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- Colin Keddie

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- David Musil

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- Bob Mai

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- Neil Lui

Membership & Corporate

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Mithun Shetty

Newsletter/Media Editor:

- Casey Keulen

Open Positions:

- Secretary
- Vice Chair

Contact Us:

On the web:

saebritishcolumbia.org

E-mail us at:

info@saebritishcolumbia.org

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UPCOMING EVENT: 'Vehicle Assembly Manufacturing—Operations, Management, and Development'

WHEN: January 25, 2021, starting at 6:00 PM

WHERE: Most, if not all of our events will be hosted virtually this year. This event will be hosted through Google Meet. [Please register to obtain the meeting link.](#)

WHAT: The seminar covers the assembly processes, operations management, development of vehicle assembly systems, and process planning pertaining to the automotive manufacturing. It will be hosted by Dr. Tang, Associate Professor at Eastern Michigan University (EMU).

This seminar is intended for engineering students, entry-level manufacturing engineers, and all levels of the non-manufacturing professionals of the automotive industry. The seminar might be viewed as 80% engineering and 20% technical management in nature.

Before joining EMU, Dr. Tang was a lead engineering specialist at Fiat Chrysler Automobiles (FCA). At FCA for over 16 years, Tang had worked on manufacturing system development and launch support for five vehicle programs, and led the specialist team to evaluate, analyze, and help improve the manufacturing system performance and capability of other two new vehicle programs.

RSVP: [RSVP using this link: register.saebritishcolumbia.org](#)

And email: info@saebritishcolumbia.org for more information.

COST: *Free for all to attend.*

Dr. Herman Tang



Associate Professor
Eastern Michigan University
Ypsilanti, MI

REVIEW OF LAST EVENT: ‘Technical Expertise in the Field of Lightweight Design’

SAE BC was honored to host a virtual presentation by Mr. Gregory Peterson on Paradigm Shifts in Transportation Architecture and The Role of Lightweight Design.

He began his presentation noting that that it only took 13 years for horses to be replaced by automobiles at the turn of the 20th century, and that another paradigm shift in transportation is upon us. He stated that there are 3 main areas of automotive paradigm shifts: efficiency, vehicle control, and 2D to 3D transportation. With the recent move to electric vehicles, they can



be made to be 4 times more efficient than ICEs. The second area of paradigm shift is the move from human control to machine control. He described the 5 levels of automotive autonomy and stated that Tesla is already testing fully autonomous (Level 5) mode. Mr. Peterson also discussed the idea of flying cars as the third major paradigm shift, which is needed to address the expected 30% increase in population over the next 30 years. Various VTOL (Vertical Take Off and Landing) vehicles were shown, along with demonstration videos.

A result of these paradigm shifts is that future vehicles will be electric. However, batteries are very heavy, and therefore saving vehicle weight is essential to their success in terms of cost and vehicle range. Mr. Peterson outlined several design principles to enabling vehicle weight savings: challenging design engineers to reduce a gram a day during the design cycle, use a totally holistic vehicle approach to weight savings, use air to replace materials (such as cup holders), increase use of carbon fiber materials, and utilize weight savings during manufacturing assembly processes (ex. non-destructive joining).

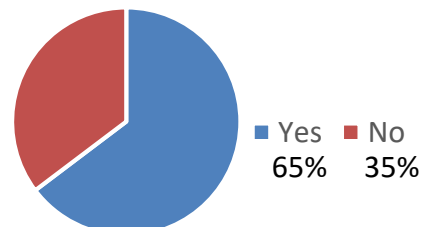
Overall, it was a very thoughtful and engaging presentation for our members.

QUESTION OF THE MONTH

‘With more options for electric vehicles than ever before, do you have plans to purchase one in the next 0-5 years?’

You’ll have a chance to respond to this question when you register for the upcoming event.

RESPONSE TO LAST MONTH’S : ‘Has COVID Affected Your Use of Car Share Services’





JOIN THE BOARD: 'Secretary, and Vice Chair'

SAE BC has two open Board positions. Please inquire if you are interested in getting involved. Supporting SAE BC looks good on one's resume as volunteer work for the community.

Position: Secretary

Description: We are looking for someone who can attend each board meeting and using a laptop, record the meeting minutes along with action items as discussed. This is an important position and requires someone who can listen/understand/interpret and type/format documentation all at the same time. The position provides a significant amount of power to the person responsible, as they can influence the action item details and overall direction of the SAE BC Chapter. Supporting SAE BC also looks good on one's resume as volunteer work for the community.

Position: Vice Chair

Description: A Vice chair is needed to help support SAE BC in general by attending local chapter meetings and helping to drive action items. The vice-chair may lead meetings when the chair is unavailable, and support the board as required. New ideas are always welcome. Supporting SAE BC also looks good on one's resume as volunteer work for the community.

2020-21 TENTATIVE SCHEDULE

Most events will be held virtually this year so you can join remotely. Below is a list of the upcoming events for this season. **Please mark your calendars!** Events are typically 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.

January 25, 2021	Speaker: Dr. Herman Tang Vehicle Assembly Manufacturing	March 2021	Event
February 8, 2021	Board Meeting	March 15, 2021	Board Meeting
February 22, 2021	Speaker: Adit Joshi Autonomous Vehicles: Role of Hardware-in-Loop Simulation In Ford's Platform	April 12, 2021	Board Meeting
		April 26, 2021	Student Showcase Event
		May 10, 2021	Board Meeting



The BC Section of SAE International is now in its 74th 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 product announcements and special offers from SAE International via:

Email	<input checked="" type="radio"/> Agree	<input type="radio"/> Disagree
Direct Mail	<input checked="" type="radio"/> Agree	<input type="radio"/> Disagree
Telephone	<input checked="" type="radio"/> Agree	<input type="radio"/> Disagree
Mobile Phone	<input checked="" type="radio"/> Agree	<input type="radio"/> Disagree
Text (SMS/RCS)	<input checked="" type="radio"/> Agree	<input type="radio"/> Disagree

VISION STATEMENT

A society dedicated to supporting mentorship, career growth and networking for our members and the local mobility industries in BC.

MISSION STATEMENT

To be the #1 resource for events, networking, and career support for mobility Engineers and the Industry in BC.