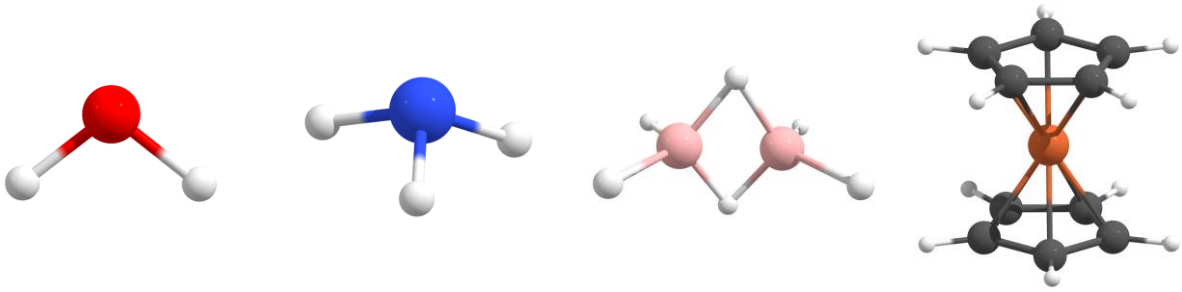
UNIVERSITÄT DES SAARLANDES

Inorganic Chemistry

Lecture Announcement

Summer Semester 2022
Symmetry and Molecular Orbital Theory in Inorganic Chemistry (AC13)

Dr. Diego M. Andrada
Website: https://inorg-comp-chem.com/
Twitter: @ICCGroup2



Starting Lecture: 14th April 2022 at 12.30 hs.
Date: You can register for the course until 22nd April 2022.
MS Teams Code: hl27u6d
Place: Room 0.04 Building C4.1

The rational design of inorganic and organic compounds requires a deep understanding of electronic structure properties and of the way they can be changed through the inclusion of new atoms or bonding patterns. Many advances have been made from lab experience supported by rather simple considerations based on molecular orbital theory. Nonetheless, theoretical chemistry has made an unparalleled impact by rationalizing trends and supporting the experimental chemist in this task. This lecture gives the fundaments of molecular orbital theory to explain and predict the properties of molecules.

Content:
Fundamentals: Definitions and concepts involving symmetry and molecular orbitals. Selection rules and atomics and molecular terms.
Applications: selected examples involving organic, inorganic and organometallic compounds.
Target audience: Master and PhD students