

# **New Catalysts, New Reactions and New Functional Materials**

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In this seminar, I would like to talk about our recent studies on the development of new catalysts, new reactions and new functional materials, including C-H activation and transformation by rare-earth catalysts, dinitrogen activation and functionalization by titanium hydride clusters, and the synthesis of self-healing polymers by catalyst-controlled microstructure regulation.

## **新型催化剂、新反应及新型功能材料**

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本次报告将主要介绍新型催化剂、新反应及新型功能高分子的一些研究进展，主要内容包括新型稀土配合物催化的惰性碳氢键活化及转化、钛氢团簇化合物对氮气的活化及功能化转化，以及通过稀土催化剂调控聚合物微观结构制备自愈合聚烯烃功能高分子材料等。