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FIRST QUARTER 2019

VICE PRESIDENT'S DINNER AND BRANCH AGM

Wednesday, January 23, 2019

The Richmond/Delta Branch's Annual General Meeting was attended by 20 people, including three staff members from Engineers and Geoscience BC: Tim Verigin, Volunteer Coordinator, Tony Chong, P.Eng., Chief Regulatory Officer and Deputy Registrar, and Harlan Kelly, P.Eng., Vice President.



All the 2019 Branch executive positions were filled, except the Vice-Chair.

Engineers and Geoscientists BC Vice President, Harlan Kelly, P.Eng., spoke about the various initiatives taking place at the association and how they're making a positive impact on the professions of engineering and geoscience.

Tony Chong, P.Eng., Chief Regulatory Officer and Deputy Registrar at Engineers and Geoscience BC, discussed the implementation of the *Professional Governance Act*. He reviewed the final report recommendations from the Professional Reliance Review and highlighted changes related to the *Act*.



PATH TO PROFESSIONAL LICENSURE

Monday, February 25, 2019

During the Path to Professional Licensure presentation, Mr. Jason Ong, Associate Director of Engineering Admissions at Engineers and Geoscientists BC, discussed the benefits of becoming a registered P.Eng. and/or P.Geo. with the association. His presentation included information on application forms, laws and ethics, examples of applicable experience, how to record and document experience, and more.

Jason explained the current requirements and the EIT/GIT Experience Reporting System and process, which changed considerably over the past few years. 40 people attended the seminar, which was organized by Nima Moazen, P.Eng. and Ron McQuat.

NEGM: POPSICLE STICK BRIDGE BUILDING COMPETITION

Monday, March 9, 2019

As part of National Engineering and Geoscience Month (NEGM), the Branch hosted a Popsicle Stick Bridge Building Competition. The challenge was to construct a bridge that could support 18 pounds of downward force using only popsicle sticks and paper glue. The competition was held at Richmond Public Library and encouraged kids and youth to engage in creativity and innovation, the ethos of engineering.

NEGM is an annual celebration of engineering and geoscience in Canada. The goal of the event is to raise awareness of the engineering and geoscience professions, showcase career choices in the fields, and promote the many ways in which engineering and geoscience relate to our everyday life.



SECOND QUARTER 2019

PUB NIGHT – SOCIAL & NETWORKING

Friday, April 3, 2019

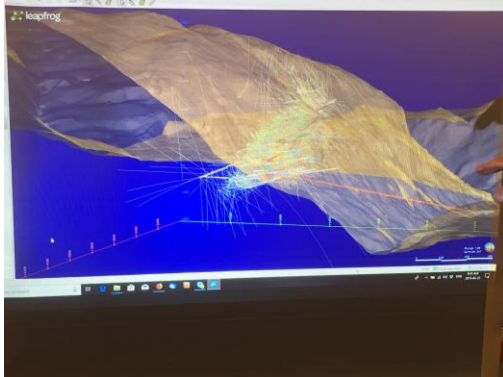
Branch Vice-Chair Nima Moazen, P.Eng., hosted a Pub Night Out – a social and networking event at The Pint Public House in Vancouver. The event was an opportunity for engineers, geoscientists, and other industry stakeholders, to connect and learn about the happenings taking place throughout the industry.

These events are crucial for the sharing of information and the generation of new and exciting projects within the engineering community. More than 30 people attended the event, which was organized by Branch executives Damian Williams, Nilufar Islam, and Dor Zohar.

DELTA TRADES & TECHNICAL CAREER FAIR

Saturday, April 25, 2019

Branch executives Earl Masarsky and Ron McOuat attended at the Delta Trades and Technical Career Fair at the Sungod Arena in North Delta. Grade 7 to 12 students from the Delta School District attended and had the opportunity to talk to practitioners in various fields. The Richmond/Delta representatives talked to 150 to 200 students that expressed interest in careers in engineering and geoscience. The Richmond/Delta Branch has participated in this annual event for the past five years.



CITY OF RICHMOND PUBLIC WORKS OPEN HOUSE

Saturday, May 11, 2019

On May 11, the City of Richmond organized the annual Richmond Public Works Open House at the Richmond Public Works Yard. This was the seventh consecutive year that the Branch participated in the event. As part of the Branch's outreach program for children and teens, the Branch set up a booth and provided information on engineering and public works to attendees.

Over 300 children and adults visited the open house and participated in the activities set up at the Branch's booth. During their visit, children learned about the various engineering and geoscience fields as well as concepts of design, measurement, and testing through conversation with our Branch executive members and reading materials. Hundreds of various space frame structures were also built by kids aged 3 to 15 using marshmallows and toothpicks.





The Executive Committee would like to extend a sincere thank you to the City of Richmond for facilitating and supporting our attendance at the event, as well to the volunteers who passionately interacted with the attendees. Special thanks also goes to Ron McOuat, P.Eng., Branch Chair, Dr. Hamid Ghanbari, P.Eng., Past Branch Chair, and volunteers Damian Williams and Ashwin Ramasubbu, who actively worked on planning, organizing, and attending our Branch booth last year.

DINNER PRESENTATION: IONA WASTEWATER TREATMENT PLANT UPGRADE

Mr. Fred Nenninger, P.Eng., presented a very informative session on the Iona Wastewater Treatment Plant Upgrade. The presentation started with a short history of the Plant, which has served the City of Vancouver's sewerage area since the early 1960s. The treatment plant is being upgraded to meet the required provincial and federal effluent regulations for secondary level treatment by 2030. The event was attended by 21 members of Engineers and Geoscience BC. Volunteers for the event were Mr. Nima Moazen, P.Eng., Dr. Hamid Ghanbari, P.Eng., and Mr. Ron McOuat, P.Eng.



DINNER PRESENTATION: ENGINEERING MARVELS IN CHINA

Saturday, June 13, 2019

The Branch hosted a dinner presentation on Engineering Marvels in China. Delivered by Dr. Diana Lary, the fascinating presentation delved through China's incredible history of mega-structures; starting with Dujiangyan in Sichuan, a water diversion project built 2,000 years ago that still functions to this day. Dr. Lary is a Professor Emerita of History at the University of British Columbia (UBC) and specializes in modern Chinese history. Her current research interests include Chinese migration, Canada- Hong Kong relations,



Chinese military, the impact of warfare on Chinese society, regionalism in China, and colour symbolism in Chinese culture.

THIRD QUARTER 2019

PANEL DISCUSSION: DIVERSITY IN ENGINEERING

Friday, September 18, 2019

In a joint effort with UBC, the IEEE Student Branch hosted a panel discussion on diversity in engineering and how inclusion - or lack thereof - affects the industry.

Sitting on the discussion panel were Dr. Sheryl Staub-French, Professor of Civil Engineering at UBC, Dr. Neda Moazen, Power Market Analyst & Data Scientist at Transalta Corp. Energy and Marketing, Kati Tamashiro, P.Eng., Transportation Engineer with the City of Vancouver, and Katie Au, P.Eng., Protection, Control and Automation Engineer at BBA – Vancouver Expertise Centre.



The key takeaway from the discussion was that by not having diversity, the engineering field is missing out on many great opportunities as these groups have different perspectives and provide unique solutions that may not necessarily otherwise arise.

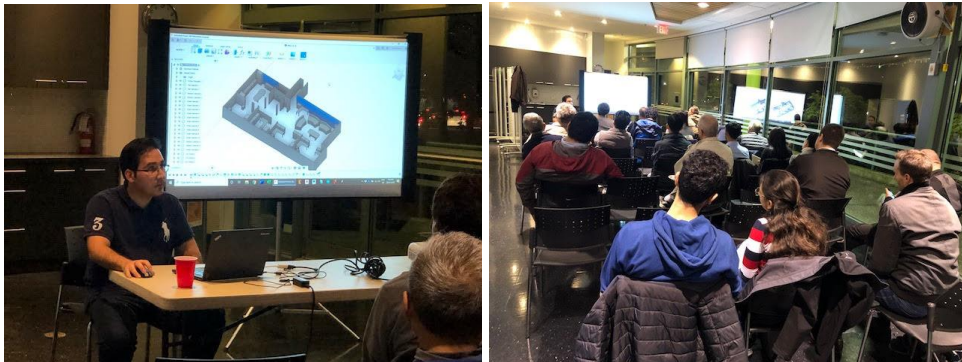
The event was attended by more than 35 people and was a success, thanks to the efforts of the 10 volunteers from UBC and Richmond/Delta's Nima Moazen, who organized the event with the support of Dr. Hamid Ghanbari.

FOURTH QUARTER 2019



3D MODELLING SEMINAR

Richmond/Delta Branch volunteer Fardin Barekat conducted a 3D modelling seminar at the Richmond Public Library. Fardin used his expertise with the Autodesk Fusion 360 software to demonstrate how 3D modelling is used in the engineering world. The event was attended by 27 people including members of the Richmond community, students, and library staff.



DINNER PRESENTATION: MONITORING DEBRIS IN OUTER SPACE

Presented by Jerry Lim of MDA Systems Ltd., the Monitoring Debris in Outer Space presentation highlighted the various challenges associated with space surveillance.

Space is congested due to the ever-increasing amount of space objects orbiting earth; more than 20,000 objects larger than 10 centimetres are currently orbiting the earth and an estimated 300,000 items between one and 10 centimetres are currently in orbit.

Canadian satellite missions support a wide variety of applications and provide ongoing services to Canadian citizens, commercial entities, and government agencies. These services include telecommunications, earth observation, remote sensing, and space surveillance. Disruption and/or loss of these services would impact the ability of Canada to respond to emergency situations and meet commitments to allies. As a result, it is important to take measures to safeguard these assets against space objects and in-orbit threats.

MDA has been active in space surveillance since the launch of Sapphire in 2013.

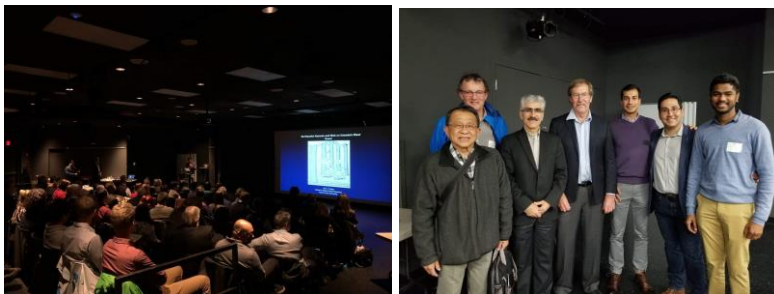


Nima Moazen, P.Eng., was the event MC, while Douglas Yee, P.Eng., and Philip Chow, P.Eng., helped at the event.

DINNER PRESENTATION: LIVING ON THE EDGE - THE RISK OF A DAMAGING EARTHQUAKE ON BC'S SOUTH COAST

Presented by Professor John Clague, Living on the Edge – the Risk of a Damaging Earthquake on BC's South Coast was a captivating presentation that discussed the likely effects on Metro Vancouver of very rare, plate-boundary earthquakes and more common, magnitude 6-7 earthquakes.

Geoscientists working on the west coast of North America from northern California to southwestern British Columbia have demonstrated that large-scale earthquakes occur along the Cascadia subduction zone, where the oceanic Juan de Fuca plate moves down beneath the edge of North America. The geologic evidence includes sudden land-level change, tsunami deposits, and sediments generated by liquefaction, and submarine landslide deposits ('turbidites') on the Pacific Ocean floor. Professor Clague painted a somewhat dismal picture of the catastrophic consequences if such an earthquake were to occur, but with an emphasis on preventative measures and strategies that can be taken to reduce both primary and secondary damage of future earthquakes.



KWANTLEN POLYTECHNIC UNIVERSITY SCIENCE CHALLENGE

The Branch participated in the annual Kwantlen Polytechnic Science challenge. The challenge was held for high school students across BC and representative schools were present and in full force. The students participated in a series of challenges and tasks throughout the day in different subjects such as physics, biology, and math.

The representatives and volunteers, Nima Moazen P.Eng., Fardin Bareka, EIT, and Ikenna Aberdeen, EIT, judged the junior and senior design challenge. In the Junior category, the



students had to design a boat that would sail across a man-made pool that is eight feet in length powered by wind. The seniors had an exciting challenge to design homemade battery and motor-powered cars to carry three cans of coke.

