

# 2015 ANNUAL REPORT

## Great Lakes Chapter

### of the Earthquake Engineering Research Institute

Report Date: March 18, 2016



This report summarizes the membership and activities conducted by the Great Lakes Regional Chapter of the Earthquake Engineering Research Institute during 2015.

#### MISSION & GOALS

The purpose of the Great Lakes Chapter shall be to promote the objectives of the EERI by serving the public and the members of the EERI within the area of the Chapter.

#### MEMBERSHIP SUMMARY

The Great Lakes Regional Chapter had a total of 15 members in 2015.

#### OFFICERS

The Board consisted of the following members:

Role	Name	Affiliation	Email
President	Jason Krohn	Precast/Prestressed Concrete Institute	jkrohn@pci.org
Past President	S. K. Ghosh	S. K. Ghosh Associates Inc.	skghoshinc@gmail.com
Secretary-Treasurer			
Director			

Board meetings were not held in 2015.

#### BUDGET & FINANCIALS

The chapter had two separate banking accounts. An account was setup with First American Bank in the 1990s and had a \$6,187.37 balance. The second account is managed by EERI and has a balance of \$2,422.98. In 2016, the First American Bank has been closed and the balance transfer to the EERI account. There has been no budget except for the \$10 of revenue for each chapter member.

#### CHAPTER ACTIVITIES

##### REGULAR CHAPTER MEETINGS

There were no regular chapter meetings.

##### Workshop on Seismic Design of Diaphragms

The chapter co-sponsored a Workshop on Seismic Design of Diaphragms with the Precast/Prestressed Concrete Institute (PCI) and the Structural Engineers Association of Kentucky (SEAK). This workshop was located in

Louisville, KY on October 14, 2015 and had an attendance of 55 participants. Please see the attached item 2 for an agenda listing the speakers at the workshop.



## COMMUNICATIONS

The goal is to develop a chapter website using the EERI website templates from other regional chapters.

## STUDENT CHAPTER COORDINATION

The chapter sponsored a SAP2000 workshop held at Purdue University on October 17<sup>th</sup>, 2015. The chapter distributed the attached item 1 flyer to its membership.

## ELECTION & ELECTION RESULTS

In 2015, Jason Krohn accepted the position as President of the chapter to replace S.K. Ghosh who will remain a board officer as the Past President. The table below shows the new officers appointed to the Chapter board who took office on May 2015.

Role	Name	Affiliation	Email
President	Jason Krohn	Precast/Prestressed Concrete	jkrohn@pci.org

		Institute	
Past President	S. K. Ghosh	S. K. Ghosh Associates Inc.	skghoshinc@gmail.com
Director			

## 2016 GOALS

### Membership

- Membership target = 30
- Increase membership by 15 members

### Chapter Meetings and Ongoing Activities

Briefly list expected events or activities for the upcoming year.

- Host a Chapter meeting potentially in conjunction with other local association meetings
- Hold Chapter elections per the Bylaws
- Create and maintain website content and
- Add new events/activities throughout the year

### Chapter Initiatives

Recruit more members and establish a complete board of officers per the established bylaws. Coordinate joint activities with student chapters as well as other related regional organizations.

## CHAPTER NEEDS AND REQUESTS FOR THE BOARD OR EERI STAFF

Please indicate if you have any needs such as web content updating, member recruitment support, conference call lines access, budget, staff support, news updates to share in the Pulse, etc.

- Member recruitment support
- Access to website template for new chapter website

## LIST OF ATTACHMENTS

Included at the end of this report are various attachments to supplement the information included above. A list of the attachments is included below:

- Item 1, SAP2000 Workshop flyer
- Item 2, Workshop on Seismic Design of Diaphragms agenda



# SAP2000 WORKSHOP

Saturday, October 17<sup>th</sup> | EERI @ PURDUE  
Speaker: Rob Tovani, Computers and Structures, Inc.



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## COST

Professionals \$50

**Professional attendees may apply for PDH credits,  
which are FREE for EERI members and \$30 for non-members**

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## LOCATION

ARMS Bo61, Neil Armstrong Hall of Engineering  
701 W. Stadium Avenue  
West Lafayette, IN 47907

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## TOPICS

- 8:00 am - **Part I: General Modeling Features of SAP2000**  
12:00 pm
- Material properties linear and nonlinear definitions
  - Section property definitions including nonprismatic
  - Model geometry
    - Joint & Frame modeling
    - Area objects
  - Loading
- 12:00 pm - **Lunch**  
1:00 pm Great Harvest Bread Co. or Janes Gourmet Deli (included in registration cost!)
- 1:00 pm - **Part II: Seismic Analysis using SAP2000**  
5:00 pm
- Equivalent lateral force procedure
  - Modal analysis
    - Eigen vectors / Ritz vectors
  - Response Spectrum analysis
  - Response History analysis
    - Linear & Nonlinear response history
  - Isolated structures
  - Pushover analysis
  - Performance based design

**Computers not provided.**

**Please bring your own laptop to install a demo version to follow along at the workshop.**

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## REGISTER

Register online by October 10th at: <http://tinyurl.com/eerisap2k15>

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## CONTACT

Web: <https://engineering.purdue.edu/EERI>

EERI @ Purdue: [purdue.eeri@gmail.com](mailto:purdue.eeri@gmail.com)

Please use [SAP2k15] in your subject line if emailing us.

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# Workshop on Seismic Design of Diaphragms

October 14, 2015

- 8:00 – 8:15 1. Welcome and Introduction (JJK)
- 8:15 – 9:30 2. Alternative ASCE 7-16 Force Level for Seismic Design of Diaphragms (SKG)
- 9:30 – 9:45 BREAK
- 9:45 – 10:30 3. Detailed Calculations of Seismic Design Force Level, Comparisons of Seismic Design Force Levels (SKG)
- 10:30 – 11:15 4. Precast Concrete Diaphragm Design Methodology ASCE 7-16 Chapter 14 (CJN)
- 11:15 – 12:00 5. Connection Qualification Protocol ASCE 7-16 Chapter 14 (CJN)
- 12:00 – 1:00 LUNCH
- 1:00 – 2:30 6. Diaphragm Design for a Hollow Core Floor in a 5-story Office (NMC)
- 2:30 – 2:45 BREAK
- 2:45 – 4:30 7. Parking Garage Diaphragm Design Example (NMC)
- 4:30 – 4:45 8. Next Steps in Codification (SKG)
- 4:45 – 5:00 9. Discussion (ALL)

## SPEAKERS

- JJK Jason J. Krohn, Precast/Prestressed Concrete Institute
- SKG S. K. Ghosh, S. K. Ghosh Associates
- CJN Clay J. Naito, Lehigh University
- NMC Ned M. Cleland, Blue Ridge Design, Inc.