

Einladung zum Kolloquium

Am Mittwoch, den 10. Juni 2009, 17:00 Uhr, spricht

Prof. Dr. Narayan S. Hosmane

Dept. of Chemistry & Biochemistry, Michael Faraday Laboratories,
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zum Thema:

"Nanostructured Cages and Dendrimers: From Materials to Cancer Therapy"

In addition to our continuing studies of the syntheses and structures of organometallic compounds, the use of such species as catalysts and catalyst precursors has been investigated.

Specifically, the isotopic exchange reactions between ^{10}B enriched boron hydrides with naturally abundant boranes catalyzed by Ru(0) nanoparticles has been studied. While the Ru(0) nanoparticles were obtained by the reduction of $[\text{CpRuCp}^*\text{RuCp}^*]\text{PF}_6$ ($\text{Cp}^* = \text{C}_5\text{Me}_5$) with hydrogen and stabilized by the ionic liquid trihexyltetradecylphosphonium dodecylbenzenesulfonate [THTdP][DBS], it was found to be an excellent, long lived catalyst for the exchange reaction of B-10 enriched diborane and naturally abundant decaborane(14). Other approaches to the production and use of nanometal catalysts have also been explored. The reduction of the iridium carborane, $(\text{PPh}_3)_2\text{IrH}(7,8\text{-C}_2\text{B}_9\text{H}_{11})$ with hydrogen in the presence of trihexyltetradecylphosphonium methylsulfonate, [THTdP][MS], produced an Ir(0) nanoparticles that catalyzed the phenylborylation as did our $\text{Ir}(\text{sal}=\text{N-R})(\text{COD})$ complex. Progress in the use of single wall carbon nanotubes (SWCNT's) as boron delivery agents along with the latest developments in the areas of boron and gadolinium neutron capture therapy (BNCT) will also be presented in detail.

Ort: Fakultät für Chemie und Mineralogie, Johannisallee 29, kl. HS 015,
04103 Leipzig

Alle Interessenten sind zu diesem Vortrag herzlich eingeladen.

Prof. Dr. B. Kersting
GDCh-Ortsverband

Prof. Dr. E. Hey-Hawkins
Sprecherin der
Graduiertenschule BuildMoNa

Die Professoren des Institutes
für Anorganische Chemie

Nähere Informationen bei Frau Professor Dr. E. Hey-Hawkins, Tel.: 36151