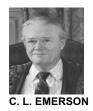


### EMERSON CENTER LECTURESHIP AWARD SYMPOSIUM



# FROM FUNDAMENTAL RESEARCH TO BREAKTHROUGHS: INNOVATIVE APPROACHES FOR DESIGNING VITAL CHEMICAL AND BIOLOGICAL CATALYTIC REACTIONS

## September 12<sup>th</sup>, 2025 Oxford Road Building Presentation Room

#### AWARD WINNER & KEYNOTE SPEAKER

### Prof. David MacMillan, Princeton University



#### The development of photocatalytic reactions of value to Chemists and Biologists

We will discuss the application of visible light photocatalysis to the discovery of conceptually and synthetically valuable transformations and will demonstrate the importance of a healthy balance of reaction discovery and mechanistic understanding for the development of vital processes in medicinal chemistry. We will highlight: (a) the application of photocatalysis to the development of new metallaphotoredox coupling reactions involving S<sub>H</sub>2 mechanisms – a development that is expected to impact the discovery of new biologically relevant molecules, and (b) the high-resolution  $\mu$ -map technology, which is a powerful tool to probe biological pathways at the subcellular level.

INVITED SPEAKERS		EVENTS SCHEDULE	
		1:00 – 1:30	<b>OPENING CEREMONY &amp; AWARD PRESENTATION</b>
	David MacMillan Princeton University	1:30 – 2:30	The development of photocatalytic reactions of value to Chemists and Biologists.
	Laura Ackerman- Biegasiewicz Emory University	2:30 – 3:15	Light-Driven Chemistry in Optical Microcavities
	<b>Christo Sevov</b> , Ohio State University	3:15 – 4:00	Electrochemical Methods for C-C and C-X Bond- Forming Reactions.
		4:00 – 4:15	Coffee Break
	Huw M. L. Davies Emory University	4:15 – 5:15	Harnessing Noncovalent Interactions to Control Selectivity in Catalytic C-H Functionalization
- Cor	Fang Liu Emory University	5:15 — 6:00	Machine learning approach toward molecular properties and interactions in photoredox catalysis
		6:00 — 6:15 6:45 — 9:30	CLOSING DINNER (by invitation)
Co- sponsor:		DEPARTMENT OF CHEMISTRY, HIGHTOWER FOUNDATION	
		Beyond CCHF: THE CATALYSIS INNOVATION CONSORTIUM	

CONTACT:

http://www.emerson.emory.edu/conferences/