



**Anton B. Burg Memorial Lecture**  
**Friday, October 26, 2018, 4:00 pm**

Refreshments: 3:30 pm  
Stauffer Science Lecture Hall  
SLH 100

## **Professor Warren Piers**

*Department of Chemistry*  
*University of Calgary*

### **New BN Isosteres of Polycyclic Aromatic Hydrocarbons**

Organoboron chemistry has a rich history of both fundamental discovery and extensive applications. The twin pillars of boron hydride chemistry and carborane chemistry have long served as the foundation of the field, and the namesake of this lecture, Professor Anton Burg, figured prominently in the development of boron hydride chemistry. While both boron hydrides and carboranes remain subjects of intensive study today, the field of boron chemistry is impressively diverse, with applications in materials, catalysis and solid state chemistry. One prominent area involves the substitution of “BN” for “CC” in hydrocarbon frameworks, which has proven a fruitful strategy for influencing the photophysical and redox properties of pi conjugated materials. We have been engaged in studying BN analogs of archetypical PAH molecules, beginning with our report of “BN pyrene” in 2007. Since then, many researchers have rejuvenated this aspect of boron chemistry. In this talk, a brief survey of “BN for CC” chemistry will introduce recent results from our lab on synthetic methods towards BN indene, indacene and pi extended derivatives, and examine the properties and reactivity of these compounds in comparison to the all-carbon analogs.

*The scientific community is invited*