



Sponsorship Package 2016-2017

Letter from the President

RE: EERI McMaster Student Chapter Sponsorship

Potential Sponsor,

The Earthquake Engineering Research Institute, McMaster University Student Chapter (EERI McMaster) is a student organization within the Department of Civil Engineering at McMaster University. The primary mandate of EERI McMaster is to engage primary, secondary, and post-secondary students in the principles of earthquake and structural engineering. Although primarily civil engineering based, EERI McMaster welcomes and encourages students from all departments and faculties to participate. Our goals include providing unique networking opportunities, yet to be established in Southern Ontario, through guest speakers from industry and academia, and sending an undergraduate team to the annual EERI Undergraduate Seismic Design Competition. We are pleased to announce that our Seismic Design Team placed in the top tier at the 2015 competition in Boston, MA, and were presented the “Spirit of the Competition” award. The location of the competition is new each year, and will take place in Portland, Oregon this year. We depend on private sponsorship for financial support to fund each of these activities. Overall, we had a very successful first year as a student chapter in the EERI community and look forward to an even better 2016-2017 year.

As a sponsor of EERI McMaster, you will help to promote awareness of earthquake engineering disciplines at McMaster University. As the importance of seismic design surges in Canada, it is paramount that engineering students be exposed to such opportunities as they represent the next generation of structural and geotechnical engineers. EERI McMaster is only the second student chapter established in Canada, at a university that holds a strong reputation for research and teaching excellence in earthquake engineering and structural dynamics. As a direct stakeholder to the education of these students, a partnership would be beneficial for both EERI McMaster and your company.

Please refer to the detailed descriptions of the different sponsorship levels attached with this letter. We invite you to show your support for our student chapter and our efforts to encourage interest and participation in earthquake and structural engineering. If you are interested in sponsoring EERI McMaster, or have any questions or conflicts, please contact the undersigned at your convenience.

Sincerely,



Taylor Steele, EIT
President, EERI McMaster University Student Chapter
Ph.D. Candidate, Department of Civil Engineering



EERI McMaster University Student Chapter

Established in 2014 with growing membership and interest, and only the second EERI student chapter in Canada, EERI McMaster consists mainly of graduate students in earthquake engineering and seismic design of structures. Research amongst our individual members varies from concrete durability and resiliency, to the seismic performance of masonry and reinforced concrete shear walls, to seismic isolation and self-centering lateral force resisting systems. This chapter gives our member the chance to meet, network, and share our knowledge during bi-weekly meetings and special events throughout the year. A core focus of our group is to spur interest in science and engineering amongst elementary and secondary school students. Our chapter will also engage students at the undergraduate level in earthquake engineering through activities and events, such as the EERI Annual Undergraduate Seismic Design competition, and guest lectures from academic and practicing professionals at the university.

EERI McMaster is a promising organization moving to improve the education in earthquake engineering at McMaster University.



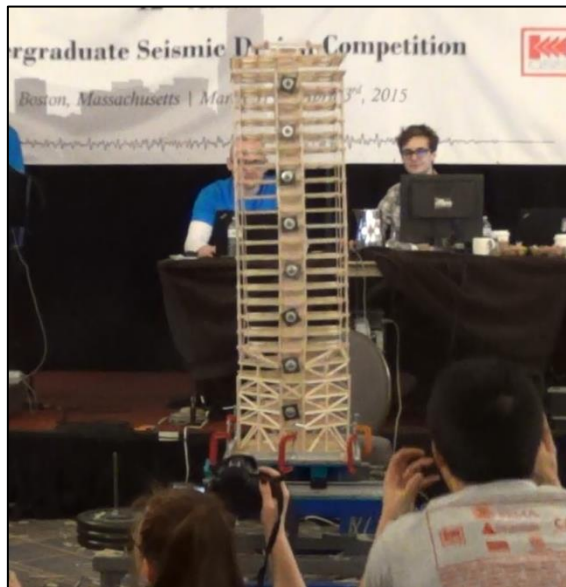
Undergrad Seismic Design Team

The undergraduate seismic design team is comprised of highly motivated students with an interest in the application of structural dynamics to consulting-based engineering. The team competed in Boston, MA in 2015 as the second Canadian team among 37 other teams from around the world. Currently, the team has over 20 members ranging all years of undergraduate studies. The objectives of the design team are to:

- Promote the study of structural dynamics among undergraduates
- Develop an appreciation for consulting engineering and an interdisciplinary skillset
- Provide experiential learning opportunities within structural engineering

Students are given a client with specific requirements, design constraints, financial objectives, and earthquake hazards, and are to design and build a scaled balsa wood model for testing on a shake table. The winning team is determined by a point system, where points are awarded based on the shake table performance, financial optimization, and architectural and structural design.

Five groups comprise the Undergraduate Seismic Design Team: Operations & Management, Materials Testing, Optimization Analysis, Design & Modelling, and Build.



EERI McMaster Seismic Design Team watch as their building meets the ultimate test



Team celebrating their structure's survival of the third and final ground motion

In 2015, the Undergraduate Seismic Design Team representing EERI McMaster was one of only 17 teams to design a building that withstood each of the three strong ground motions, and were also awarded the *Spirit of the Competition Award* by industry sponsors of the event. This was an incredible success for a team who's first showing was in the founding year of the Chapter.

What we can take away from this experience:

- The team demonstrated communication and design skills that are required to provide a sustainable and cost effective structural design;
- The team is excited by opportunities to draw connections between engineering theory and practice, especially in interdisciplinary environments;
- The team gained international exposure for themselves and McMaster University, and had a truly unforgettable experience.

But what can you do to help?

As an industry sponsor, not only will you be helping to provide this talented group of undergraduate students the opportunity to gain design and project management skills unmatched by many other student groups, but you can also act as industry advisors and help them build a network in the professional field. The team will also carry the logo of all sponsors on their poster presentation to create new exposure for your professional brand. This year, the competition is in Portland, Oregon. Funds received by EERI McMaster go toward subsidising the travel, accommodation, and material costs for the Seismic Design Team.

Any and all support from sponsorship will be gratefully acknowledged. *Please refer to the Sponsorship Levels and Information section at the end of this document for more information.*



Primary and Secondary School Outreach

Exposure to new concepts and critical thinking can greatly influence decisions regarding education and career paths. A core focus of the student chapter is to spur interest in science and engineering amongst primary and secondary school students. The student chapter has been offering workshops on the fundamentals of earthquakes and the challenges faced by structural engineers trying to develop sustainable infrastructure. During the workshop, students are asked to build a miniature structure from basic materials that is tested on a shake table. The idea behind the use of a shake table and its ability to recreate past earthquake recordings is described. After the testing, a discussion on the behaviour of the small models takes place, highlighting the consequences of failure and how mass location influences the response.

EERI McMaster organised two outreach events in the past year, including an event with Let's Talk Science, a youth program for kids of all ages interested in STEM subjects. Planning for future events is ongoing.



Guest Lectures at McMaster University

Guest speakers can provide an entirely different perspective on seismic design to students used to receiving training in the class room. Speakers may choose to talk about relevant research, or recent state-of-the-art projects taking place in industry. EERI McMaster held three guest lecture events in the 2014-2015 academic year, including a pair of lectures delivered by David Friedman, P.E. S.E., the owner and past CEO of Forrel/Elsesser Engineers Inc. in San Francisco, California. These events will not only provide networking opportunities between the speaking professional and students, but also within the student body itself. Students will get the opportunity to meet colleagues in different years who share an interest in earthquake engineering and seismic design.

In conjunction with the Friedman Family Visiting Professionals Program, faculty and active industry professionals are invited to McMaster to discuss unique topics and challenges faced by earthquake and structural engineers. The lectures are hosted to enhance the understanding of the multi-disciplinary nature of earthquake engineering and to promote earthquake risk reduction.

Sponsorship Levels and Information

The sponsorship levels and information are presented in the matrix below:

Return\Level	Bronze (\$250)	Silver (\$500)	Gold (>\$1000)
Commemorative Plaque			✓
Logo on Design Team/Member Shirts			✓
Logo on Design Team Banner		✓	✓
Logo on Design Team Poster Presentation		✓	✓
Logo on EERI McMaster Website	✓	✓	✓

All companies will have the opportunity and are encouraged to send a representative to speak at McMaster University about any cutting edge or state of the art seismic design projects that have been completed within the last year.

Contact

Should you wish to become a sponsor of the EERI McMaster Student Chapter events, please contact us using the most convenient option listed below:



www.sites.google.com/site/eerimcmaster



Attn: Taylor Steele, President - 1280 Main St. W, JHE 301, Hamilton, ON L8S 4L7



eerimcmasterstudentchapter@gmail.com

Thank you for your vested interest in EERI McMaster. We hope this is the start of a wonderful partnership between us and your company.