

# 8th conference - Translating structure to function using chemical synthesis

The process of **chemical synthesis** is analogous to designing and constructing a building. The building blocks at the synthetic chemist's disposal are the elements of the periodic table, and the available construction tools are dictated by the fundamental laws of chemical reactivity. In a sense, a synthetic chemist can be considered a molecular architect.



Mother Nature is the master molecular architect that has accomplished the synthesis of organized molecular entities with extraordinary complexity using building blocks of organic chemistry (carbon, hydrogen, nitrogen, oxygen...). But in its evolution of life, Nature has seemingly chosen to neglect a majority of the elements of the periodic table.

In this 8<sup>th</sup> Conference, **Shih-Yuan Liu** – E2S UPPA's **International Guest Chair** laureate and **Professor of Chemistry at Boston College** – will speak about synthetic strategies to incorporate “unusual” elements, specifically boron, into organic compounds, thus introducing new chemical space beyond what Nature can achieve. **Similar to how a specific structure of a building conveys a corresponding function, the new chemical structural space provided by these organoboron compounds is expected to translate into new functions.**

Potential applications of organoboron compounds synthesized in Liu's laboratory will be discussed.

« **Save the date : June 20th, 17h00**

« **Speech in English**