Faculty of Engineering and Applied Science
Chemical Engineering Seminar Series

The Quest for Fuel Cell Longevity

Dr. Erik Kjeang /Simon Fraser University

Thursday, September 30, 2021, 2:30pm

Dupuis Hall Room 215

Fuel cell electric vehicles are powered by hydrogen through an electrochemical cell reaction that converts hydrogen and oxygen (from air) into water and electricity. These vehicles are capable of providing zero emissions while maintaining the driving performance and range of conventional vehicles. However, most fuel cell vehicles are not yet competitive in terms of capital cost and engine durability. The research conducted at Simon Fraser University's Fuel Cell Research Laboratory (fcrel.ca) addresses these challenges in close partnerships with the fuel cell industry cluster in the Metro Vancouver region. The present seminar will narrate our decade-long quest for fuel cell longevity – including how to decipher, overcome, and predict the dynamic degradation processes that occur during real-world use of fuel cell electric vehicles.