



Advisors

Dr. Varesh Sinha
Chief Secretary, Government of Gujarat

Shri. S.J Haider
Secretary, Department of Science & Technology (DST, GOG)

Smt. Anju Sharma
CEO, GSDMA

Invited Speakers

Prof. C.V.R. Murthy, IIT Jodhpur

Ms. Alpa Sheth, Advisor, GSDMA

Prof. V. M. Patel, SVBIT

Prof. C. S. Sanghvi, L.D. Engg. College

Prof. R. Pradeep Kumar, IIT, Hyderabad

Prof. Antonella Peresan, Italy

Prof. Friedemann Wenzel, Director, KIT

Mr. Fumio Kaneko, OYO Corporation

Dr. Laliana Mualchin, USA

Dr. Jens-Uwe Klügel, ETH, Zurich

Dr. Eng. Matsutaro SEKi, Bldg. Res. Ins., Tokyo, Japan

Eng. Maurizi INDIRLI, Italy

Eng. Giancarlo GIULIANI, Italy

Invited Abstracts

The invited abstracts should be typed in A4 size page in MS Word, Times New Roman, Font 12, line spacing 1.5. The title of the abstract should be in Times New Roman, font 14, bold, centered aligned followed by authors' name, affiliations, and email of corresponding author. Figures, if necessary, should be accommodated on the same page. The abstract should be sent on the email vibrantaes2015@gmail.com on or before **15th December, 2014**.

Participants

- ◆ 100 - Students, Research Scholar
- ◆ 50 - Faculty
- ◆ 10 - Foreign Delegates
- ◆ 50 - ISR
- ◆ 100 - Govt. Officials
- ◆ 100 - Civil Engineers
- ◆ 100 - Real Estate Industry
- ◆ 100 - Structural Engineers
- ◆ 100 - Architects

Important Deadlines

Abstract Submission Deadlines : 15-12-2014

First Circular : 01-10-2014

Second Circular : 01-11-2014

Registration Deadline : 15-12-2014

National Advisory Committee (Suggested)

Dr. Sudhir Jain
Director, Indian Institute of Technology, Gandhinagar

Dr. Harsh Gupta
National Geophysical Research Institute

Prof. C.V.R Murty
Director, Indian Institute of Technology, Jodhpur

Dr. A. S. Arya
Member, Bihar State Disaster Management Authority, Bihar

Prof. T. G. Sitharam
Professor, Indian Institute of Science, Bangalore

Dr. D.K. Paul
Professor (Retd.) IIT Roorkee

Dr. V. P. Dimri
Distinguished Scientist, National Geophysical Research Institute, Hyderabad

Prof. J. R. Kayal
Visiting Professor, Institute of Seismological Research, Gandhinagar

Dr. A. K. Singhvi
Outstanding Scientist & Dean, Physical Research Laboratory

Dr. B. K. Bansal
Advisor, Ministry of Earth Science, New Delhi

International Advisory Committee

Dr. G. F. Panza
Professor at DMG - University of Trieste, Abdus Salam International Center for Theoretical Physics (ICTP) - SAND group Trieste

Dr. Friedmann Wenzel
Professor, Karlsruhe Institute of Technology

Mr. Fumio Kaneko
OYO International

Dr. Walter Mooney
Research Geophysicist, United States Geological Survey (USGS)

Dr. Susan Hough
Seismologist, United States Geological Survey (USGS)

Contact Details

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Department of Science & Technology
Government of Gujarat

International Symposium on Reducing Earthquake Losses

and Advances in Earthquake Science-2015

5-6th Jan-15



Invitation

- ◆ It is a great pleasure for the organizers to invite you to attend and contribute to the International Symposium on Advances in Earthquake Science: Reducing Earthquake Losses during 05 – 06 January 2015 in Ahmedabad at Ahmedabad Management Association (AMA). Purpose of the Symposium is to propagate new knowledge on earthquake resistant constructions and develop synergy between seismologists, civil engineers, structural engineers, architects, builders and various agencies involved in earthquake research. Following Topics will be covered during the Symposium:

Seismology

- ◆ Observational Seismology (Introduction to Earthquakes, past earthquakes and its effects)
- ◆ Site characterizations and Site amplification
- ◆ Seismic Hazard assessment, Earthquake Ground motion modeling, New findings in seismic hazard assessment, Seismic Coefficient and Response spectra, Design Spectra, Seismic Microzonation

Engineering Seismology

- ◆ Geotechnical Engineering, Soil response to earthquakes, Liquefaction and remedial measures
- ◆ Soil structure interaction and Dynamic Analysis
- ◆ Tall structures and Earthquakes
- ◆ Behavior on Confined masonry
- ◆ Earthquake behavior on vernacular buildings
- ◆ Seismic Design Philosophy and BIS code requirements
- ◆ Construction best practices for earthquake resistant structures
- ◆ Structural Health Assessment & Retrofitting
- ◆ Industrial approach case studies

Symposium Theme

- ◆ Due to Bhuj earthquake of 2001 (Magnitude 7.7) it was realized that damage due to large earthquakes could be upto 300km distance. It was also realized that some buildings collapsed but not others. This is found to be primarily due to improper structural designing. In some areas geotechnical conditions and geological basin structure could be additional contributory factors. The studies done in over a decade have shed important light which will be highlighted for better earthquake resistant designing.
- ◆ The new seismic Hazard and Microzonation studies indicate higher hazard than the national code for 1-3 storey buildings. Buildings near the fault zones need to be assigned importance factor of 1.5-2. New detail seismic hazard map and shear wave velocity map for Gujarat will be presented. It is found that it is safer to build sky scrapers in Ahmedabad but not in Kachchh. Such aspects will be discussed. The results of new studies of soil structure interaction, structural dynamics and seismic design philosophy vis-à-vis BIS codes will be highlighted. Now the techniques are available to measure the natural period of high rise buildings. Temporal change in natural period reflects deterioration of the building strength. Such aspects will be illustrated.
- ◆ The municipal laws of structural designing are old and not enforced. Scheme to frame new laws and mechanism to enforce them will be discussed

Gandhinagar

- ◆ Gandhinagar is the capital city of Gujarat. The city is quiet, spacious and green. Gandhinagar is located on the west central point of the Industrial corridor between Delhi, the Capital of India and Mumbai, the capital of Maharashtra. Gandhinagar has an average elevation of 81 metres. The city sits on the banks of the Sabarmati River, in the north-central-east Gujarat. From November to February, the average maximum temperature is around 29°C (85°F), the average minimum is 14°C (57°F) and the climate is dry.

About ISR

The Institute of Seismological Research (ISR) under the Science and Technology Department, Government of Gujarat is functioning from 2006. ISR is the only institute in India fully dedicated to seismological research and is considered as a premier international institute. The ISR is engaged in the following Programs.

- ◆ Earthquake monitoring program
- ◆ Crustal Deformation Study by GPS Measurements
- ◆ Microzonation Program
- ◆ Earthquake Prediction Research
- ◆ Earthquake Hazard Assessment
- ◆ Tsunami Modeling
- ◆ Geophysical Surveys
- ◆ ISR has carried out investigations for various

Organizers

Co-Organizers:

- ◆ Department of Science and Technology, GOG (DST)
- ◆ Gujarat State Disaster Management Authority (GSDMA)
- ◆ Gujarat Institute of Disaster Management (GIDM)
- ◆ Pandit Deendayal Petroleum University (PDPU)
- ◆ Shankersinh Vaghela Bapu Institute of Technology (SVBIT)

Platinum Partners:

- ◆ MoES, CREDAI, GIHED, GICEA, structural Engineers Association, Ind. Geotechnical Soc., Civil Engineers Association

Gold Partners:

- ◆ Ambuja Cement, SSNNL, AUDA, VUDA, GUDA, GIFT City

Silver Partners:

- ◆ LD Engg. College, IIT-Hyderabad, IIT-Gandhinagar, Nirma Uni., CEPT, M.S. University, NHPC, MG Science Institute, Ahmedabad.

International:

- ◆ Department of Mathematics and Geosciences (DMG), University of Trieste, Italy
- ◆ Geophysikalisches Institut (GPI), Karlsruher Institut für Technologie, Karlsruhe, Germany;
- ◆ OYO International, Japan

Registration Form

Symposium on "Reducing Earthquake Losses" and Advances in Earthquake Science-2015

Name : _____
Organization : _____
Designation : _____
Qualification : _____
Experience : _____
Contact No : _____
E mail ID : _____
Address : _____

Registration Fee:

Delegate : Rs. 5000

Student : Rs. 1000

Foreign Delegate : US\$100

Do you require accommodation through organizers

Tentative arrival Date : _____

Tentative departure date : _____

Payment Details : _____

Cheque/ DD no : _____

Date : _____

Bank : _____

Branch : _____

For foreign delegates:

Passport Details : _____

Passport No. : _____

Place of Issue : _____

Date of Issue : _____

Valid till : _____

No. of Previous visits to India : _____

Name and Details of accompanying person....

Certified that the above information is true to the best of my knowledge.

Signature