

## **UniCat Colloquium**

In collaboration with TU Berlin, Institute of Chemistry (OC)  
(for most actual information, please see [www.unicat.tu-berlin.de](http://www.unicat.tu-berlin.de))

Lecturer: **Prof. Dr. Zeev Gross**, Schulich Faculty of Chemistry, Technion – Israel Institute of Technology, Haifa, Israel

Title: **Corrole Metal Complexes: From Fundamental Chemical and Physical Properties to Advanced Medicinal Utilizations**

Abstract: The discovery of stable corroles, one carbon atom-short analogs of porphyrins, has initiated extensive research on their fundamental chemical and physical properties, which was rapidly followed by advantageous utilization of these molecules in many fields. The gallium and aluminum corroles are highly fluorescent, the transition metal complexes display unique coordination chemistry (also reflected in catalytic processes), and the corrole macrocycle undergoes highly selective electrophilic reactions. The easily accessible water-soluble bipolar corroles have a large affinity to certain proteins, which is used for selective delivery to target cells and organs. Fluorescence-based imaging, including of whole animals, is utilized for following bio-distribution and bioavailability of the corroles. The catalytic properties regarding the decomposition of reactive oxygen and nitrogen species are currently employed in a variety of disease models wherein oxidative stress is heavily involved.

Date: **Wednesday, 24 February 2010**

Time: **5:15 pm - around 6:45 pm**

Location: **TU Berlin  
Institute of Chemistry, Building C  
Straße des 17. Juni 115, 10623 Berlin  
room C 243**

Organiser: **Prof. Dr. Drs. h.c. Helmut Schwarz (TUB)**

Coffee and tea will be served thirty minutes prior to the lecture start.  
Guests are cordially invited to attend!

Prof. Dr. Matthias Driess, Chair of the Cluster of Excellence UniCat