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zve všechny zájemce na přednášku kterou přednese  
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na téma

### New organometallic transformations of pentafulvenes and benzofulvenes: from regioselective hydroalumination to C-F bond activation

#### Synopsis:

Fulvenes are widely used building blocks in organic and organometallic chemistry and studied for their optoelectronic properties in material sciences.<sup>1</sup> The cross-conjugation of the  $6\pi$  electrons and the polarizable exocyclic C=C bond confer some unique reaction behaviors to these formal benzene isomers. In organic chemistry, fulvenes are often applied as 2, 4 or 6  $\pi$  electron components in cycloaddition reactions.

We have recently discovered some new endo-selective transformations, for example the titanium-catalysed hydroalumination,<sup>2</sup> the Lewis acid catalyzed hydroheteroarylation,<sup>3</sup> and the zirconium-mediated double insertion of carbonyl groups.<sup>4</sup>

Furthermore, our interest in lanthanide chemistry has led to the synthesis of new luminescent europium(II) *ansa* complexes via reductive dimerization of fulvenes and to the discovery of an unprecedented C-F bond activation reaction in trifluoromethylated benzofulvenes.<sup>5</sup>

#### *Some selected references:*

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