

Université Laval ACI student chapter



CRIB
Étudiants

- Students belong to a research centre : *Research Centre on Concrete Infrastructures (CRIB)*.
- The CRIB helps financing some of our activities.



Come see the CRIB's booth in the Exhibit Hall (#612)!



- 2nd ACI@UL annual conference on concrete



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Chapter Reports



David A. Lange during the opening ceremony in Monterrey, Mexico



Special guests at the opening dinner held by Holcim México included, front row, from left: Ramón Carrasquillo, Carrasquillo y Asociados; Francisco García, Mexican Society of Structural Engineering; David A. Lange, ACI President; Dimitri Feys, Missouri S&T; and José Alfredo Rodríguez, Holcim México; second row, from left: Pedro L. Valdez, FIC UANL; Alejandro Durán, UANL; José Lozano, Northeast Mexico Chapter – ACI; Jorge Martínez, Central and South Mexico Chapter – ACI; Juan Carlos Rocha, Northwest Mexico Chapter – ACI, and Javier Góngora



Juan Carlos Rocha, President, Northwest Mexico Chapter – ACI; David A. Lange, ACI President; and José Alfredo Rodríguez, Innovation Manager at Holcim México, with the students from the University of Sonora, first-place winners of the student competition.

The ACI Concrete Convention and Exposition – Spring 2019 in Québec City, QC, Canada.

In addition, technical visits were made to relevant projects under construction in the city of Monterrey, including a tour of Holcim México's concrete plant in Monterrey.

Closing session

During the closing ceremony, ACI President Lange highlighted the prominent level of achievement reached by UANL in the field of concrete technology and thanked all the participants for their enthusiasm and interest throughout the event. He expressed that these kinds of events provide a solid foundation for future professionals, help strengthen the link between the industry and educational institutions, and increase the interest of engineering professionals in digging deeper into the field of construction materials.

Université Laval Student Chapter – ACI Participates in Construction Site Tour

In late summer 2018, Université Laval Student Chapter – ACI, Québec City, QC, Canada, held a construction site tour in the Montréal region. The tour was organized in partnership with the Research Center on Concrete Infrastructure (CRIB) student chapter. The tour began with a visit, led by the group Signature sur le Saint-Laurent (SSL), to the famous new Champlain Bridge, the first Canadian bridge with a life expectancy of 125 years. Students first viewed the east abutment before visiting the bridge's main pillar. SSL invited the students to speak with its concrete specialist for the project. This was very informative since it allowed them to better understand the concrete challenges of such a big project. For instance, they learned that more than 150 different concrete mixture designs were produced for the construction of the new Champlain Bridge.



Visit to the new Champlain Bridge's main pillar

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Students walking on the new Turcot interchange while the old structure (left and right) is still in use

The second visit of the day was to the Turcot interchange, one of the main interchanges in Montréal, conducted by the Québec Department of Transportation. The interchange is located on the south shore of Montréal as a continuation of the Champlain Bridge. During the visit, the engineer in charge of the construction contract explained the main challenges of building a new interchange while keeping the traffic on the former structure. The new structure was built below the former one. The plan is to allow traffic flow on the new structure while destroying the old one right above it later.



View of the Saint-Jacques Bridge before installation of the main pillar

The third and last visit of the tour took place at the Saint-Jacques Bridge, an architectural signature of the Turcot interchange. This bridge crosses the northern highway of the Turcot interchange, joining both ends of Saint-Jacques Street. This steel bridge was welded together on the street before being moved onto the abutments with a sliding system, because using a crane was impossible due to the presence of the highway under the bridge. Then, the main pillar (not in place during the visit) will be built by stacking steel blocks together starting from a structural midpoint built in the steel bridge.

Overall, the event was a success. The tour was useful for the students, showing how challenging building new structures can be, not only in terms of concrete mixture designs but also in terms of dealing with existing traffic. The Université Laval Student Chapter – ACI is planning another instructive visit such as this one in the coming summer to offer a deeper knowledge of practices and development in the field of concrete to its members.

Ryerson University Holds Technical Seminars for Students

Ryerson University Student Chapter – ACI, located in Toronto, ON, Canada, introduced students to the value of ACI membership with technical seminars during the fall semester. The inaugural meeting focused on the role of the student chapter, ACI competitions, ACI Foundation scholarships and fellowships, and how to get involved.

During the first seminar, Khaled Sennah, Chair of the Ryerson University civil engineering department, gave the keynote presentation titled "Vehicle Crash Test on a Developed TL-5 GFRP-Reinforced Concrete Bridge Barrier." The second seminar organized by the student chapter featured Medhat Shehata, Professor in structural engineering and teaching Chair at Ryerson University, who discussed "An Innovative Use of Recycled Concrete Aggregate."

The student chapter is planning to coordinate future competitions and social activities in collaboration with the local concrete industry.

The Ryerson student chapter is sponsored by the Ontario Chapter – ACI. To learn more about activities in this region, visit www.aciontario.com.



Pictured with Chris Christidis (left) and Bryan Schulz (right) is Farzed Kouroshnezhad, the recipient of the Ontario Chapter – ACI \$1000 scholarship award



Concrete Convention and Exposition

- Lunch conferences

➤ **Eric Samson P. Eng. PhD (SIMCO)**



➤ **Anne Castaigne P. Eng. (DeWALT)**



- 2019 edition of the CRIB student symposium



- Concrete Lab visit : Montreal's Polytechnique



- 3rd ACI@UL annual conference on concrete (6 speakers including 3 CRIB professors);
- Construction site visit at a mining residual park in Abitibi:

