





# **UNIVERSITY AT BUFFALO**

# EARTHQUAKE ENGINEERING

# **RESEARCH INSTITUTE**

### **STUDENT CHAPTER**

REPORT

#### 2008 EERI FRIEDMAN FAMILY VISITING PROFESSIONAL:

**DR. RONALD L. MAYES** Simpson, Gumpertz & Heger, Inc. With the generous support of the Earthquake Engineering Research Institute's Friedman Family Visiting Professional Program, Ronald L. Mayes, Ph.D., *Simpson, Gumpertz & Heger, Inc.*, visited the University at Buffalo EERI Student Chapter on April 15 & 16, 2008.

Dr. Mayes' visit to UB started with a "welcome" dinner with a few faculty members and graduate students on the night of his arrival at Buffalo. The second day of the visit started with a tour of the state-of-art Structural Engineering and Earthquake Simulation Laboratory (SEESL) facility at the Department of Civil, Structural and Environmental Engineering (CSEE), led by SEESL Director, Professor A. Filiatrault. The main event of the day was a lecture by Dr. Mayes titled "Base Isolated Addition to 185 Berry Street Building in San Francisco's China Basin." After the lecture, Dr. Mayes had lunch with selected faculty members and representatives of the UB EERI student chapter. Following that, Dr. Mayes had an informal meeting-discussion with graduate students, covering a broad range of subjects and providing an opportunity for personal interaction with the speaker.

Mr. Saeed Fathali, a Ph.D. Candidate in the CSEE department and current president of the UB-EERI Student Chapter, opened the seminar by welcoming the audience, describing the UB seminar series and introducing Dr. Mayes. Dr. Mayes began his presentation with a brief discussion of his career and his professional experience with Simpson, Gumpertz & Heger, Inc. He continued to present an innovative application of seismic isolation that permits the vertical expansion of an existing three story reinforced concrete moment frame building in the China Basin area of San Francisco with the addition of two new stories, while reducing seismic demands by introducing isolation bearings between the existing structure and the addition. The speaker presented the results of the analyses, documented the design process for the application of this unique approach and discussed design issues and details of the isolation system. After the interesting presentation, Mr. Fathali moderated a session of questions and discussion. A generous applause by all participants concluded the seminar.

Dr. Mayes' lecture was the 10<sup>th</sup> seminar of the 2007-2008 academic year in an ongoing seminar series at UB on topics related to structural and earthquake engineering. The purpose of the seminar series is to widen accessibility to timely, technical presentations by students, researchers, visitors and affiliates of MCEER. This seminar series is co-sponsored by the Multidisciplinary Center for Earthquake Engineering Research (MCEER) Network and Education Programs, the University at Buffalo Earthquake Engineering Research Institute Student Chapter (UB-EERI) and the University at Buffalo Department of Civil, Structural and Environmental Engineering (CSEE). Upcoming seminars and past archived seminars can be viewed at the following website: <u>http://civil.eng.buffalo.edu/webcast/</u>.

<u>Prepared by:</u> Antonis Tsitos, 2007-2008 UB-EERI Senator Saeed Fathali, 2007-2008 UB-EERI President



Figure 1: Dr. Ronald L. Mayes during his lecture.



Figure 2:

Dr. Ronald L. Mayes (third from right) at dinner with UB CSEE Professor Andrew S. Whittaker (center) and graduate students.