

Department of Civil, Structural and Environmental Engineering



# EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

## UNIVERSITY AT BUFFALO STUDENT CHAPTER

ANNUAL REPORT 2009-2010

## Student Chapter of EERI at the University at Buffalo (UB-EERI) General information

## Affiliation of UB-EERI

The parent organization of the Student Chapter of EERI at the University at Buffalo (abbreviated as UB-EERI Student Chapter or UB-EERI) is the Earthquake Engineering Research Institute (EERI).

UB-EERI is headquartered at the Department of Civil, Structural and Environmental Engineering (<u>CSEE</u>) at the University at Buffalo (<u>UB</u>), the State University of New York.

The UB-EERI Student Chapter is recognized as a Special Interest Club by the Graduate Student Association (<u>GSA</u>) of the University at Buffalo.

## Executive Officers 2009 - 2010

President:	Petros Sideris	(psideris@buffalo.edu)
Vice President:	Jose A. Sanchez	(js495@buffalo.edu)
Treasurer:	Daniel Gavahi	(dgavahi@buffalo.edu)
Webmaster:	Ricardo Alberto Ecker Lay	(raecker@buffalo.edu)
Senator/Treasurer:	Konstantinos Oikonomou	(ko24@buffalo.edu)
Senator:	Maikol Del Carpio Ramos	(mdcarpio@buffalo.edu)
Senator:	Juan Bautista Aleman Hernandez	(jbaleman@buffalo.edu)



President: Petros Sideris



Vice-President: Jose Sanchez



**Treasurer:** Dan Gavahi

## Student Chapter of EERI at the University at Buffalo



**Senator:** Maikol Del Carpio



**Senator:** Kostis Oikonomou



Senator: Juan Aleman



Webmaster: Ricardo Ecker

## 2009-10 UB-EERI Faculty Advisor

#### Dr. Gilberto Mosqueda

Associate Professor and Director of Graduate Studies, Department of Civil, Structural and Environmental Engineering, University at Buffalo – State University of New York

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Buffalo, NY 14260-4300
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#### Contact Address

UB-EERI Student Chapter 212 Ketter Hall, North Campus Department of Civil, Structural and Environmental Engineering University at Buffalo – State University of New York Buffalo, NY 14260-4300 U. S. A.

#### **UB-EERI** Website

Our website presents minutes, reports, abstracts, pictures, and additional links and material regarding all our activities. Please visit our website to learn more about each of the activities listed in this report.

webpage: <u>http://gsa.buffalo.edu/eeri/</u>

### Local Professional Contact

Serafim Arzoumanidis Steinman Boynton Gronquist Birdsall 110 William St. New York, NY 10038 Tel: (212) 266-8370 E-mail: serafim\_g\_arzoumanidis@parsons.com

## **UB-EERI Members during 2009-2010**

The majority of the members are registered graduate students in the Department of CSEE at the University at Buffalo (UB) – State University of New York. Some members are graduate students in the Department of Economics, the Department of Education, the Department of Medicine and Biomedical Sciences, the Department of Chemical and Biological Engineering (CBE), etc.

Many of the UB-EERI members are also members or officers of the Graduate Student Association of the Department of CSEE (CSEE-GSA).

The UB-EERI and the CSEE-GSA work together on a number of activities on the UB campus, including the **UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE Seminar Series**, which will be presented later.

No.	Name	Department	Graduate / Undergraduate
1	Abolfath, Ramin	Physics	GRAD
2	Aleman, Juan	CSEE	GRAD
3	Alimperti, Styliani	СВЕ	GRAD
4	Calderon, Jean	Chemistry	GRAD
5	Christovasilis, Ioannis	CSEE	GRAD
6	Del Carpio, Maikol	CSEE	GRAD
7	Ecker, Ricardo	CSEE	GRAD
8	Erdemir, Ersoy	Foreign & Second Lang Educ	GRAD
9	Gavahi, Daniel	CSEE	GRAD
10	Guo, Xuhan	Economics	GRAD
11	Karakosta, Loukia	Medicine and Biomedical Sciences	GRAD
12	Kariniotakis Konstantinos	CSEE	GRAD
13	Koliou, Maria	CSEE	GRAD
14	Mastri, Michalis	Medicine and Biomedical Sciences	GRAD
15	Merry, Brenna L	Education	GRAD
16	Mistriotis Panagiotis	CBE	GRAD
17	Moore, Kimberley	Urban Planning	GRAD
18	Moradinezhad Dizgah, Azadeh	Physics	GRAD
19	Muños Garcia, Ana Luisa	Education	GRAD
20	Mulero, Julie	Education	GRAD
21	Oikonomou, Konstantinos	CSEE	GRAD
22	Oliveto, Nicholas	CSEE	GRAD
23	Ozel, Banu	English	GRAD
24	Panning, Katie	Education	GRAD
25	Roumpanis, Spyridon	Economics	GRAD
26	Sanchez, Jose	CSEE	GRAD
27	Sarlis, Apostolos	CSEE	GRAD
28	Sideris, Petros	CSEE	GRAD
29	Singan, Vikram	CSEE	GRAD
30	Staikos, Dimitrios	Economics	GRAD
31	Tao, Yuna	EE	GRAD
32	Temel, Melih	ISE	GRAD
33	Tsoutsoura Aikaterini	CBE	GRAD
34	Velazquez, Jesus M.	Chemistry	GRAD
35	Wang, Qian	MAE	GRAD
36	Whittaker, Luisa	Chemistry	GRAD
37	Yao, Yabin	Economics	GRAD
38	Yu, Tianyi	Economics	GRAD

39	Zannikos, Kyriakos	School of Management	GRAD
40	Zhang, Yanyan	Economics	GRAD
41	Zhoo, Yihui	CSEE	GRAD

### **Financial Information**

The UB-EERI student chapter is affiliated to the Earthquake Engineering Research Institute, while is also recognized as a Special Interest Club by the Graduate Student Association at the University at Buffalo.

Funding for club activities is provided by the EERI and is \$10 for each member of the club that is also a member of and in good standing with the EERI. The budget provided for the Academic year 2009-10 was \$190. In addition, the club receives support of up to \$500 annually from the Graduate Student Association at UB.

The above support has been used to fund the activities of the UB-EERI student chapter, which are listed below.

## 2009-10 UB-EERI Activities

A major activity of the UB-EERI Student Chapter is the organization of the UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE Seminar Series. This seminar series is co-organized with the CSEE-GSA, the MCEER (formerly known as the Multidisciplinary Center for Earthquake Engineering Research) and the Department of CSEE. This lecture series was established during this academic year and is hosting leading academic researchers and practitioners as well as current and former graduate students.

Apart from this series of activities, the UB-EERI organizes and participates in educational, social and outreach activities, such as a Departmental Poster Competition (CSEE Annual Graduate Poster Competition), annual pot-luck parties, coffee meetings, bowling nights, etc.

Some major events organized by the Student Chapter of EERI at UB are:

## October 2, 2009: UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE Seminar Series

Mr. Graeme Ballantyne, P.E., LEED AP, Senior Engineer at Thornton-Tomasetti, Inc.

San Francisco, CA, gave a presentation on "The Transition from University to

**Professional Practice''**. Mr. Ballantyne is a former student of the Department of CSEE of the University at Buffalo.

> November 11, 2009: 2009-10 UB-EERI General Meeting

The UB-EERI Student Chapter was introduced to the students, while the benefits of becoming s student memer of the National EERI were explaned. New and old students were invited to join both the UB-EERI and the National EERI. The activities of the UB-EERI as well as its contribution to the student life at UB were also discussed.

February 3, 2010: UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE Seminar Series

**Dr. Ioannis Anastasopoulos**, Ph.D., Adjunct Lecturer at the National Technical University of Athens and Honorary Post-Doctoral Research Fellow at the University of Dundee, gave a presentation on "Seismic soil-structure interaction with full mobilization of soil failure mechanisms and uplifting at the soil-foundation interface".

March 18, 2010: UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE Seminar Series

The **2010 EERI Distinguished Lecture Awardee**, **Prof. Sharon L. Wood**, Ph.D., who is the Robert L. Parker, Sr. Centennial Professor and Chair of the Department of Civil, Architectural, and Environmental Engineering at the University of Texas at Austin was invited to give a lecture at the University at Buffalo by the UB-EERI Student Chapter. Prof. Wood's presentation entitled **"The Potential of Ubiquitous Sensing"** investigated possible applications of the current sensing technology in the field of Structural and Earthquake engineering and it was well received by the audience. The major sponsor for this event was the Earthquake Engineering Research Institute (EERI).



Tour at the Structural Engineering and Earthquake Simulation Laboratory (SEESL) of the University at Buffalo.

From Left: Konstantinos Oikonomou, Juan Aleman, Petros Sideris, Prof. Andre Filiatrault, Prof. Sharon Wood, Jose Sanchez, Ricardo Ecker and Maikol Del Carpio



Prof. Sharon Wood with UB-EERI Officers – From Left: Juan Aleman, Petros Sideris, Prof. Sharon Wood, Jose Sanchez, Ricardo Ecker and Konstantinos Oikonomou



Prof. Sharon Wood with students attended this seminar

March 31, 2010: 2010 CSEE Annual Poster Competition

The 2010 CSEE Poster Competition was organized and sponsored by the UB-EERI, the CSEE-GSA, the MCEER and the Department of CSEE.

> April 19, 2010: UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE Seminar Series

Ms. Maria D. Cortes Delgado, M.Sc., Graduate Research Assistant and Graduate Student at the Department of CSEE, gave a lecture on "Development of the University of Puerto Rico at Mayaguez (UPRM) Earthquake Simulator Facility for Dynamic Model Analysis". In this presentation, Ms. Cortes Delgado spoke the design, construction and validation of a small uni-directional electro-hydraulic earthquake simulatior at the UPRM.



**During Ms. Cortes Delgado's presentation** 

> April 21, 2010: UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE Seminar Series

**Mr. John D. Hooper**, PE, SE, Principal and Director of Earthquake Engineering, Magnusson Klemencic Associates Inc., Seattle, WA, was invited by the UB-EERI to give a lecture at the University at Buffalo. Mr. Hooper's presentation entitled **"Project-Directed Physical Testing: Its Importance in Delivering Better Seismic Performance"**. Illustrated how project-directed physical testing has resulted in improving the codes of practice currently used in the United States. This seminar was sponsored by the Earthquake Engineering Research Institute (EERI) through its <u>Friedman</u> <u>Family Visiting Professionals Program</u>.



Mr. John Hooper with UB-EERI officers – From left: Juan Aleman, Maikol Del Carpio, Mr. John Hooper, Jose Sanchez, Ricardo Ecker, Konstantinos Oikonomou and Petros Sideris



Mr. John Hooper with several attendees of his presentation

## May 6, 2010: UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE Seminar Series

Mr. Leo Argiris, PE, SE, Principal and Structural Engineer, ARUP, New York was invited by the UB-EERI to give a lecture at the University at Buffalo. Mr. Argiris' presentation entitled "Regular Structures in an Irregular World" identified the latest trends in architecture and investigated their impact on structural engineering through

several projects undertaken by Arup. This seminar was sponsored by the MCEER (formerly known as the Multidisciplinary Center for Earthquake Engineering Research) of the University at Buffalo.



Mr. Leo Argyris with organizers of his seminar – From Left: Maria Koliou (CSEE-GSA Officer), Maikol Del Carpio, Leo Argiris, Juan Aleman, Ricardo Ecker, Jose Sanchez and Prof. Gilberto Mosqueda

> July 10, 2010: CSEE-GSA / UB-EERI BBQ at Ellicott Creek Park

The CSEE-GSA and UB-EERI organized an picnic at Ellicott Creek Park for their Graduate Students to come together before their summer vacations.

## > July 22, 2010: UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE Seminar Series

**Dr. Oren Lavan**, Ph.D., Faculty of Civil and Environmental Engineering, Technion – Israel Institute of Technology, gave a presentation on **"Contact modeling in the Mixed Lagrangian Formulation (MLF): Towards Progressive Collapse Prediction"**. In his presentation, Dr. Lavan extended the capabilities of the MLF towards prediction of progressive collapse of structures by introducing a new contact element.

All seminars were organized and sponsored by the UB-EERI, the CSEE-GSA, the MCEER and the Department of CSEE, unless otherwise stated. Most of the UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE seminars are webcast and can be attended online.

## Goals for the 2010-2011 Academic Year

- Support and help to improve the UB-EERI / CSEE-GSA / MCEER / Dept. of CSEE Seminar Series by inviting more speakers from both academia and engineering practice.
- Develop an outreach program in collaboration with the CSEE-GSA, the MCEER and the Department of CSEE. Involve local school
- Promote student membership of UB-EERI Student Chapter.

## 2010 UB-EERI Elections (September 15, 2010)

The 2010 UB-EERI elections was the last event of the UB-EERI Student Chapter for the 2009-10 academic year. During this event, the UB-EERI president presented the work his club and invited the students to remain active and involved in all future activities. Feedback was also received to help the new executive officers. The elected <u>Executive Officers for the 2010-11</u> <u>academic year</u> are:

President:	Apostolos A. Sarlis	(aasarlis@buffalo.edu)
Vice President:	Konstantinos Oikonomou	(ko24@buffalo.edu)
Treasurer:	Maikol Del Carpio Ramos	(mdcarpio@buffalo.edu)
Webmaster:	Juan Bautista Aleman Hernandez	(jbaleman@buffalo.edu)
Senator:	Armin Masroor Shalmani	(am249@buffalo.edu)
Senator:	Yasser E. Alzeni	(yealzeni@buffalo.edu)
Senator:	Bismarck N Luna	(bismarck@buffalo.edu)
Past-President:	Petros Sideris	(psideris@buffalo.edu)

#### The **2010-11 UB-EERI Faculty Advisor** is:

### Dr. Andrei M. Reinhorn

Clifford C. Furnas Eminent Professor of Engineering, Department of Civil, Structural and Environmental Engineering, University at Buffalo – State University of New York

Ex-Director, Structural Engineering and Earthquake Simulation Laboratory (SEESL), University

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