

# Chemistry Colloquia

## The Versatility of Boron Containing Compounds: Three Short Stories



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<https://www.bc.edu/content/bc-web/schools/morrissey/departments/chemistry/research-labs/liu-research-group>

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**11:00**

**Central Bldg Mondri 2a+b**

Nature in its evolution of life has bypassed the element boron despite its proximity in the periodic table to carbon, the quintessential element of organic and biological chemistry. BN/CC isosterism, the replacement of a carbon-carbon unit with a boron-nitrogen unit, has emerged as a general strategy to expand the chemical space of carbonaceous compounds beyond what nature can achieve. The ability of BN isosteric compounds to create new properties and function is highlighted in the context of three areas: organic synthesis, ligand supported catalysis, and chemical biology.

**Prof. Shih-Yuan Liu** received his BS degree in Chemistry from Vienna University of Technology (Austria) in 1998. He did his doctoral work at MIT with Prof. Gregory C. Fu and received his Ph.D. degree in organic chemistry in 2003. He then pursued his postdoctoral studies in inorganic chemistry with Prof. Daniel G. Nocera, also at MIT. He started his independent career as an Assistant Professor at the Department of Chemistry at the University of Oregon in 2006, and he was promoted to Associate Professor in 2012. He joined the Department of Chemistry at Boston College as a Full Professor in 2013. His research interests include the development of boron-nitrogen heterocycles for synthetic and biomedical applications.

