

Section Officers:

Chairperson:

- David Musil

Outgoing chair:

- Elise Woolliams

Vice-chair and
Secretary:

- Ophir Kendler

Treasurer:

- Stuart Evans

AWIM Representative:

- Dale Brown

Appointed Officer:

- Antonio Marchet

Appointed Officer:

- Colin Keddie

Appointed Officer:

- Colin Blair

Appointed Officer:

- Martin Jackson

Appointed Officer:

- Kyle Farnand

Webmaster:

- Bob Mai

Newsletter Editor:

- Casey Keulen

Contact Us:

On the web:

saebritishcolumbia.org

E-mail us at:

info@saebritishcolumbia.org

Like us on Facebook:

<https://www.facebook.com/SAEBritishColumbia?ref=bookmarks>

UPCOMING EVENT: 'SAE BC Student Night'



WHEN: January 21, 2019, starting at 6:00 PM

WHERE: [William and Wayne White Engineering Design Centre \(EDC\)
2345 East Mall, UBC Campus](#)

WHAT: It's the beginning of the 2018/19 year for SAE BC. Every year we start off with our annual SAE Student Night! This is a chance for student teams from across British Columbia to talk about their projects (everything from racecars to autonomous sailboats to solar cars) and show off the fruits of their labor. **Industry Members:** this is a great way to catch up on student activities and meet potential recruits (many of these students will be graduating soon). **Students:** this is a great way to support your fellow students, possibly get involved with these projects, and meet people from industry.

The event will start off with a chance to network. After that, each team will give a brief presentation on their project, competition results, and plans for the future. We will conclude with a word from SAEBC.

Food and drinks will be provided.

RSVP: [RSVP using this link: register.saebritishcolumbia.org](http://register.saebritishcolumbia.org)
And email: info@saebritishcolumbia.org for more information.

COST: ***Free for student members, \$5 for SAE professional members, \$5 for student non-members, \$10 for non members***

SUMMARY OF LAST EVENT: ‘Tour of ARKTOS ’

By Colin Keddie, P.Eng, MBA

This past May (2018), SAE had the privilege of touring Arktos Developments Ltd, located in Surrey, BC. Arktos design, develop and manufacture highly specialized amphibious craft designed to operate in various conditions, including arctic waters where the ocean and ice are not always stable. The vehicles operate relentlessly without fear of capsizing over treacherous terrain, largely to support oil and gas operations and rescue missions. More recently, they have discovered a new market for their vehicles in the middle east off-shore oil and gas operations where shallow waters include many sand banks that prohibit access by other crafts. These unique tank-like amphibious vehicles can easily operate in extreme conditions, with heated cabins and fibreglass composite bodies driven by hydraulic motors powering the customized traction treads.

We were graciously hosted by founder Bruce Seligman, Darlene Seligman, and Luis Dos Santos. Arktos is 100% Canadian owned and operated and was incorporated in 1993.



Due to their unique design, ARKTOS Craft have an unsurpassed ability to climb vertical steps from deep water (multi-year ice-floes), operate in mixed ice/water conditions, and maneuver through ice-rubble fields, significant side slopes, steep grades, deep mud, muskeg, quicksand, shallow water and other water transition zones. ARKTOS Craft can operate in all weather conditions, poor visibility and rough seas. These Craft have the ability carry heavy loads and tow equipment such as amphibious barges, disabled boats, life-rafts and oil spill booms etc. A smaller, faster Air Transportable ARKTOS Craft has also being developed and has been designed to be air transported by a Lockheed Martin C130J or a Chinook Helicopter.



UPDATE ON LAST YEAR'S STUDENT TEAM WINNERS: 'UBC Supermileage 2017-2018 Summary'

This year, the team's focus was improving the reliability of our two vehicles the Urban Concept, and the Prototype Concept (proto) and implementing our sleeved engine design that has been in development over the last year. These were the major focuses on both our vehicles along with the various projects that went into making these goals possible. Our hope was that the team would have an outstanding year at competition and be competitive at the two competitions the teams attends.

The first competition was the Shell Eco-Marathon Americas (SEMA), which took place in Sonoma, California this year from mid to late April. We had 15 representatives attend the competition this year who would work non-stop over a 5-day span to get the vehicles through technical inspection, and across the finish line. The team was able to complete its first goal, regards to having both vehicles go through technical inspection, which checks every aspect of the vehicle to ensure that its both safe and reliable for competition. However, our Urban Concept was not able to meet its second goal, we encountered a few issues of the vehicles and as a result, we were never able to get the vehicle across the finish line. Meanwhile, our prototype concept faired much better, as it got several runs in finishing in 7th place with a fuel economy of 960 MPG. We were happy about the top 10 finish; however, we were a little disappointed that we did not reach the 1000 MPG mark, which we hope to obtain in a few weeks a SAE Supermileage.

At our second competition, SAE Supermileage, the team had a fantastic 2 days at competition. We were able to get through the technical inspection of the event within the first couple of hours leaving time to get in crucial practice runs and be at the track first thing in the morning for the official runs. During day 2, the team was able to get 5 complete runs, we started the day with a fuel economy of 1128 MPG, beating our record set at SEMA, and gradually improved the fuel economy to 1406 MPG on our 5th run. This proved to be enough for UBC Supermileage to come in 3rd place this year, and our prototype vehicle also took home the "Best Design Execution" award. This competition also broke our highest fuel economy record since 2008 and has rebounded the team from a downward slope we have been on for a few years. The hope is to be back next year, and get a fuel economy in the 2000-3000 range, as we continue to build on the success that we were able to obtain this year.



QUESTION OF THE MONTH

Every month we will be asking a new mobility related question and post the best answers from last month.

This month's question:

“What are you doing to prepare your car for the winter driving season?”

Please email your answer to: info@saebritishcolumbia.org or enter your answer while filling out the online registration form for the upcoming event.

IN MEMORY OF LESLIE JOHN HART, 1929-2018

Long-time members of the BC Section will be saddened to learn of the passing of Les Hart in May of this year. Les was a 42-year member of SAE and a key figure in our local section, serving as Chair in 1983-84 and contributing vitally in many capacities on the governing board for more than three decades.

Les wrote and distributed the section newsletter starting in the 1980's and he continued to do so right up through 2012. Les also coordinated the production of an annual section membership roster which was an invaluable resource in the days before social media. He was instrumental in the success of SAE International meetings held in Vancouver in 1983, 1989 and 1996, receiving accolades from SAE headquarters for his organizational skills.



The Section owes him a great debt for his many years of service and I am sure that all members who had the privilege of knowing Les join me in passing our condolences to his wife Margaret and daughter Ann.

2018-19 SEASON'S TENTATIVE SCHEDULE

Below is a list of the upcoming events for this season. ***Please mark your calendars!*** Events are held on Mondays unless stated otherwise. Please note that the Board Meetings are open to anyone. Please let one of the board members know if you are interested in attending and/or getting involved!

A reminder to Professional Engineering members that attending SAE events contributes to their Continued Professional Development (CPD) as outlined by Engineers and Geoscientists of BC.

2019 January 21	Student Night	2019 April 1	Board Meeting
2019 February 11	Seaspan Tour	2019 April 13	Paccar Tour
2019 March 11	Board Meeting	2019 April 29	Board Meeting
2019 March 25	Event	2019 May 25	Tour and Social Event

WELCOME NEW MEMBERS

Let's welcome the following new members to the SAE BC Section for 2018:

Kody Taylor
Roei Ornai
Eric Sikes
Jonathan Leskewich
Kris Ramachandra
David Johnson



The BC Section of SAE International is now in its 73rd year, since being officially designated as the SAE British Columbia Group on June 12, 1946. The Section has about 250 regular members with additional student chapter members at UBC, UVic, SFU and BCIT.

The majority of our Members live and work in the Lower Mainland, and represent a wide spectrum of technical interests. We have a regular program of local events, mostly centered in the Vancouver area, although we have had meetings elsewhere in BC on occasion.

KEEP RECEIVING OUR NEWSLETTER

If you are an SAE member, but did not receive this e-mail directly, you may have opted out of SAE e-mails. Please log into SAE.org, and under mySAE, Account Profile, Communication Preferences, please ensure the following item is checked:

I would like to receive:

<input type="radio"/> All SAE Product Announcement Emails *	<input type="radio"/> All SAE Product Announcement Direct Mail Communications
<input type="radio"/> All SAE Telephone Communications	<input type="radio"/> All SAE Mobile Communications
<input type="radio"/> All SAE SMS/Text Communications	<input checked="" type="radio"/> All Third Party Email Communications
<input type="radio"/> All Third Party Direct Mail Communications	

VISION STATEMENT

SAE BC will be the active resource to the professional and student community for advancing the level of mobility engineering in the province of British Columbia.

MISSION STATEMENT

To enrich the professional life of the membership by:

1. Providing recognized leadership for mobility in British Columbia.
2. Creating opportunities for technical meetings, tours, events and continuing professional career development.
3. Supporting young membership through mentorship and funding of student activities.
4. Communicating through the newsletter, website and timely responses to members.
5. Striving for membership satisfaction at every opportunity.