FAKULTÄT FÜR CHEMIE



Einladung zum Vortrag von

Prof. Bernhard Lippert

Fakultät Chemie und Chemische Biologie (CCB), Technische Universität Dortmund, Deutschland

"Pd" and Pt" Coordination Chemistry with Nucleobases: Analogies, Differences, and Combinations of the two Metal Ions"

Contrary to earlier expectations that Pd^{II} might produce antitumor active coordination complexes similar to those of Pt^{II}, and despite some 850 Pd^{II} compounds tested thus far, there is today no single Pd containing drug in clinical use. Moreover, presently no hard evidence exists that Pd analogues of active Pt drugs interact with DNA in a way the latter do. The question may be raised as to why this is the case.

The lecture will start out with a short tutorial regarding similarities and differences in the coordination chemistry of Pd^{II} and Pt^{II} and will focus then on their interactions with nucleobases. Differential affinities for nucleobase donor atoms based on differences in kinetics will be discussed. Given the wide-spread use of Pd^{II} and specifically of (en)Pd^{II} in Supramolecular Chemistry, examples will also be presented in which discrete Pt-nucleobase entities are extended into larger constructs by means of Pd^{II} moieties. Although unlikely to be of any biological relevance, they reflect the large potential nucleobases have as supramolecular building blocks.

Mittwoch, 21. Juni 2017, 11:00 Uhr Kleiner Hörsaal 4 Währinger Straße 42, 1090 Wien

Bernhard Keppler Institut für Anorganische Chemie