

Einladung zum  
**SONDERVORTRAG**

**Herr Prof. Dr. Cameron Jones**  
*(Senior Humboldt Research Award  
of the AvH Foundation 2008)*

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**„Bulky Guanidines and Related Ligands for the  
Stabilization of Very Low Oxidation State  
Metallacycles“**

Datum: **Mittwoch, 16. September 2009**

Zeit: **17.15 Uhr**

Ort: Technische Universität Berlin  
Institut für Chemie (altes Chemiegebäude)  
**Raum C 264**  
Straße des 17. Juni 115  
10623 Berlin

Gäste sind herzlich Willkommen!

## Bulky Guanidines and Related Ligands for the Stabilization of Very Low Oxidation State Metallacycles

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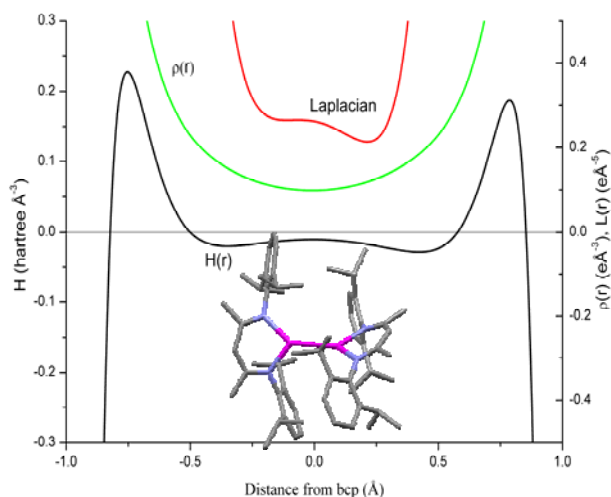
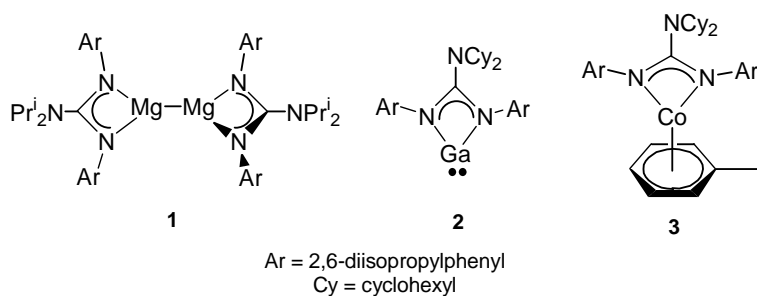
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The chemistry of low oxidation state main group compounds is rapidly emerging. Progress in this exciting field has largely been facilitated by the development of a variety of sterically demanding ligand systems that provide kinetic protection to coordinated metal centers in low oxidation states. In order to extend the range of ligand types available to synthetic chemists working in the area, we have developed routes to very bulky guanidinate ligands. The ligating and stabilizing properties of these are closely related to those of the well-studied  $\beta$ -diketiminato ligand class. In this lecture the application of bulky guanidinate ligands to the formation of heterocycles containing s-, p- or d-block metal(I) centers, e.g. **1** - **3**,<sup>1-3</sup> will be discussed. The remarkable further reactivity of these heterocycles, and their relationship to  $\beta$ -diketiminato complexes, will also be summarized.



<sup>1</sup> Green, S.P.; Jones, Stasch, A. *Science*, **2007**, *318*, 1754.

<sup>2</sup> Jones, C.; Junk, P.C.; Platts, J.A.; Stasch, A. *J. Am. Chem. Soc.*, **2006**, *128*, 2206.

<sup>3</sup> Rose, R.P.; Jones, C.; Schulten, C.; Aldridge, S.; Stasch, A. *Chem. Eur. J.*, **2008**, *14*, 8477.