

iTERM Lunchtime Seminar Series

Institute for Tissue Engineering and Regenerative Medicine

TITLE

"Metal-organic Frameworks (MOFs) for biomedical applications "

Prof. Sebastian Beyer, Research Assistant Professor, Department of Biomedical Engineering, CUHK

The seminar will provide an introduction to the material class of MOFs and report on their potential biomedical applications. Metal-organic frameworks comprise of metal ions that are coordinated by bidentate or multidentate ligands into a 3-dimensional crystalline and porous material. MOFs have been shown useful to encapsulate small molecular weight drugs into their pores for sustained drug release applications over several weeks. MOFs have also been shown to encapsulate biomacromolecules, preventing their unwanted degradation in biological fluids or denaturation of proteins under harsh environmental conditions. These and other properties make MOFs an interesting component in future formulations of biomaterials, implant coatings or drug delivery vehicles. The seminar will focus on both, the basic underlying chemistry of MOF crystallization as well as strategies to utilize MOFs for biomedical applications to foster future collaborations.

DATE TIME VENUE 6 Sep 2019 (Friday)

12:30pm - 2pm (please arrive 15 minutes before the scheduled time, light lunch shall be provided)

G02, Lo Kwee-Seong Integrated Biomedical Sciences Building, Area 39, CUHK

Online Registration: https://cloud.itsc.cuhk.edu.hk/mycuform/view.php?id=353972

~ All are Welcome ~

