

EINLADUNG

zum Vortrag von

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über

**Chemistry Nobel-Prize 2005:
The Olefin Metathesis Reaction – a powerful
tool in organic synthesis and materials
chemistry**

am

Dienstag, 9. Mai 2006, um 17.30 Uhr

im Großen Hörsaal des Instituts für Experimentalphysik der Universität Wien
1090 Wien, Strudlhofgasse 4 / Boltzmannngasse 5, 1. Stock

Abstract:

In the first part a short overview of the history of the metathesis reaction will be given (honouring Chauvin's contribution). In a second part the achievements of well defined initiators based on Mo and W carbenes are presented. These initiators are mainly used in polymer synthesis because of their well defined living character. Liquid crystalline poly-norbornenes and poly-acetylenes are discussed as examples (this part honours Schrock's contribution). Finally examples for the application of Ru-initiators in polymer chemistry and synthetic organic chemistry are presented and discussed. Because of their excellent environmental stability the "Grubbs Initiators" allow the use of standard solvents and working "on the bench" in open environment. This has promoted a broad use of the method in organic synthesis, polymer synthesis and even in polymer technology. Examples for applications in polymer chemistry and in organic synthesis are presented.