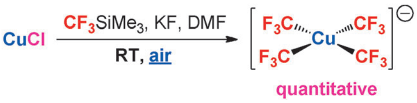
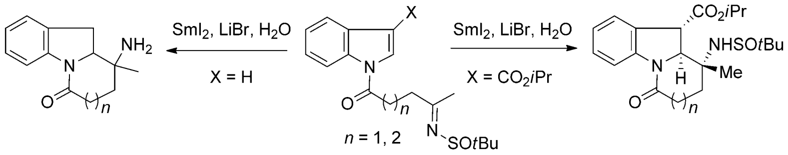
Copper Complexes



Easy as it gets: The Cu^{III} anion $[Cu(CF_3)_4]^-$ is finally easily accessible through the newly developed exceedingly simple and highly efficient one-step procedure directly from CuCl. The reaction occurs at room temperature in air to furnish quantitatively $[Cu(CF_3)_4]^-$, which can be used for the synthesis of other, previously unknown CF_3Cu^{III} compounds.

Polycyclic Amines



Two ways to three rings: Indolyl sulfinyl imines undergo smooth SmI_2-mediated cyclizations and provide polycyclic tertiary carbinamines in good yield. *N*-Sulfinyl imines with unactivated indole units (X = H) undergo an *N*-desulfinylation—a previously unknown reaction—and then the cyclization. In contrast, activated indoles (X = CO_2R) undergo cyclization with intact *N*-sulfinyl imine moiety leading to the formation of enantiomerically pure tricyclic products.

DOI: 10.1002/anie.201580914

Flashback: 50 Years Ago ...

The chemistry of heterosiloxanes was the subject of a Review by Hubert Schmidbaur, a former Chairman of the Editorial Board of *Angewandte Chemie*. 50 years later, at the age of 80, Schmidbaur is still actively publishing; his Review on argentophilic interactions appeared in a very recent issue (see *Angew. Chem. Int. Ed.* **2015**, *54*, 746).

Ernst Otto Fischer, who shared the 1973 Nobel Prize in Chemistry with Geoffrey Wilkinson, reported on isonitrilocyclopentadienyl complexes of lanthanoids. These complexes were formed by the reaction of lanthanoid tricyclopentadienyl complexes with cyclohexyl isonitrile, and were the first reported examples of compounds where a stable metal–carbon σ bond is formed for rare-earth metals.

Armin Weiss et al. reported on the crystal structure of strontium disilicide. The silicon atoms were found to form a three-dimensional network with Si–Si distances comparable to that of elemental silicon. This structure contrasts with those other disilicides that contain two-dimensional nets or isolated tetrahedra of silicon atoms.

Horst Prinzbach et al. published two Communications on conjugated π-bond systems. The first report described the synthesis of a monobenzo derivative of cyclopropenylidenecyclopentadiene (calicene), which is a highly strained but also delocalized system. Interestingly, a report from Andrew S. Kende on a similar calicene derivative was published shortly afterwards (*J. Am. Chem. Soc.* **1965**, *87*, 1609). Prinzbach's second contribution was on stable methylene-phenalene derivatives (phenalenes are three fused six-membered rings). Prinzbach was one of the most influential German organic chemists in the latter half of the last century, and was famous for the synthesis of a range of non-benzenoid organic compounds, including dodecahedrane (for more details see his Obituary: *Angew. Chem.* **2012**, *51*, 11936).

Read more in Issue 3/1965.