

Grubbs catalysts

Reporter: Yandong Wang

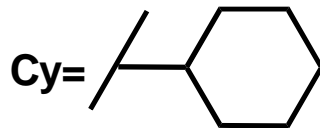
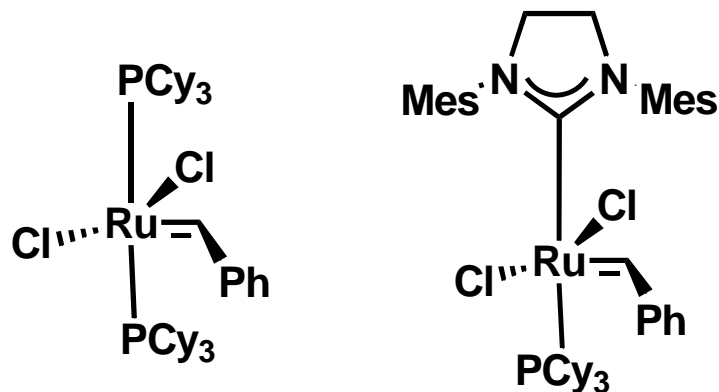
Supervisor: Jing Zhao

Robert H. Grubbs



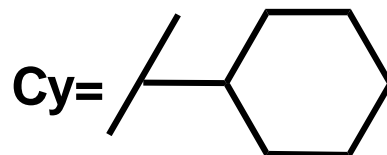
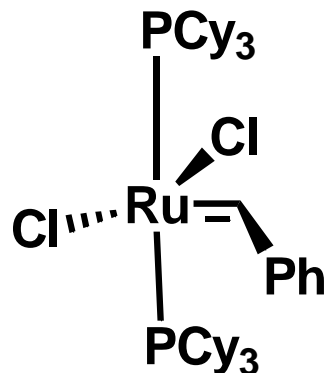
- ◆ Victor and Elizabeth Atkins Professor of Chemistry
- ◆ received the 2005 Nobel Prize in Chemistry
- ◆ First found Grubbs catalysts

Grubbs catalysts



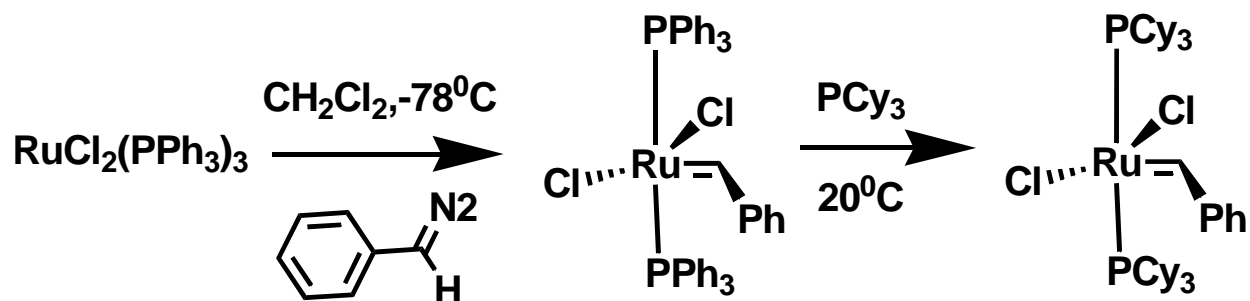
Grubbs' Catalysts are a series of transition metal carbene complexes used as catalysts for olefin metathesis

Grubbs' First Generation Catalyst

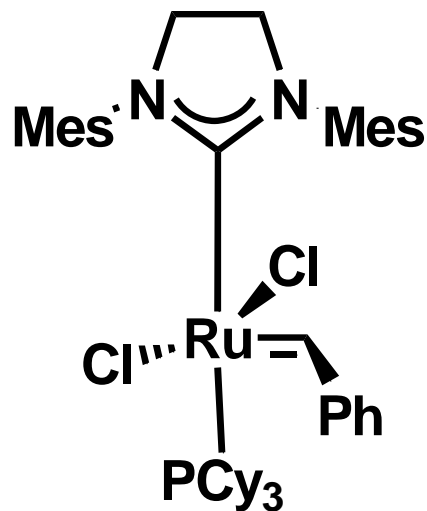


Angew. Chem., Int. Ed. 1995, 34, 2039

Synthesized in a one-pot synthesis

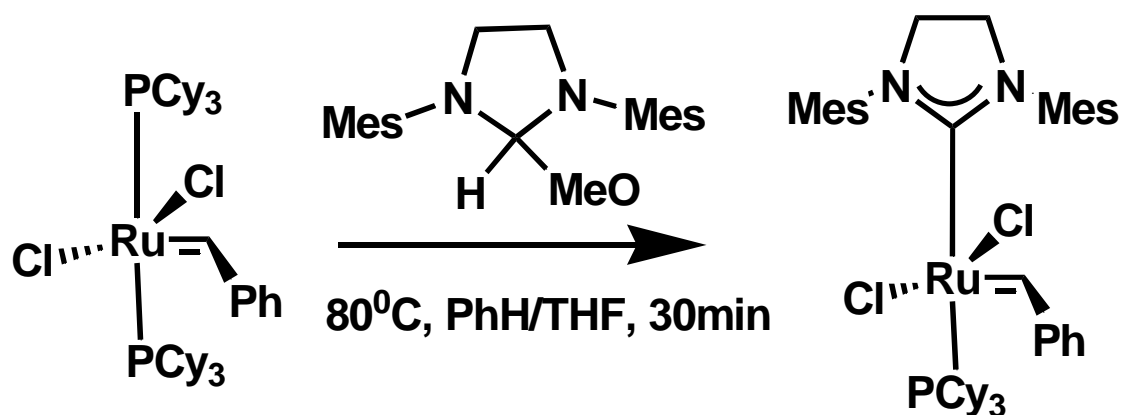


Grubbs' second Generation Catalyst



based on a saturated N-heterocyclic carbene (1,3-bis(2,4,6-trimethylphenyl)imidazole)

Synthesized The second generation catalyst



THANKS