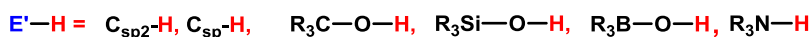
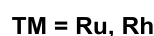
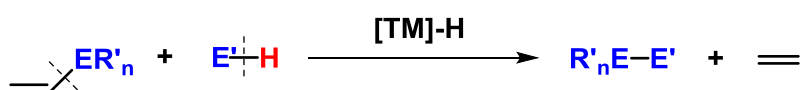


Transformations of vinylsubstituted silsesquioxanes and heterosilsesquioxanes *via* olefin metathesis and metallative coupling procedures

Bogdan Marciniak*

Center for Advanced Technology and Faculty of Chemistry, University of Adam Mickiewicz in Poznań, Umultowska 89c and 89b, 61-614 Poznań, Poland, e-mail: Bogdan.Marciniak@amu.edu.pl

The silylative coupling of olefins, well-recognized as an efficient catalytic activation of Csp²-H bond of olefins, can be extended (similarly as the olefin metathesis procedure) for other metalloids (e.g. B and Ge) as well as Csp-H –O-H and –N-H bond. Vinylmetalloid compounds function in these reactions as metallating agents and hydrogen acceptors.¹ (Scheme 1)



Scheme 1.

In the lecture, our recent results on the synthesis of new mono and multifunctional silsesquioxanes of both cubic and double decker architecture as well as germa- and other hetero-silsesquioxanes, have been presented.²⁻⁴ These syntheses are based on metathesis and metallative coupling procedures producing efficiently and selectively new types of molecular and macromolecular silsesquioxane-based hybrid materials.

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