

Special Colloquium

TU Berlin, Division of Organic Chemistry in collaboration with UniCat

(www.unicat.tu-berlin.de)

Lecturer: **Dr. J. Henrique Teles**, Basic Chemicals
Research, BASF SE, Ludwigshafen

Title: **Oxidation from an industrial point of view**

Abstract: The field of selective oxidations is, and will remain, a very active research field in industrial chemistry, where many problems still remain unsolved. In this lecture two recent developments at BASF in this field will be highlighted.

The development of a new process for the synthesis for propylene oxide without any co-products, the HPPO process, was one of the most outstanding achievements in the recent past. The background and the development of this new process based on the epoxidation of propylene with aqueous hydrogen peroxide on a titanium silicalite (TS-1) catalyst will be presented. Besides the reaction itself, some of the pitfalls found during the process development will be highlighted and some of the unanswered questions about the mechanism of catalysis will be discussed.

The second highlight will be the newly developed cyclododecanone process of BASF that for the first time makes use of N_2O as an oxidant in an industrial. This not only highlights the value of the "Verbund", where a waste product of one process is a valuable starting material for the next one, but once again a seemingly simple reaction turns out into fascinating chemistry.

Date: **Monday, 12 October 2009**

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. H. 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