Univerzita Karlova v Praze, Přírodovědecká fakulta

Sekce chemie PřF UK v Praze
zve všechny zájemce na přednášku z cyklu

Quo Vadis Chemie

Workhorses taking off: unexpected and unrecognised chemistry of diaminocarbenes

kterou přednese

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Abstrakt:

The general belief that carbenes are always transient species was shattered by the report of a stable, crystalline N*-heterocyclic carbene (NHC) by Arduengo in 1991, which triggered the tremendous development of NHCs and related diaminocarbenes from laboratory curiosities to reliable workhorses in synthesis and catalysis. Just a few years after their discovery they had already attained the status of "ordinary compounds", exhibiting very useful, but essentially unspectacular, reactivity. In contrast to this popular conception, our recent investigation of ferrocene-based NHCs and of acyclic diaminocarbenes revealed that their reactivity and synthetic potential has been much underestimated. Even the activation of fundamentally important small molecules like* NH_3 *and CO has proved possible, in support of the novel concept of `main-group elements as transition metals´.*