

## **Quo Vadis Chemie**

## From Group 14 Hydrides Towards Nano-sized Materials



which will be delivered by

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## on November 13, 2017 at 15:00

the Lecture Hall CH2 at the School of Chemistry, Faculty of Science, Hlavova 8

Abstract: Silicon, germanium and/or tin containing derivatives carrying aryl substituents as well as hydrogen atoms seems like a well explored field in organometallic chemistry. However, a closer look reveals that despite 150 years of chemical history with these compounds, mostly only the phenyl derivatives are well characterized. Over the years our institute has also reported on the syntheses of novel compounds of this type. In extension of this work, we will present here on the synthesis and characterization of such derivatives, with emphasis on Germanium and Tin compounds of types REH<sub>3</sub> and  $R_2EH_2$  (E=Ge,Sn) as well as their applications in material science, especially for the synthesis of nano-sized particles.