



# Vortragsankündigung

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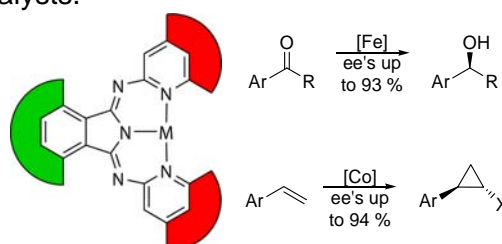
Es spricht: **Prof. Dr. Lutz H. Gade**, *Anorganisch-Chemisches Institut, Universität Heidelberg*

Zeit: **Mittwoch, 27. Mai 2009** 17:15 Uhr

Ort: **TU Berlin**  
**Institut für Chemie, Altes Chemiegebäude**  
**Straße des 17. Juni 115**  
**10623 Berlin**  
**Raum C 243**

Thema: **New Strategies in Catalyst Design Based on Modular Chiral Bis(pyridylimino)isoindolato (BPI) ligands**

Abstract: Bis(2-pyridylimino)isoindoles (BPIs) are highly modular, readily accessible "pincer" ligands. First employed as ligands for the cobalt catalyzed aerobic oxidation of hydrocarbons three decades ago, their coordination chemistry, with 3d metals in particular, has been studied in some detail since then. However they have not been studied in the search for new lead structures for enantioselective catalysts.



The synthesis of a series of chiral BPI ligands will be reported. Whilst the chirally modified pyridyl units (red in Figure 1) act as stereodirecting elements, the appropriate choice of the substitution pattern in the backbone provides a protective "hedge" for rear attack processes (green in Figure 1). Their versatility as efficient stereodirecting ligands will be demonstrated inter alia for the *iron* catalysed asymmetric hydrosilylation of ketones and the *cobalt* catalysed enantioselective inter- and intramolecular cyclopropanation of alkenes.

Organisator: Prof. Dr. Andreas Grohmann (TUB)

Gäste sind herzlich willkommen!

Prof. Dr. Matthias Drieß  
Sprecher des Exzellenz-Clusters UniCat