year 11th March's 9.0 Mw super earthquake was a nightmare. India has had its share of bad luck due to earthquakes, 18th September's 6.9 Mw Sikkim earthquake was the most recent to hit India. Hence, appropriately, theme for this workshop was "Earthquake Geotechnical Engineering".

The workshop began with a formal inauguration. Prof. K. S. Rao, Prof. M. R. Madhav, Prof. Babu T. Jose, Prof. Osamu Kusakabe and Prof. Ikuo Towhata were on the dais. While Prof. Rao and Prof. Kusakabe spoke about their respective societies, their aims and future vision, Prof. Madhav explained about the importance and usefulness of this Indo - Japan tie-up. Prof. Towhata emphasized on the relevance of Earthquake Geotechnical Engineering. Prof. Babu T Jose, Chairman of IGC 2011 spoke about

the Indian Geotechnical Conference that was starting the next day and welcomed every one to join for the grand show.

The following were the speakers and their respective topics in the order of presentation.

Sl No	Speaker	Topic of Presentation
1	Dr. Osamu Kusakabe	Lessons learned from the 2011 Great East Japan Earthquakes
2	Dr. K S Rao	Seismic Microzonation of Indian Mega Cities
3	Dr. Ikuo Towhata	Validation and strategy of early warning instrument for mitigation of precipitation-induced slope failure
4	Dr. M. R. Madhav	Seismic Risk Mitigation of Loose Saturated Sands with Granular Inclusions
5	Dr. Yoichi Watabe	Seismic performance of caisson quay wall with lightweight backfill
6	Dr. A. Boominathan	Lateral Dynamic Response and Effect of Weak zone on the stiffness of Full Scale Single Piles
7	Dr. Hemanta Hazarika	Damage to waterfront structures in northern Tohoku area due to the March 11, 2011 tsunami
8	Dr. Deepankar Choudhury	Seismic liquefaction hazard and site response for design of piles in Mumbai
9	Er. Hiroyasu Ishii	Effectiveness of Liquefaction Countermeasures in the 2011 M=9 Gigantic Earthquake, and an Innovative Soil Improvement Method
10	Dr. B. K. Maheshwari	Geotechnical aspects of recent Sikkim Earthquake of September 18, 2011
11	Er. Yoshitake Oka	Earthquake resistant technology applying steel products based on a study of the damage of The 2011 off the Pacific coast of Tohoku Earthquake
12	Dr. Neelima Satyam D	Liquefaction Hazard Assessment using SPT and VS for Two cities in India
13	Dr. S. K. Prasad	Sliding Displacement of Quay Wall during earthquake for Performance Based Design

Each speaker had about 20 minutes for presentation. The summary of presentations is as follows.

1. Live experience of two of the recent earthquakes 2011 Great East Japan Earthquake and Sikkim Earthquake of September 18, 2011.
2. Performance of geotechnical structures such as Quay Walls, Pile Foundation, earth slopes during earthquake.

3. Microzonation and Liquefaction Hazard Assessment with discussions on microzonation of Indian Mega cities, Liquefaction hazard analysis and site response for Delhi, Ahmedabad, Surat, Mumbai and Vijayawada.

4. Earthquake resistant design and technology with discussions on steel technology and algorithm for sliding displacement of quay wall.
5. Ground modification methods with discussion on innovative method to counter liquefaction hazard, use of light weight backfill to enhance seismic performance of retaining walls.

Panel Discussion was given equal importance. The following were the

Topics for panel discussion.

1. Microzonation and its relevance
2. Codal provisions and design requirements
3. Performance Based design
4. Performance of Geotechnical structures such as foundations, embankments, retaining walls, slopes & tunnels.
5. Disaster management
6. Cooperation between JGS and IGS

Members conducting the discussion included Prof. Hemanta Hazarika (Moderator), Prof. Ikuo Towhata, Prof. Osamu Kusakabe, Dr. Yoichi Watabe and Er. Hiroyasu Ishii from Japan and Prof. Chandan Ghosh (Moderator), Er. Suresh S., Prof. K. S. Rao and Prof. M. R. Madhav from India.

The following are some remarks from the technical presentations and panel discussion.

1. Microzonation was considered important, especially for Indian cities. Analysis of Site effect and ground behavior is one aspect, but, precise evaluation of ground properties with depth is the other challenge. Available methods such as SPT, CPT, SASW and MASW etc. should be utilized judiciously for this purpose.
2. Design procedures need constant revision according to seismic activities in the region. For instance,

the super earthquake of March 11, 2011 in Japan has enhanced the target of design acceleration. In India, work on evolving target acceleration for design purpose in different regions needs a more rational and rigorous approach.

3. Performance Based Design should be given more importance. For geotechnical structures, it is more rational to design based on deformation rather than strength based approach.
4. Disaster management is the most important aspect in earthquake engineering. Both the countries suffer from different disasters and methodologies to reduce damaging effects from disaster need to be evolved. These methodologies can not be unique and may vary according to geographic location, economic and social standing, policy of government among others.
5. Cooperation between JGS and IGS has started in a positive manner. We need to proceed with more joint seminars, sharing of resources, exchange of researchers etc. for which more precise planning will be evolved.
6. Performance of geotechnical structures such as foundations, retaining walls, earth slopes etc. during 2011 Great East Japan

Earthquake and Sikkim Earthquake of September 18, 2011 were discussed and it was inferred that available design aids and codal provisions need improvement to incorporate new findings and new observations.

The workshop was sponsored by AIMIL, HEICO, FERROCO and XPLOER.

The financial assistance from them is highly appreciated.

The venue for the workshop was Central Park in Kochi, Kerala. The auditorium and infrastructure for the workshop was excellent. The workshop attracted a large number of participants from academia, research organizations, industry and governmental organizations. After the inaugurations, there were three technical sessions. In the first two sessions, technical presentations were made alternatively from Japan and India by the invited speakers and the last session was devoted for panel discussion.

Prof. S. K. Prasad, Er. Suresh S. and Prof. Hemanta Hazarika were the coordinators of the workshop. The workshop was appreciated by all the delegates who participated in it especially for time and financial management and technical content.

The following pictures provide the glimpse of workshop.

Dr. S. K. Prasad & Er. Suresh
Organising Secretary



Dignitaries on dais during the inauguration



Lighting the lamp to symbolize the start of workshop



A view of delegates during one of the sessions



A glimpse of lunch time



Invited speakers and coordinators of the workshop



Members of panel discussion during deliberations

Local Chapter News

IGS Baroda Chapter

National Seminar on Recent advances in Geotechniques (RAG-11) for Infrastructure Development" under the auspices of IGS-Baroda Chapter , one day National seminar on the above subject was organized recently at I G Patel seminar hall, MS Univ., Baroda. Experts from various IITs IISc, leading foundation firms, were invited to deliver lectures on environmental geotechniques, forensic geotechniques, advances in pile foundations, reinforced

earth, & Geosynthetics, which will be used for buildings, dams, & road construction as well as other infrastructure developments of the country. Important feature of the seminar was penalist session arranged for penal discussion on geotechnical aspects of Kalpsar project which is to be constructed in the sea of Cambay gulf of Gujarat.

The seminar was inaugurated by shri N V Patel , chairman , VUDA and was presided by DR K S Rao, National



President of Indian Geotechnical Society & Sri N B Desai, former secretary, Narmada was Guest of honor.

IGS Thanjavur Chapter

A one-day workshop on "Ground Improvement Techniques" was



L to R: Dr. K. Premalatha, Secretary, IGS Chennai Chapter, Dr. S. Seshadri, Dean/SASTRA University, Er. S. Asokan, Superintending Engineer, Cauvery Division, Thanjavur, Dr. K. Saravana Raja Mohan, Co-ordinator, IGS Thanjavur Chapter, Er.I.V.Anirudhan, Chairman, IGS Chennai Chapter.

conducted jointly by IGS- Chennai Chapter and Thanjavur Chapter, at SASTRA university on 15 th October 2011. It was a great amalgam of knowledge imparting lectures on various upcoming topics of Geotechnical Engineering by eminent speakers who included teaching professionals and industrialists. The workshop was inaugurated by Er.S.Asokan, Superintending Engineer, PWD, Thanjavur. The meeting was presided by Dr.S.Seshadri, Dean, School of Civil engineering, SASTRA University. Dr.K.Saravana Raja Mohan, Coordinator,IGS Thanjavur chapter was the convener of the workshop.

Lectures were delivered by S.V. Ramaswamy, Shri R. Radhakrishnan, Prof.A.Boominathan, Dr. R.G. Robinson, Dr. V.K. Stalin, Shri Madhan Kumar, Dr. K. Ilamparuthi and Dr.S.Jayalekshmi,

The one-day workshop gave a good opportunity for the students and working professionals to interact with experts in the field and to enrich their knowledge about the relevant happenings in the field. It was a combined effort of all the staff members and the organizing committee Members of the IGS Thanjavur and Chennai Chapters which made the workshop a huge success.

IGS Visakhapatnam Chapter

A Workshop on "Soil Retaining by Reinforcing Techniques" was organized by the IGS-Visakhapatnam Chapter in association with Department of Civil Engineering, Andhra University on October 22, 2011. The workshop was organized in commemoration of 128th Birthday of Father of Soil Mechanics "Karl Von Terzaghi". The workshop was inaugurated by Prof. M.R. Madhav, Prof. C.N.V. Satyanarayana Reddy and Hon. Secretary, IGS-Visakhapatnam Chapter Coordinated the workshop.

During Inaugural address Prof. M.R.Madhav stressed the need for taking steps to avoid failure of retaining walls of buildings constructed in hilly areas. Prof. G.S.N. Raju, Principal, A.U. College of Engineering highlighted



Garlanding of Karl Terzaghi during inaugural Function

the significance of the workshop. Prof. B.S.N. Raju, Head, Department of civil engineering, explained importance of the work shop in light of recent failures of retaining walls in Visakhapatnam. Sri K. Rama Chandra Rao, patron, IGS Visakhapatnam chapter and chief engineer Visakhapatnam port trust presided over the function.

Lectures were deliberated by Prof. M.R. Madhav, Prof. G.L. Siva Kumar Babu, C.N.V. Satyanarayana Reddy, Prof. G.V.R. Prasada Raju and Prof. D.L. Narasimha Rao

IGS KUECKELMANN BIENNIAL AWARD 2010-2011

The IGS Kueckelmann Award is presented once in two years to honour an eminent geotechnical engineer for the outstanding cumulative contribution made to geotechnical engineering in India. All Indian nationals are eligible for this award. The award comprises Rs.30,000/- plus Rs.5000/- to cover expenses and a plaque. The award for the period 2010-2011 will be presented at the IGS Annual General Session at IIT-Delhi in December 2012. Nominations for the award are invited on the prescribed form to be supplied on demand from the IGS Secretariat/can be downloaded from IGS Website. The completed nomination form in quadruplicate should reach IGS Secretariat not later than 31st May 2012.

CALL FOR NOMINATION

IGS-Prof. Dinesh Mohan Award 2010-2011

The award is presented once in two years to an eminent geotechnical engineer for excellence in geotechnical practice in India. All Indian Nationals are eligible for the award. The award carries a cash prize of Rs.5000/- and a plaque.

Nominations for the award for above years are invited. Nominations for the award should be on the prescribed form available on web. The completed nomination form in quadruplicate should reach IGS Secretariat not later than 30th June 2012.

IGS ELECTION, 2013-2014

Dear Fellows/Members,

As you are aware IGS Election 2012 is shortly to take place to elect new office bearers for the term 2013-2014.

As already approved by the Executive Committee and passed by the AGM during IGC-2011 at Kochi, Kerala, this election shall be online electronic voting and electronic voting offered to only to those members who have specifically opted for the same. Those members who desire Electronic Voting, may please send their option to IGS Secretariat as and when called for. All others would be given ballot paper in the normal course. The following is IGS Election schedule 2013-14.

1.	Notification of Election and Call for Nominations	:	Monday, 06 Aug 2012
2.	Last date for Receipt of Nomination Papers	:	Wednesday, 05 Sept. 2012 (4:00 P.M.)
3.	Scrutiny of Nominations	:	Wednesday, 05 Sept.2012 (4:00 P.M.)
4.	Intimation to the Candidates	:	Monday, 10 Sept. 2012
5.	Withdrawal of Candidature	:	Friday, 21 Sept. 2012
6.	Printing of Bio-data of Contesting Candidate	:	IGS Website/Alongwith Ballot Papers for non-Electronic Voters
7.	Despatch of Ballot Papers by Post	:	Tuesday, 16 October 2012
8.	Last Date of Receipt Back of Ballot Papers	:	Thursday, 15 November 2012 (5:00 P.M.)
9.	Voting Date/Time for Electronic Voting	:	To be fixed by Returning Officer
10.	Counting of Votes	:	Friday, 16 November 2012
11.	Announcement of Results	:	16/17 November 2012 IGS Website

CALL FOR PAPERS

18 ICSMGE 2013 (September 2-5, 2013) Paris - France

Against quota allocated to IGS by ISSMGE, Members of IGS & ISSMGE can send abstracts of their papers on any of the Conference Themes through IGS ONLY by April 7, 2012. For instructions how to prepare abstracts are available on Conference Website:

www.issmge2013.org

It is important for sending papers to above Conference and all ISSMGE Sponsored Conferences, memberships of both IGS and ISSMGE by Author/Co-authors are mandatory. Abstracts/Papers cannot be accepted without these memberships. Papers cannot be sent directly to the Conference and routed through IGS only.

KEY DATES:

Until APRIL 15, 2012	Selection of abstracts by the Member Societies
APRIL 2012	Submission of selected abstracts to the Organising Committee by the Member Societies
JUNE 2012	Notification of abstract acceptance
JANUARY 2013	Final submission of papers by the Member Societies to the Organizing Committee
MARCH 2013	Final paper acceptance

Conference Theme : "Challenges and Innovations in Geotechnics".

Sub-Theme: Please refer website www.issmge2013.org



O B I T U A R Y

Indian Geotechnical Society announce with deep regret the passing away of Prof. Jagdish Narain on 05, January 2012, its Past President (1979-81). Prof. Jagdish Narain has been during past several years leading a spiritualistic life at Puttapparth, the abode of revered Saint late Sri Satya Sai Baba.

In his chequered career, Dr. Jagdish Narain had exceptional achievement to his credit as a research scholar, University Professor & Administrator and Consultant to national and international firms, and for valuable research contribution in Geotechnical Engineering, winning the prestigious Norman Gold Medal of ASCE. He did his B.E. from Roorkee University and MSCE & Ph.D in Civil Engineering from Purdue University. He was Fellow of ASCE, IGS and Institution of Engineers. He was Professor and Dean at Roorkee University (1962-69) and later Vice Chancellor and Director, Water Resources Centre. He worked with TAMS, a New York based consulting firm, and was consultant to Marmagao Maritime Ltd., Goa and actively assisted AICTE and UGC in several committees.

Indian Geotechnical Society conveys its deepest sympathy to the bereaved family and pray God to rest his Soul in eternal peace.



IGC-2012 INDIAN GEOTECHNICAL CONFERENCE Advances in Geotechnical Engineering

13 - 15 December, 2012



IIT Delhi

Venue:

Indian Institute of Technology Delhi
New Delhi, India

Organized by:

Indian Geotechnical Society, IGS Delhi Chapter and
Indian Institute of Technology Delhi

IGS Delhi Chapter

IGS Delhi Chapter was established in 1982 from the savings of GEOCON-78. The Chapter celebrated its Silver Jubilee in the year 2007. Delhi has hosted the Annual Conferences of the Society in 1978, 1986 and 1998. All three of them were very well attended and highly appreciated by the delegates for the excellent arrangements and the good quality of technical ambience. The pleasant duty of organizing the IGC-2012 has been entrusted with the IGS Delhi Chapter in association with the Indian Institute of Technology Delhi at IIT Delhi.

Indian Institute of Technology Delhi

The institute was established as College of Engineering and Technology, New Delhi on August 21, 1961. Parliament of India amended the Institutes of Technology Act, and upgraded the institute as Indian Institute of Technology Delhi. The IIT Delhi main building was formally opened by the then President of India, Dr. Zakir Hussain, on March 2, 1968.

IIT Delhi is located in Hauz Khas, in South Delhi. The campus of 320 acres is surrounded by the beautiful Hauz Khas area and monuments such as the Qutub Minar and Lotus Temple. The campus is also close to other educational institutions such as the Jawaharlal Nehru University, AIIMS and Indian Statistical Institute. The Institute is about 19 km from the Delhi Main Railway Station, 14 km from the New Delhi Railway Station, 21 km from the Inter-State Bus Terminal and 10 km from New Delhi Airport. The nearest metro station is Hauz Khas, which is just about 1 km from IIT Delhi campus.

IGC-2012: Advances in Geotechnical Engineering

The IGC-2012 will be held from December 13 to 15, 2012 (Thursday to Saturday) in IIT Delhi campus. Post-conference technical visit in Delhi as well as outstation visits will be arranged on December 16 (Sunday) and December 17 (Monday).

The theme of the Conference is "Advances in Geotechnical Engineering". The conference

will focus on the advances in geotechnical engineering taking place to meet the challenges faced in infrastructure development.

Sub-themes are:

1. Advances in Geotechnical Characterization
2. Developments in Dealing with Difficult Ground Conditions and Geotechnical Structures
3. New Techniques in Instrumentation and Monitoring
4. Trends in Tunnelling and Underground Structures
5. Innovative Design and Construction of Foundations
6. New Developments in Computational Geomechanics
7. Advances in Environmental Geotechnics
8. Special Techniques of Earthquake Geotechnical Engineering and Dynamic Foundations
9. Practices of Risk Assessment and Disaster Reduction
10. Experiences of Forensic Investigation and Rehabilitation
11. New Concepts in Professional Practices and Geotechnical Education

Conference Proceedings

Proceedings of the Conference will include keynote addresses by experts and presentation of papers by authors.

Call for Papers

The official language of the Conference is English. Abstracts shall be sent to igc2012delhi@gmail.com

Dates of Reminders

Submission of abstract	: March 31, 2012
Acceptance of abstract	: April 30, 2012
Submission of full paper	: June 30, 2012
Acceptance of full paper	: August 31, 2012
Conference	: December 13-15, 2012

Registration Fees

	Upto 31 st Oct. 2012	After 31 st Oct. 2012
IGS Members*	Rs.4000/-	Rs.4500/-
Non-IGS Members*	Rs.4500/-	Rs.5000/-
SAARC Countries	Rs.6000/-	Rs.7000/-
Other Countries	US\$ 300	US\$ 400
Senior Citizens (above 60 years age as on Oct.31, 2012)	Rs.2000/-	Rs.2500/-
Students	Rs.2000/-	Rs.2500/-
Spouse, Accompanying Persons	Rs.2000/-	Rs.2500/-

All payments should be made by demand draft or at par cheque in favour of "Indian Geotechnical Society Delhi Chapter" payable in New Delhi.

Sponsorship

Category	Sponsorship Fee	Free Delegates	Free Advertisement
Platinum	Rs.200,000	6	Full page: Colour
Gold	Rs.100,000	4	Full page: Colour
Silver	Rs. 50,000	3	Half page: B&W
Bronze	Rs. 25,000	1	Half page: B&W

Exhibition

A technical exhibition will be arranged close to the Conference venue ensuring, maximum footfall. Geotechnical and environmental consultants, manufacturers and suppliers of laboratory and field instruments, equipment, and data acquisition systems, research organizations, contractors, and software vendors are invited to display their products in the exhibition. An enclosed space of 3 m x 3 m with a table, two chairs and power connection will be available at a tariff of Rs. 40,000/- for domestic exhibitors and US\$ 1,500 for firms from abroad. Exhibitors would get two free delegates.

Contact

Dr. R. Ayothiraman

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Email: igc2012delhi@gmail.com
Web site: www.igsdelhichapter.com

G L I M P S E S



IGC-2011 Organising Committee



Inaugural Function



Lighting of Lamp



Address by the Chief Guest



Inauguration of Exhibition



IGS Annual Lecture



Cultural Function



Cultural Function

IGC - 2011



Welcome Address by Prof. Babu T. Jose



Lighting of Lamp



Address by the Guest of Honour



Presentation of Proceedings to Arvind Verma



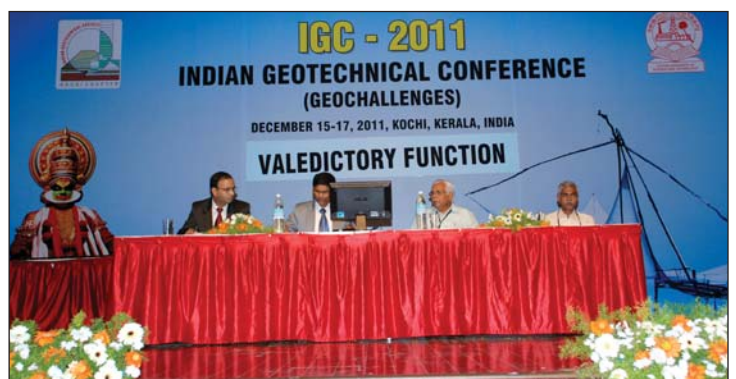
A View of Audience



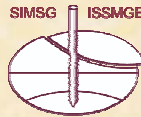
A View of Audience



Cultural Function



Valedictory Function

ISFGE 2013**FIRST ANNOUNCEMENT**

**International Society for Soil Mechanics and Geotechnical Engineering
TC 302: Forensic Geotechnical Engineering**

Invites you to the

Fourth International Seminar On**FORENSIC GEOTECHNICAL ENGINEERING**

**Date: January, 10-12, 2013
Venue: Bengaluru, India.**

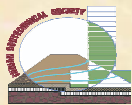
Co-Organizers

**Indian Geotechnical Society
Indian Institute of Science
ASCE South India Region**

Important Dates:

**Submission of Abstracts : July 2, 2012
Acceptance of Papers : August 31, 2012
Full Length Papers : October 1, 2012**

More details on website: www.igs.org.in

**INDIAN GEOTECHNICAL JOURNAL**

Vol. 42, No. 1, January 2012

CONTENTS**PAPERS**

Geotechnology for Environmental Control at Waste Disposal Sites
by Manoj Datta

Subsidence Due to Groundwater Leakage into Tunnels
by Vikas Thakur

Influence of Rock Socketing on the Lateral Response of Single Pile
by S. Karthigeyan and K. Rajagopal

Being published by M/s Springer (India) Private Limited.

3rd IGS-FERROCO TERZAGHI ORATION

The prestigious IGS-Ferrococo Terzaghi Oration (IFTO Oration) the third in the series is scheduled on 05th October 2012 (Dr. Karl Terzaghi B'day Week) in New Delhi, being organized by IGS-Delhi Chapter.

The Oration shall be by the eminent Professor Dr. Kerry Rowe of Kingston University, Canada, an authority in Geotechnical Engineering on the topic "Design and Construction of Barrier Systems to Minimize Environmental Impacts Due to MSW Leachate and Gas"

The earlier two orations were delivered by no less than Prof. Harry G. Poulos and Prof. M.R. Madhav, respectively.

IGS WEBSITE !

IGS is now accessible on Website !

Please log on: www.igs.org.in

For all information about IGS.

Your valuable suggestions if any are welcome.

IGS-STUDENT MEMBERSHIP

The concept of a separate student membership has been approved both by the Executive Committee and AGM recently. Broadly the following shall be the guidelines for Student Membership. This is a great opportunity for the Student fraternity, to avail all advantages offered by IGS but at an easy affordable subscription:-

Criteria	: Student : UG/PG/Doctoral
Membership	: Annual
Subscription	: Rs.300/- Admission Fee (Onetime) Rs.500/- Annual Subscription (Proposed) Renewable Calender year basis
Affiliation	: Directly under IGS
Privileges	: Online Journal, Membership Certificate Concessions in IGS/IGC Conferences Convertible to regular membership upon completion of studies/joining assignment.

However, Student Membership do not entitle to contest/ vote for IGS Election in its duration.

For details, contact: www.igs.org.in Apply online.

MEMBERS NEWS



Dr. T. Ramamurthy
(HF - 0004)

Professor T. Ramamurthy delivered a Key Note lecture during the 12th International Congress of Rock Mechanics of the International Society for Rock Mechanics on "How to select rock mass parameters for analysis and design", held at Beijing, China in the 3rd week of Oct.2011. It was well received and the Organizers took the approval for wider publicity and circulation of the presentation made. It was by far the best presentation of the Congress as per delegates attending the Conference. Our hearty congratulations to Prof. Ramamurthy.

IGC-2013

IGC-2013 shall be hosted by IGS-Roorkee Chapter. The dates, venue, theme and other details are being worked out and shall be announced soon.

Best Paper Awards Presented During IGC-2011

IGS-Prof. A.V. Shroff Biennial Prize for the Best Paper on "Grouting Technology/ Environmental Geotechnical Engineering" titled: "ELECTRO-Osmotic CONSOLIDATION STUDIES ON PEAT OF NORTH SARAWAK" by Dr. SHENBAGA R. KANIRAJ AND Dr. H.L. HUONG published in the Proceedings of IGC-2009 (pp.455-458).

IGS-Dr. Shamsher Prakash Biennial Prize for the Best Paper on "Soil Dynamics" titled: "DYNAMIC ANALYSIS OF PILES UNDER ROCKING MOTION" by Dr. INDRAJIT CHOWDHURY AND Prof. SHAMBHU P. DASGUPTA published in the Indian Geotechnical Journal, Vol.39, No.4, October 2009 (pp.360-386).

IGS-Prof. Leonards Biennial Prize for the best Ph.D. Thesis in

Geotechnical Engineering titled: "CENTRIFUGE MODEL STUDIES ON THE PERFORMANCE OF GEOGRID REINFORCED SOIL BARRIERS OF LANDFILL COVERS" by Dr. S. RAJESH

IGS - Dr. B.B. Rai - S.N. Gupta Biennial Prize for the best paper on "Earth and Earth-Retaining Structures" titled: "APPRAISAL OF SOIL NAILING DESIGN" by Prof. G.L. SIVAKUMAR BABU AND Shri VIKAS PRATAP SINGH published in the Indian Geotechnical Journal, Vol.39, No.1, January 2009 (pp.81-95).

IGS - Shri R.N. Prasad Biennial Prize for the best paper on "Slope Stability and Land Slides" titled: "SLOPE STABILITY MODELLING FOR EMBANKMENTS USING PARTICLE SWARM OPTIMIZATION" by Dr. M. JANGAREDDY AND Shri S. ADARSH published in the Indian Geotechnical

Journal, Vol.34, No.4, October 2010 (pp.243-252).

IGS - Shri M.S. Jain Biennial Prize for the best paper on "Innovations in Piling and other Foundation Construction Techniques" titled: "ULTIMATE PULLOUT CAPACITY OF GRANULAR PILE ANCHORS IN HOMOGENOUS GROUND" by Shri B. VIDYARANYA, Prof. M.R. MADHAV AND Dr. M. KUMAR published in the Indian Geotechnical Journal, Vol.40, No.3, July 2010 (pp.159-166).

IGS-HEICO Biennial Prize for the Best Paper on "Rock Mechanics" titled: "OPTIMIZING THE USE OF IN SITU ROCK IN UNDERGROUND POWERHOUSES" by Shri V.V. BADAREENARAYANA AND Shri R. VENUGOPALA RAO published in the Proceedings of IGC-2009 (pp.217-220).



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Important Announcements

HONOURED

Indian Geotechnical Society takes immense pleasure to announce the award of Honorary Fellowship of the Society, to the following eminent members during IGC-2011.



Prof. V.S. Chandrasekharan
(HF-0017)



Prof. Swami Saran
(HF-0018)



Dr. V.M. Sharma
(HF-0019)

Our hearty congratulations.

REVISION OF FELLOWSHIP/ MEMBERSHIP SUBSCRIPTION

A final proposal to revise existing Fellowship/Membership subscriptions upward has been approved the Executive Committee/AGM of the Society. The revised rates would become effective from 01 April 2012 onwards.

Please refer IGS website for full details.

A New IGS CHAPTER

The 33rd IGS Chapter is scheduled to be inaugurated at Shimla during May, 30, 2012 thanks to the untiring efforts by Prof. S.K. Jain and his team from Jaypee Instt. of Info. Technology, Solan, Himachal Pradesh. Our hearty congratulations!

7TH AYGEC 2012, JAPAN

The 7th AYGEC 2012 Japan has been scheduled from 14-17th Sept. 2012 at Nagase, Yokosuka, Japan.

The following Young Geotechnical Engineers have been selected to attend this Conference from IGS.

Dr. Preeti Maheswari, Asstt. Professor, IIT Roorkee
Dr. Bappaditya Manna, Asstt. Professor, IIT Delhi

Our hearty congratulations!

AWARD FOR BEST IGC

IGS-Mumbai Chapter has been given an appreciation award during IGC-2011 for hosting a very memorable and successful IGC-2010. The Award was received jointly by the Chairman Prof. Anand Katti and Hon Secretary Dr. R.A. Hedge. Our hearty congratulations!

NEW IGS AWARD

M/s HEICO, a premier Instrumentation Company has instituted an Award in memory of their Founder Sardar Resham Singh. This is a biannual award titled "IGS-Sardar Resham Singh Award". The award is for the contribution by a person for the ultimate benefit of the Society adopting innovative original research applications/procedures to benefit infrastructure projects in the field or those related to reducing ill effects of natural disasters by creating safe structure or such allied field projects.

The Award carries a cash prize of Rs.50,000/- a plaque & citation. The contestant should be a member of Indian Geotechnical Society. The award is operative from this year.

JOINT CO-OPERATION AGREEMENT WITH KOREA

Similar to Indo-ASCE-Geo Institute, Indo-Japan joint co-operation agreements, an agreement with Korean Geotechnical Society (KGS) was also inked during IGC-2011 at Kochi. An Indo-Japanese Workshop on "Advances in Earthquake Geotechnical Engineering" was successfully hosted prior to IGC-2011. Similar major Workshop on "Urban Geotechnical Engineering", is slated to be conducted with KGS also during IGC-2012 at New Delhi. These IGS initiatives no doubt opens up great vista to International developments in geotechnical engineering field.

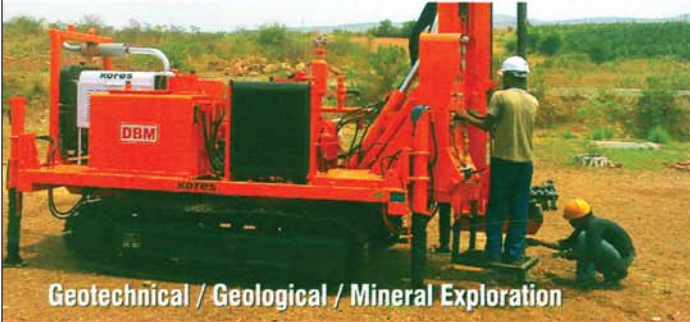




Construction of Berths & Jetties



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Soil Mechanics Laboratory (NABL / ISO)

« Specialisation »

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GEOTECHNICAL CALENDAR

ABROAD

2012

March 25-29

San Francisco (Oakland) California

IC on GeoCongress 2012: State of the Art and Practice in Geotechnical Engineering

Contact:

Dr. Dipanjan Basu

Asst. Professor

Dept. of Civil & Env. Engineering

University of Connecticut, USA

E-mail: dbasu@engr.uconn.edu

Website: <http://content.geoinstitute.org/GeoCongress2012.html>

May 28-30

Taormina, Italy

Second IC on Performance-Based Design in Earthquake Geotechnical Engineering under ISSMGE TC203

Contact:

Michele Maugeri

Chairman of Conference

E-mail: mmaugeri@dica.unict.it

May 30 - June 01

Brussels, Belgium

IS on "Recent Research, Advances & Execution Aspects of Ground Improvement Works" IS-GI Brussels 2012 under ISSMGE's TC-211.

Contact:

Conference Secretariat

Chairman/Secretary TC-211

Belgian Building Res. Institute

Carine Godard, Av.P. Holoffe, 21

B-1342 Limelette, Belgium

E-mail: carine.godard@bbri.be

Website: www.bbri.be/go/IS-GI-2012

June 06-09

Edmonton, Alberta, Canada

12th International Environmental Speciality Conference at CSCE 2012. For details see website www.csce2012.ca

Contact:

Selma Guigard

Ph.D. P.Eng. MCSCE

Co-Chair ESC, University of Alberta

E-mail: Selma.guigard@ualberta.ca

June 27-29

Los Angeles, CA, USA

X1th IC on Environmental Geotechnology, Energy and Global Sustainable Development

For Details Contact:

Prof. Krishna R. Reddy

University of Illinois at Chicago

842 West Taylor Street

Chicago, Illinois 60607, USA

E-mail: kreddy@uic.edu

September 18-21

Porte de Galinhas, Pernambuco - Brazil

4th International Conference on Geotechnical and Geophysical Site Characterization (ISC-4) TC 102

Contact:

Roberto Q. Coutinho

Chairman, Geotechnical Group

Dept. of Civil Engineering

Federal University of Pernambuco

Brazil (UFPE)

Secretary: Factos Eventos -

E-mail: isc-4@factos.com.br

Website: www.isc-4.com

October 30-November 2

Wollongong, Australia

IC on Ground Improvement and Ground Control: Transport Infrastructure Development and Natural Hazards Mitigation.

Contact:

Dr. Jayan S. Vinod

Faculty of Engineering

University of Wollongong

Wollongong City, NSW 2522, Australia

E-mail: icgi_2012@uow.edu.au

Website: www.icgiwollongong.com

December 10-14

Bangkok, Thailand

5th ARC on "Geosynthetics for Sustainable Adaptation to Climate Change", GA2012

Contact:

GA2012 Secretariat, IGS-Thailand

C/o Asian Centre for Soil Improvement and Geosynthetics

Asian Institute of Technology

P.O. Box 4, Klong Luang

Pathumthani 12120, Thailand

E-mail: igs-thailand@ait.ac.th

INDIA

2012

December 13-15

New Delhi, India

Indian Geotechnical Conference 2012 (Advances in Geotechnical Engineering)

Contact:

Dr. R. Ayothiraman

Joint Organizing Secretary

IGC-2012, Secretariat

Civil Engineering Department

Indian Institute of Technology Delhi

Hauz Khas, New Delhi - 110016, India.

Phone: 9868182877

Email: icg2012delhi@gmail.com

Website: www.igsdelhichapter.com

2013

January 10-12

Bengaluru, India

Fourth International Seminar on Forensic Geotechnical Engineering

Contact:

Prof. G L Sivakumar Babu

Organizing Secretary, ISFGE,

Department of Civil Engineering,

Indian Institute of Science,

Bengaluru - 560 012. INDIA.

Email: isfge2013@gmail.com

Phone: +91-80 2293 3124 / 2360

Fax: +91-80 2360 0404

December 19-21

Roorkee, India

Indian Geotechnical Conference 2013 Geotech. Advances and Novel Geomech. Applications (GANGA)

Contact:

Dr. N.K. Samadhiya

Dr. Mahendra Singh

Organising Secretaries

IGC-2013, Secretariat

Civil Engineering Department

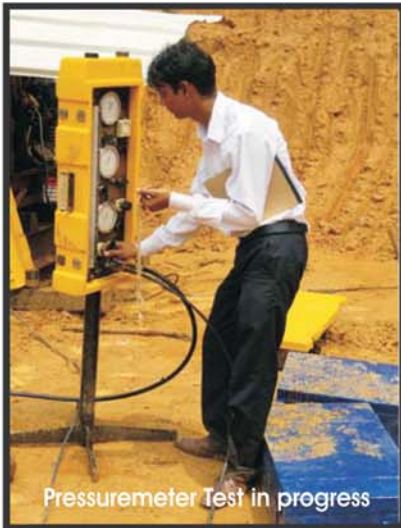
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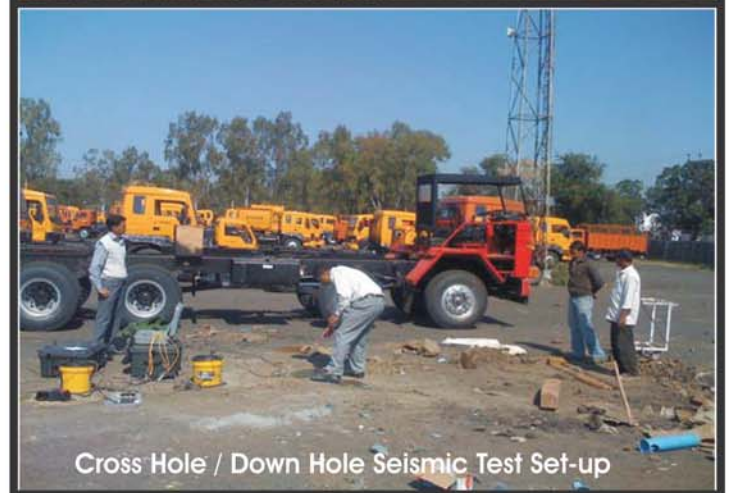
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- Pressuremeter Test
- Static & Cyclic Plate Load Test
- Static & Cyclic Pile Load Test
- Field Permeability & Percolation Test
- Plate Load Test
- In-situ Vane Shear Test
- Block Vibration Test
- Geological Appraisal of Sites

2. Geophysical Investigations

- Cross-hole and Down-hole Seismic Test
- Electrical Resistivity Test (ERT)
- Seismic Refraction Test (SRT)
- Spectral Analysis of Surface Waves (SASW)

3. Laboratory Testing of Soil and Rock (NABL / ISO:17025 accredited)

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5. Foundation Construction & Ground Improvement

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- Under-reamed Piles
- Stone Columns / Gravel Piles
- Pressure Grouting
- Pile Integrity Test

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REVISED MEMBERSHIP/FELLOWSHIP SUBSCRIPTION RATES

(Effective 01 April, 2012)

MEMBERSHIP/FELLOWSHIP FEES		
	SAARC Countries	Other Countries
1. Individual Membership		
Admission Fee	1000	1500
5 Subscription (refer table-1)		
Donor Membership		
2. Fellowship		
Admission Fee (Regular for conversion from LM)	1500	3000
Life subscription (refer table 2)		
Direct Admission (Fresh eligible Applicants)*	5000	10000
3. Institution Membership (Annual)	7500	10000
Institution Membership (10 years)	60000	80000
4. Associate Membership (Annual)	9000	12000
Associae Membership (10 years)	75000	100000
5. ISSMGE Membership for a block of 4 years payable in full (2014-2017)	8000	20000
6. Advertisement Rate for IGS News (1 insertion)	8500	20000
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Note: Application form can be downloaded from IGS website : www.igs.org.in

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26-30	5000
31-35	4500
36-40	4000
41-45	3500
46-50	3000
51-60	2800
60 Above	2500

Table-2

FEE FOR LIFE FELLOWSHIP

Age (Birth year)	One Time (Rs.)
36-40	10000
41-45	9000
46-50	8000
51-60	7000
60 Above	5000
Donor Membership	25000
Donor Fellowship	30000

ATTENTION IGS MEMBERS

**Members, please send your email ID and mobile number
to the IGS Secretariat in the following format**

Name:		Email ID:	
Membership No:		Mobile No:	

IGS Secretariat will update the above information in the database, and use the same for future correspondence, in addition to the use for the election purpose. Please hurry and sent above information at the earliest.

We also request the members to give their ideas if any on the election reforms to the email ID: igsmain@vsnl.net by April 30, 2012.

Prof. Chandan Ghosh
Hon. Secretary



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