



CHEMISTRY & BIOCHEMISTRY

# SEMINAR PROGRAM

DEPARTMENT OF CHEMISTRY & BIOCHEMISTRY  
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We Are Pleased to Announce A Seminar  
Presented By

**Tendal Gadzikwa**  
Kansas State University

Friday, April 7, 2023  
3:00 pm  
SLSRC 3410/3430

*Metal-organic framework (MOF) materials as scaffolds for enzyme-inspired catalysts*

A long-standing goal in the field of supramolecular chemistry is the construction of catalysts that more adequately mimic the active sites of enzymes, i.e catalysts whose active sites are (i) confined, (ii) highly functionalized, and (iii) flexible. To this end, our group has introduced metal-organic framework (MOF) materials as scaffolds on which we can deliberately organize complex chemical functionality within confined, 3-dimensional space. MOF materials are porous, crystalline solids with pores of small-molecule dimensions, and whose cavity environments are highly tailorable. While the pores of MOF materials can be decorated with a wide variety of chemical functionality, the ability to uniformly multifunctionalize MOF materials remains a challenge. This presentation will describe strategies we have developed for the construction of uniformly multifunctionalized MOF materials, and the initial results with our enzyme-inspired catalytic materials.

Dr. Gadzikwa earned her BA in Chemistry from Macalester College (MN) and her Ph.D. degree from Northwestern University (IL). She took on a postdoc position in homogeneous catalysis at the Universiteit van Amsterdam, and began her independent faculty career at the University of Zimbabwe. She joined the University of Alberta (Canada) as a visiting researcher in 2015, and then joined the Department of Chemistry at Kansas State University as an Assistant Professor in 2016. She was recently awarded tenure with promotion to the rank of Associate Professor.

Refreshments will be served.