

BHUKAMP

The Newsletter of EERC
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BHUKAMP



Earthquake Engineering Research Centre
International Institute of Information Technology
Gachibowli, Hyderabad - 500 032, India

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FROM EDITORIAL TEAM...

Welcome to the second issue of Bhukhamp which is being issued by Earthquake Engineering Research centre (EERC) quarterly. Editorial team is very happy to receive feedbacks and suggestions on the first issue which have been incorporated in this issue. This issue gives all the events which have taken in past four months with the involvement of EERC, CASE and its members. Information about new CASE students, new lecturers, first time events, awards and many more are written. So know your department and research center in more detail, lastly if you want any information, details or events which could be of our interest and published through this newsletter that we encourage you send. Suggestions on improving bhukhamp are most welcome.

EDITORIAL TEAM:

*Chenna Rajaram,
Archanaa Dongre,
PV Dilip Kumar,
SK Ali Saheb,
& Ramancharla Pradeep Kumar*

RESEARCH UPDATE**RECENT PUBLICATIONS:**

EERC has published around 75 research papers since 2002. Kindly visit website to know the details. Publication during May-Aug are given below:

1. A book chapter on Research Methodology, Cafet Innova Society, by Neelima Satyam D
2. Book Chapter on Review on liquefaction hazard assessment Earthquake Research and Analysis / Book 3, ISBN 979-953-307-679-8, Intech Publishers, by Neelima Satyam D
3. Book Chapter on Geophysical methods for seismic site characterization in Earthquake Research and Analysis / Book 2, ISBN 979-953-307-273-8, Intech Publishers, by Neelima Satyam D
4. Praneetha Surapaneni and Ramancharla Pradeep Kumar: Assessment of Vulnerability of Installations Near Gujarat Coast vis-a-vis Disturbances, International Journal of Earth Sciences and Engineering, Vol. *, Issue No. *. (Accepted for Publication)
5. Harinadha Babu Raparla, and Ramancharla Pradeep Kumar: Nonlinear Static Large Deformation Analysis of Bare Frames Subjected to Lateral Loads, Indian Concrete Institute Journal, Vol. **, No. **. (Accepted for Publication)
6. Dasari Hima Chandan and Ramancharla Pradeep Kumar: Numerical Simulation of Wind Analysis of Highrise Buildings: A Computational Fluid Dynamics Approach, Indian Concrete Institute Journal, Vol. **, Issue No. ** (Accepted for Publication).
7. Ahmed Hussain, Ramancharla Pradeep Kumar: Effect of Heterogeneities in Soil on Spatial Variation of Peak Ground Acceleration, Journal of Civil Engineering and Architecture, Vol. 4, No.11, November 2010.
8. Lakshmi Tejaswi and Ramancharla Pradeep Kumar: Disaster Mitigation and Management for Andhra Pradesh, India: An Appraisal, International Journal of Earth sciences and Engineering, Vol. 4, Issue No. 3.
9. Ahmed Hussain, Ramancharla Pradeep Kumar: Large variation in PGA due to presence of heterogeneities in the surface soil, Journal of Civil Engineering and Architecture, US 2011. (Accepted for publication)
10. Harinadha Babu Raparla, and Ramancharla Pradeep Kumar: Linear Analysis of Reinforced Concrete Buildings Subjected to Blast Loads, Indian Concrete Institute Journal, Vol. 11, No. 5, April-June 2011.
11. Chenna Rajaram and Ramancharla Pradeep Kumar: Comparison of codal provisions on pouding bewteen adjacent buildings, International Journal of Earthquake Sciences and Engineering, Vol.**, No.** (Accepted for Publication).
12. Neelima Satyam D and Vijaya lakshmi (2011) Landslides Hazard in Manali Region, Himachal Pradesh International Journal of Earth Sciences and Engineering, Vol. 4, Issue No. 3, pp 418-428.

13. Neelima Satyam. D (2011) Site Specific Dynamic Response Analysis of Nuclear Reactor Building on deep sedimentary soils, The 14th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering (May 2011), Hongkong . Paper No: 465
14. K S Rao and Neelima Satyam D (2011) 11th March 2011 Tohoku Tsunami Disaster in Japan Indian Geotechnical Society News Letter, April- June 2011, PP 3-7.

FACULTY CORNER

1. Notable Achievements
2. Honorary Academic Positions
3. Technical Lectures
4. Field Visits
5. New Appointments

NOTABLE ACHIEVEMENTS:

Dr. Ramancharla Pradeep Kumar, Associate Professor and Head of IIIT-H's Earthquake Engineering Research Centre (EERC), was selected to receive the Young Scientist Award from the Indian Concrete Institute (ICI). The award is presented annually to a researcher below 45 years of age and who has excelled in academics, research, publications, and contribution to ICI and society.

Dr. Ramancharla Pradeep Kumar has been elected as Vice Chairman of ICI, AP Hyderabad Centre.

Dr. Ramancharla Pradeep Kumar has become editor of Electronic Journal of Earthquake Sciences published by Indian Society of Earthquake Sciences.

Dr. Ramancharla Pradeep Kumar has been nominated as Member of NDMA's Expert Committee on Crowd Management at Religious Places

Dr. Ramancharla Pradeep Kumar became Member, Board of Studies of Civil Engineering of Malla Reddy Engg. College

Dr. Ramancharla Pradeep Kumar became Member, Board of Studies of National Academy of Construction.

TECHNICAL LECTURES:

By Dr. Ramancharla Pradeep Kumar

August 2011: Strengthening Cyclone shelters, MCR-HRD. (45 Participants)

9 June 2011: Community based disaster management, NIRD. (24 Participants)

9 August 2011: Foundation design for practicing civil engineers, National Academy of Construction, Hyderabad

2 technical lectures (Nanded), Virtual lab review meeting, Nanded one day review meeting

NEW APPOINTMENTS:

Mr. Dilip kumar has joined as a lecturer on 18th August 2011. His areas of interest are Plate Tectonics Modeling, Solid Mechanics, Elasticity, Finite Element Method and Human Values.

<http://case.iiit.ac.in/Dilip.html>



Mr. Chenna Rajaram has joined as a lecturer on 18th August 2011. His areas of interest are structural dynamics, earthquake engineering and analysis and design of concrete structures. This academic year he is floating a new course "CASE Workshop". The main objective of this course is focusing on software tools like STAAD, SAP, MATLAB etc.

<http://case.iiit.ac.in/Rajaram.html>

**NEWS CORNER****RESEARCH SCHOLARS IN NEWS:**

Anthugari Vimala: joined in EERC as a PhD student

Akhila Manne: joined in EERC as a MS by Research student

Chenna Rajaram: Defended his MS by Research thesis on *A Study of Pounding between Two Adjacent Structures* in August 2011. He also joined in EERC as a PhD student

Vasudeo Choudhury: Defended his MS by Research thesis on *Numerical Study of Buried Continuous Pipeline Subjected to Large Ground Deformation* in May 2011.

Archana Dongre: Appeared for *PhD depth qualifier viva* and now writing her thesis

Bhukamp congratulates all the above students.

SUMMER CAMP:

EERC has organized summer camp to the students for B.Tech and M.Tech. This is the first time that we have initiated the summer camp. The main objective of this summer camp is to initiate the students towards research. Also, students get interacted with researchers. Researchers also gave some lectures on their own research areas and some lectures on structural dynamics and structural analysis. Lectures has given by researchers.

Date	Topic	Researcher
23 May 2011	Fault Motion Analysis	Ahmed
26 May 2011	Numerical Modeling of Plates	Dilip
30 May 2011	Soil-Structure Interaction	Sushma
2 June 2011	Pounding of Buildings	Rajaram
6 June 2011	Numerical Modeling of Masonry buildings	Archana
7 June 2011	Vulnerability Assessment of Buildings	Narender
13 June 2011	Seismic Analysis of Dams	Jagan
16 June 2011	Moment Curvature Relationship	Hima Chandan

EXTERNAL PROJECT STUDENTS:

Bachelors and Masters Students from various colleges all over the country have come to Earthquake Engineering Research Centre for their project of duration 3 - 6 months. List of students, their organization and project titles have been mention below:

Name	Institution	Topic
Krishna Veni V	NIT Trichy	<i>Earthquake Analysis of Multi-storey Building</i>
B. Deepthi	NIT Trichy	<i>Earthquake Analysis of Multi-storey Building</i>
G. Deepthi	NIT Warangal	<i>Earthquake Analysis of Multi-storey Building</i>
G. Bhavana	NIT Warangal	<i>Earthquake Analysis of Multi-storey Building</i>
B. Gouthami & D Sumanth	NIT Warangal	<i>Earthquake Analysis of Multi-storey Building</i>
C B K Karthik & T Srujan Kumar	NIT Warangal	<i>Earthquake Analysis of Structure</i>
Sai Nikhil Reddy B & Arjun Srivastav	NIT Warangal	<i>Crash Analysis & Design of Shock Absorbers</i>
Kaustav Sen Gupta & Ajit Kamath	NIT Surathkal	<i>Seismic Resistant Design of Structures</i>
Aditi Singh	SVNIT, Surat	<i>Performance Based Engineering</i>
Bharagavi Podili	Visvesvaraya NIT	<i>Earthquake Analysis of Multi-storey Building</i>
Sreevani	SV University	<i>Behavior of Beam Column Joint under cyclic loading</i>
M Rajesh	SV University	<i>Pushover Analysis</i>
T R K Rao	SV University	<i>Vulnerability Assessment of Tirupati City</i>
Nimisha Chaturvedi	IET Lucknow	<i>Speech Recognition</i>
N Abhinav, J Raghavender & M Jaya Teja	CMR Inst. Of Tech	<i>Seismic Analysis of Bridge</i>
M Satish, J Karunakar, A Ramu & P Shiva Krishna	JBIT, Hyderabad	<i>Earthquake Analysis of Multi-storey Building</i>
J Sindhu	JNTU, Hyderabad	<i>Earthquake Analysis of Multi-storey Building</i>

TRAVEL/FIELD VISITS:**FACULTY:**

Dr. Neelima Satyam been a part of Geotechnical investigation on rock at the proposed powerhouse cavern, at Dikchu hydro electric project, Dikchu, Sikkim.

Dr. Neelima Satyam has presented her paper in 14th Asian regional conference on Soil Mechanics and Geotechnical Engineering (May 2011), Hongkong . Titled “*Site Specific Dynamic Response Analysis of Nuclear Reactor Building on deep sedimentary soils*”

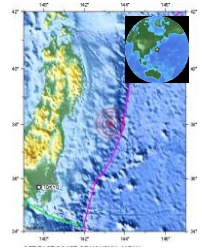
STUDENTS:

Mr. Uday Kumar and Srikanth from PG-2 CASE, carried out field work for “*Seismic Site Characterization of Vijayawada City*” using microtremor test during 27th June 2011 to 23rd July 2011.

EARTHQUAKE NEWS**Magnitude 7.0 - OFF THE EAST COAST OF HONSHU, JAPAN**

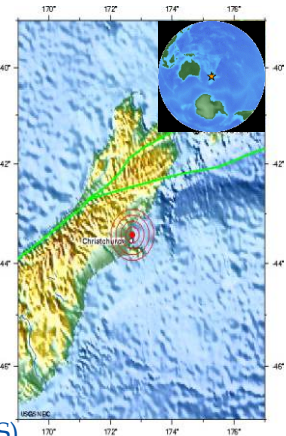
2011 July 10 00:57:12 UTC

The July 10, 2011 earthquake off the east coast of Honshu, Japan, occurred close to the boundary between the Pacific and North American plates, in the subduction zone region where the Pacific plate converges with and sinks beneath Japan and Eurasia to the west. The July 10 event struck just over 80 km to the east-southeast of the March 11 2011 Mw9.0 Tohoku earthquake, near the southern end of major rupture during that larger event. The July 10 earthquake can be considered an aftershock of the March 11 event. (Source: USGS)

**Magnitude 6.0 - SOUTH ISLAND OF NEW ZEALAND**

2011 June 13 02:20:50 UTC

The M6.0 June 13, 2011 South Island, New Zealand earthquake is a continuing part of the earthquake sequence that initiated with the M 7.0 September 3, 2010 Darfield, New Zealand event. The June 13, M 6.0 earthquake is a dominantly strike-slip faulting event near the eastern end of the inferred rupture of the 21 February 2011 M 6.1 earthquake. Both this M 6.0 quake and the previous M 6.1 event have an inferred fault plane striking approximately east-northeast.

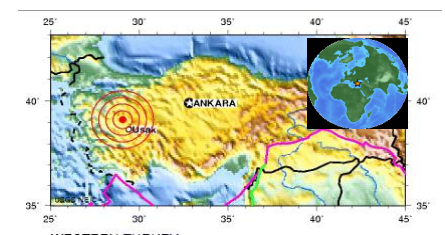


This latest earthquake, similar to the February 21 event, is close to the main population centers of Christchurch, New Zealand. This region has suffered significant casualties and damage to buildings, infrastructure, and lifelines from a series of events particularly since the February 21 earthquake. (Source: USGS)

Magnitude 5.8 - WESTERN TURKEY

2011 May 19 20:15:24 UTC

Turkey is a tectonically active region that experiences frequent destructive earthquakes. The shock of May 19, 2011, occurred in a broad area that is characterized by north-south tectonic extension, with earthquakes being produced by normal-faulting or strike-slip faulting. Preliminary analysis of seismographic data imply that the earthquake occurred as the result of slip on a normal fault that trends approximately east-west. The epicenter is 40 km west of the epicenter of the magnitude 6.9 Gediz earthquake of March, 1970, which killed over 1000 people, and which also occurred as the result of normal-faulting. (Source: USGS)



CASE NEWS

NEW BATCH STUDENTS

Recently, 17 students have joined in 10th batch of M.Tech program in Computer Aided Structural Engineering after successful completion of written exam and interview.

Standing from left

- ✓ C. Ipsita
- ✓ M. Divya
- ✓ A. Krishna Mohan
- ✓ Pammin Raghu Nandan Vyas
- ✓ G. Sai Krishna
- ✓ P. Bharat
- ✓ Ajay Kumar Sreerama
- ✓ K. Rajesh
- ✓ S. Hemanth
- ✓ Y. Swathi
- ✓ Preeti
- ✓ P V S Neelima

Sitting from left

- ✓ V. Anil Kumar Reddy
- ✓ Yashvaradhan Singh
- ✓ Naseer Ahmed
- ✓ Swajit Singh Goud
- ✓ Venkata Sri Vasudha



Bhukamp congratulates all the above students.

CASE GET-TOGETHER:

EERC family has organized get-together for 10th batch of M.Tech students on 8th August 2011. This is the time where PG-1 CASE students interacted with PG-2 and EERC members. During this interaction new batch students shared their long term and short term goals.



2009-11 PLACEMENTS & EXPERIENCES:

Name	Organization
Divya Tameer	Consultancy and Architects (TCA), Hyderabad
Dushyanth V Babu R	-----
Rupak Ashle	KMC, Jaipur
Lalit Kumar	KMC, Goa
Saranya	-----
Vijaya Lakshmi	SS Consultancy, Hyderabad
Rajesh Chandra	Tameer Consultancy and Architects (TCA), Hyderabad
Rakesh Kapse	Lecturer, Nagpur
Sai Tejesh	Moldtek, Hyderabad
Venkat Das	KMC, Jaipur
Varun Naidu	L&T Ramboll, Hyderabad

TECHFEST:

In collaboration of EERC and CASE, CASE students are planning to host a national level winter school camp.

**Earthquake Engineering Research Centre
International Institute of Information Technology
Gachibowli, Hyderabad-500 032, India.**

What is all about?
If I was able to see a little farther than some others, it was because I stood on the shoulders of giants.
-Sir Issac Newton
Each generation, however, standing on the shoulders of giants who had passed on, reached new heights, glimpsed new horizons and left behind them several marvels that are still standing. And while looking five thousand years were required to discover, and to organise crudely those principles of structural mechanics which the college student of today learns in several weeks.

In spite of having all the information just few clicks away, is college student able to think of creating atleast one marvel in his/her lifetime or able to see problems which are around him/her that needs immediate attention. If you feel that you have zeal and enthusiasm then this camp is for you. In this camp you will be encouraged to work on your dream toward building a new India.

Faculty Co-ordinator:
Ramacharla Pradeep Kumar
Head EERC
Ph No: 040-6653-1318

**build india
A Winter School
Camp
@
IIIT H, 9-22 Dec**

Topics:
- Indian Housing
- Dams
- Heritage Structures
- Nuclear Power Plants
- Historic Monuments
- Earthquake safety of buildings
- Sustainability
- New Technologies in Civil Engineering
- Any other topic....

Important dates:
10 Oct 2011 :Last date for receiving entries
21 Oct 2011 :Declaration of results
9-22 Dec 2011 :Winter School Camp
22 Dec 2011 :Final presentation

Who should participate?
Camp is open to 3rd and 4th year undergraduate Civil Engineering Students.

How to participate?
You need to send two page write-up on any of the topics mentioned. Article must display your innovative thoughts, ideas to solve problems around you.

Selection Criteria:
A panel of 3 experts will read all the entries and make final selection. All the selected students will be invited to IIIT Hyderabad for **Build India: A Winter School Camp for 15 days**. During the camp, students will be provided with literature and a mentor to discuss their ideas and convert the same into a research paper, which will be sent later to an appropriate journal or a conference.

NOTE: There is no fee for participating in the camp. Accommodation and boarding charges will be taken care. However, travel cost should be borne by student itself.

For further details:
log on to : eerc.iiit.ac.in
E-mail Id: buildindia2011@gmail.com

Student Co-ordinator:
B. Uday Kumar : 90106-14321
Swajit Singh Goud : 90525-15905
S. Ajay Kumar : 94909-33444

More Details at : <http://eerc.iiit.ac.in/winter%20school/mainn.php>

OUTREACH ACTIVITIES / EVENTS:

1. A one-day discussion meeting is organized on Concrete Codes of India by IIT Kanpur and IIIT Hyderabad at IIIT Hyderabad on 20 August 2011. About 30-40 selected persons were invited for the meeting from academia and industry, who currently are working directly in the subject of Concrete Structures and have substantive experience and expertise on various facets of the design and construction of RC structures. The purpose of the meeting was to understand the experiences of stakeholders in last ten years, in terms of gap areas, loop holes, shortcomings, additional items required, revisions or corrections needed, etc., in the current concrete codes of India. Also, it was intended to discuss at the meeting a draft proposal of the possible Unified Concrete Code for India.
2. Short course on seismic design of RC high-rise structures during May 12-14 2011.
3. Technical lecture arranged at IIIT Hyderabad on 12th August on Geosynthetics for Practitioners by Dr. G.V.Rao, Professor (Retd), IIT Delhi.





NICEE Seminar on "Earthquake Protection on Buildings in India" EERC(IIIT-H) and NICEE(IITK) has jointly organized two day seminar on "Earthquake Protection on Buildings in India" by Prof. CVR Murthy and Prof. Ramacharla Pradeep Kumar. Nearly 60 participants(including consultants, faculty, designers and students) were attended to this seminar from different parts of the country.

UPCOMING EVENTS:

Short Course on Geotechnical Aspects of Earthquake Engineering is being conducted on 8 - 10 Dec 2011 at IIIT Hyderabad, Organised by Earthquake Engineering Research Centre, IIIT- Hyderabad.

CONTACT INFORMATION

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