# FRIEDMAN FAMILY VISITING PROFESSIONALS PROGRAM





Visit to University of Concordia: March 10, 2020

This report summarizes the visit of **Mr. David A. Friedman**, Senior Principal, Emeritus CEO & Board Chair Forell/ Elsesser Engineers, Inc. that took place at Concordia University on March 10, 2020.

### ITINERARY OR AGENDA

| TIME                   | AGENDA  |  |  |
|------------------------|---|--|--|
|                        |   |  |  |
| 08:30 am – 9:15 am     | Guest meeting with President Graham Carr (Conference Room GM 801.4)   |  |  |
|                        |   |  |  |
| 09:30 am – 10:00 am    | Guest Reception and Meeting With faculty members (Coffee, Breakfast and Refreshments will be served)  |  |  |
| 10:00 am – 10:15 am    | Welcome Note By: Dr. Amir Asif Dean of Gina Cody School of Engineering and Computer Science   |  |  |
| 10:15 am – 10:30 am    | Overview of EERI Concordia Student Chapter By: Timir Baran Roy (EERIC President)  |  |  |
| 10:30 am – 11:30 am    | The Practice of Structural & Earthquake Engineering Today: 3 Unique Structural Engineering Projects   |  |  |
|                        | By: David Friedman  |  |  |
| 11:30 am – 12:30 am    | Panel Discussion: "Career Advice"  Panelist: Mr. David Friedman- Forell/ Elsesser Engineers, Inc Mr. Richard Frazao- QuakeTek Corporate Dr. Michelle Nokken- Concordia University (BCEE- GPD) |  |  |
| 12:30 am – 12:45<br>pm | Desjardins Bank (EERIC Banking Partner) Lucky Draw for Hockey Game Tickets  |  |  |
| 12:45 pm – 01:45 pm    | Networking and Lunch Break  |  |  |
| 01:45 pm – 02:45 pm    | Lab visit and gathering with EERIC Team (Structural Engineering lab, Aerodynamics lab and Solar Engineering lab)  |  |  |

#### STUDENT CHAPTER VISIT PLANNING COMMITTEE

#### **LEAD ORGANIZER(S):**

- Timir Baran Roy, President EERI Concordia University Student Chapter
- Hasan Ayouby, Vice-President EERI Concordia University Student Chapter
- Bayan Abu Safieh, Undergraduate Coordinator and Board Member, EERI Concordia University Student Chapter

#### VISITING PROFESSIONAL LECTURE OVERVIEW

#### The Practice of Structural & Earthquake Engineering Today & 3 Unique Structural Engineering Projects

We had 52 registered students to the event. We got a great response from the students in regards to the lecture provided by Mr. Friedman and the activities performed during the event.



#### Lecture Abstract

The practicing structural engineer today must not only have a broad understanding of not just structural engineering, but must be knowledgeable about architecture, M/E/P systems, construction delivery methodologies, and the construction process. All projects come with their own litany of challenges and constraints, and the structural engineer is one of the key players in achieving the optimal solution. The project's budget, the selected performance and design criteria, the architectural form, and the operating systems all affect the selection of the appropriate structural materials and lateral force resisting system. Then the analysis must get translated into a design, and the design must clearly and carefully be delineated into construction documents including plans, details, sections and technical specifications, with appropriate attention to sequencing, phasing and constructability. This all gives rise to the notion of today's structural engineer as a "Master Builder," one who can articulate their way through a complex labyrinth of form finding, criteria setting, risk evaluation, design and documentation, and construction (and hopefully not litigation).

#### Professional Bio

David is a Senior Principal, and emeritus President, CEO and Board Chair of Forell/Elsesser Engineers Inc., with over 40 years of professional practice (35 years at F/E!) in structural and earthquake engineering. His strength, gained over the breadth and depth of his career, is a holistic perspective of a projects' planning, design and construction and the collaborative integration of creative structural solutions with architects, engineers and builders. With a specialty in seismic engineering and retrofitting of existing structures, particularly those with historic designation, David has solved numerous structural and earthquake engineering challenges during his career with Forell/Elsesser Engineers. Principal examples of his projects include the base isolation retrofits of San Francisco City Hall and the Asian Art Museum, the adaptive reuse and retrofit for the San Francisco Conservatory of Music, and the seismic safety corrections and remodeling of UC Berkeley's California Memorial Stadium. David is devoted to world-wide seismic risk reduction and is a former director of the Earthquake Engineering Research Institute, and a current director of Build Change. He is also deeply involved in many other civic, philanthropic and not-for-profit Boards including The San Francisco Foundation, SPUR, UC Berkeley Foundation, Jewish Senior Living Group, Faultline Foundation and the United States Resiliency Council (USRC).

#### SUPPLEMENTAL ACTIVITIES

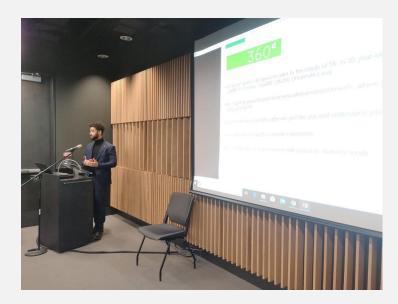
#### Panel Discussion

Professors from the department along with Mr. Friedman and some industrial experts were part of the panel discussion which was oriented to help students in their career opportunities and choices. The advisors answered some questions from the panel moderator and others from interested students.



#### Desjardin Presentation

Desjardin bank, our partner, made a presentation on their student services, their promotions for student accounts referred from EERIC and provided some prizes for the attendees.



#### Lab Visit

The EERIC Team associated the guest on tour to visit the Engineering labs, which includes structural labs, solar engineering lab, and aerodynamics lab.



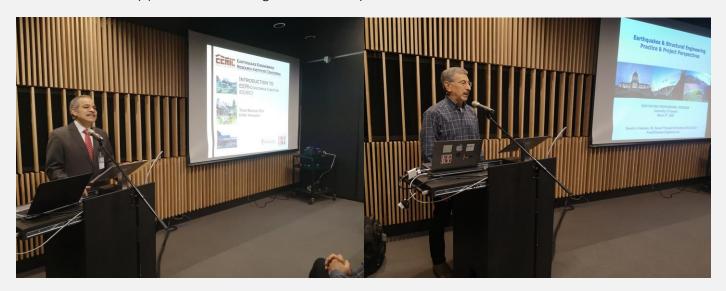
#### Meeting with the President of Concordia University

On behalf of the President of Concordia University, Interim Provost and Vice-President Academic Prof. Anne Whitelaw received Mr. Friedman. The meeting was attended by Prof. Whitelaw, Prof. Bagchi (Chair of the BCEE department), Prof. Asif (Dean of the Gina Cody School) along with the EERIC Board members. Discussions were focused on academic outcomes, future collaboration and the global pandemic situations.

#### RESULTS, FEEDBACK AND LESSONS LEARNED

We had a great acceptance of the event on campus from different parties. The Dean of Engineering and the Chair of the BCEE Department was there to open the event. The president of QuakeTek, who's also an advisor on our board, was part of the panel discussion. Students from the BCEE department shared their views with us

and were very happy with the topic about base isolation that is very unique. The university showed interest in the event, and they promoted it through the university website.



#### **ACKNOWLEDGEMENTS**

EERI Concordia University Student Chapter (EERC) gratefully acknowledges the support of the Friedman Family for sponsoring the travel of Mr. David Friedman through their Friedman Family Visiting Professional Program endowment. EERIC also thanks the Engineering and Computer Science Graduate Association (ECSGA) for sponsoring the food and itinerary during the event. EERIC would like to appreciate the Desjerdin Bank for taking part in the event and organizing a lottery competition for the attendees for the hockey games.

#### 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, i.e. poster for event, sticky notes, banner
- Item 2, agenda for the event
- Item 3, attendee list

| Full Name                        | University              | Major  | Designation           |
|----------------------------------|-------------------------|--|-----------------------|
| Avirup Sarkar                    | Concordia University    | Structural engineering                           |                       |
| Pronob Kumar Ghosh               | Concordia University    | Structure  |                       |
| Saikat Bagchi                    | Concordia University    | Civil (Structural)<br>Engineering                |                       |
| Samia hilal                      | Concordia               | PhD Systems Engineering                          |                       |
| Orkun Arat                       | Concordia University    | Civil Engineering                                |                       |
| Mohammad Nurulain Banday         | Concordia University    | Structural Engineering                           |                       |
| Theodore Potsis                  | Concordia University    | Building, Civil and<br>Environmental Engineering |                       |
| Naved Chanderi                   | Concordia University    | Civil Engineering                                |                       |
| Mostafa Fadaeefath Abadi         | Concordia               | Building Engineering                             |                       |
| Shokoofe                         | Concordia               | Building engineering                             |                       |
| Ghazaleh                         | Concordia               | Civil engineering                                |                       |
| mahtab banihashemi               | Concordia University    | building engineering                             |                       |
| Umer Jamil                       | Concordia University    | Structures                                       | Graduate Student      |
| sunny mali                       | concordia university    | masters in structure engineering                 | Graduate Student      |
| Ulyana Ilnytska                  | Concordia University    | Civil Engineering                                | Undergraduate Student |
| Yasaman Niroumand                | Concordia university    | Civil engineering                                | Graduate Student      |
| Sanketh Shetty                   | Concordia University    | Structural Engineering                           | Graduate Student      |
| Carlo Sparapani                  | Concordia University    | Civil Engineering                                | Graduate Student      |
| Mohamed Algamati                 | Concordia University    | PHD Civil Eng                                    | Graduate Student      |
| aref kasis akel                  | concordia university    | civil engineering                                | Undergraduate Student |
| Rodrigo Jimenez                  | Concordia University    | Civil Engineering                                | Graduate Student      |
| Ivan Pramatarov                  | Concordia               | Structural Engineering                           | Graduate Student      |
| Husain Dohadwala                 | Concordia University    | Structural Engineering                           | Graduate Student      |
| Masoud                           | Concordia               | Structural engineering                           | Graduate Student      |
| Siamak Pejmanfar                 | Concordia               | Civil Engineering                                | Graduate Student      |
| SHAIKH MOHMAD FAIZAN             | Concordia University    | Structure engineering                            | Graduate Student      |
| Liam Crosthwaite                 | Concordia University    | Civil engineering                                | Undergraduate Student |
| Dipesh Donda                     | Concordia University    | Structural Engineering                           | Graduate Student      |
| Hamza Faiz                       | Concordia University    | Civil Engineering                                | Undergraduate Student |
| Sam Bahmanoo                     | Concordia University    | Structural engineering                           | Graduate Student      |
| Xiang li                         | Concordia               | civil engineering                                | Undergraduate Student |
| siamak delir                     | Concordia               | Civil engineering                                | Graduate Student      |
| Zaineb Khalid Al-Maadhidi        | Concordia University    | MAsc. in Civil Engineering                       | Graduate Student      |
| UR VISHKUMAR MAHESHBHAI<br>PATEL | CONCORDIA<br>UNIVERSITY | CIVIL ENGINEERING                                | Graduate Student      |
| SWATHI DINESH                    | Concordia University    | Master of Engineering                            | Graduate Student      |
| Fawaaz Azam Hussain              | Concordia university    | Constructions Management                         | Graduate Student      |
| Thang Ho                         | Concordia University    | Geotechnical                                     | Graduate Student      |
| Raviteja Chilupuri               | Concordia University    | Structural                                       | Graduate Student      |
| Ashutosh Bagchi                  | Concordia University    | Structures                                       | Professor             |
| Fawzi Latosh                     | Concordia               | Associated professor                             | Staff                 |
| Hamid Nourani                    | Concordia University    | Mechanical                                       | Graduate Student      |

| Dr. Khaled Galal           | Concordia University            | Developing Multi-Hazard<br>Resilient Structures | Professor             |
|----------------------------|---------------------------------|---|-----------------------|
| Omar Elmeligy              | Concordia                       | BCEE  | Graduate Student      |
| Abdulelah Mansoor Al-Ahdal | Concordia                       | Structural Engineering                          | Graduate Student      |
| Inamullah Shariff          | Concordia University            | Civil Engineering                               | Graduate Student      |
| Nazim Attaf                | Concordia university            | Civil engineering                               | Undergraduate Student |
| Mohammad Faiz Hassan       | Concordia University            | Construction Management                         | Graduate Student      |
| Gurinderbir Singh sooch    | ECOLE Polytechnique<br>Montréal | Structural Engineering                          | Graduate Student      |
| Zannatul Mawa Dalia        | Concordia University            | Civil engineering                               | Graduate Student      |
| Faruk Ahmed Sakib          | Concordia University            | Civil Engineering                               | Graduate Student      |
| Omar Gouda Mohamed Mohamed | Concordia University            | Civil Engineering                               | Graduate Student      |
| YIFENG HU                  | concordia university            | civil engineering                               | Graduate Student      |





"All projects come with their own litany of challenges and constraints, and the structural engineer is one of the key players in achieving the optimal solution"

Friedman D. 

## EARTHQUAKE ENGINEERING RESEARCH INSTITUTE CONCORDIA CHAPTER

In collaboration with



Welcome you in the

# Guest Speaker Seminar and Networking Event

(Friedman Family Visiting Professionals Program)

March 10, 2020

CONCORDIA UNIVERSITY

9:30 am - 3:00 pm (Room: MB 9 EG)

1450 Guy St, Montreal, QC H3H 0A1



#### David Friedman, SE Senior Principal, Emeritus CEO & Board Chair Forell/Elsesser Engineers, Inc.

# THE PRACTICE OF STRUCTURAL & EARTHQUAKE **ENGINEERING TODAY-3 UNIQUE STRUCTURAL ENGINEERING PROJECTS**

Personals from the industry and academia will join

The Career Advice Panel Discussion







