unicat
Unifying Concepts in Catalysis

UniCat Colloquium

PROF. DR. JOHN C. VEDERAS

University of Alberta

Structure, synthesis and mechanisms of antimicrobial peptides from bacteria

Certain strains of Paenibacillus spp. as well as lactic acid bacteria produce a variety of antimicrobial peptides that display potent broad spectrum activity against gram negative or gram positive bacteria. Many of them permeabilize the membranes of their targets after binding to receptor molecules. Some of these antibiotic peptides are nonribosomal peptide synthase (NRPS) products (e.g. polymyxins, tridecaptins). However, others are ribosomally produced bacteriocins that are either unmodified (e.g. enterocins 7A & 7B, lacticin Q) or cyclized by posttranslational modifications (e.g. paenicidin A, carnocyclin A, acidocin B). Recent studies show that some of the unmodified bacteriocins have remarkable similarity in their three dimensional structure to cyclized bacteriocins. Ongoing work on mechanisms of action will also be presented.

Wednesday, July 13, 2016 at 5:15 PM
TU Berlin, Institute of Chemistry
Straße des 17. Juni 115, 10623 Berlin

Building C, Lecture Hall **C 264**

Prof. Dr. Süßmuth (TUB)
Organizer

Coffee and cake will be served 30 minutes before the lecture. Guests are cordially invited to attend!
Prof. Dr. Matthias Driess - Chair of the Cluster of Excellence UniCat - www.unicat.tu-berlin.de