



# Osakada-Koizumi Lab

Functional metal complexes, supramolecular compounds,  
and polymers based on organometallic chemistry

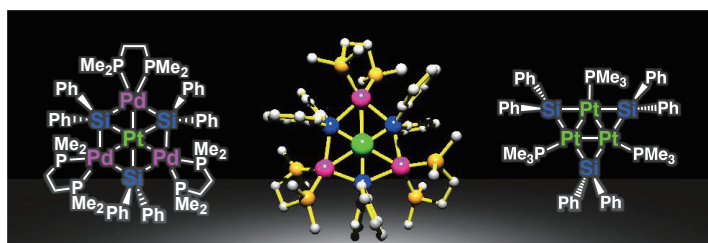
Laboratory for Chemistry and Life Science, Molecular Synthesis Division

<http://www.res.titech.ac.jp/~shinkin/>

We are Studying in a variety of **Organometallic Compounds**

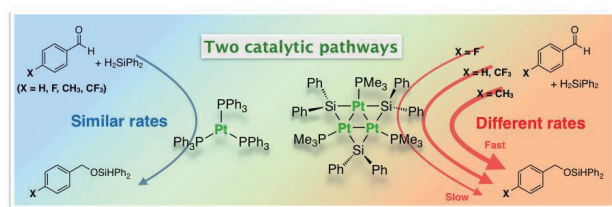
## Coordination Chemistry

### Multinuclear Complex with Planer Geometry



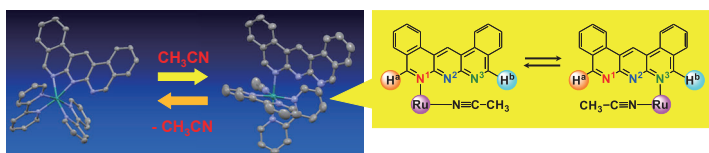
Chem. Eur. J. 2017, 23, 1386-1392.  
Organometallics 2015, 34, 2985-2990.

### Catalytic Reactions by Multinuclear Pt Complex



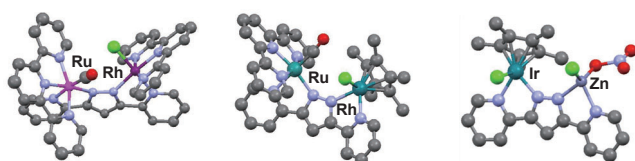
Bull. Chem. Soc. Jpn. 2018, 91, 858-864.  
Organometallics 2017, 36, 1929-1935.

### Metal Complexes with Unique Dynamic Behavior



Inorg. Chem. 2014, 53, 10788-10790

### Activation of Small Molecules by Dinuclear Complex

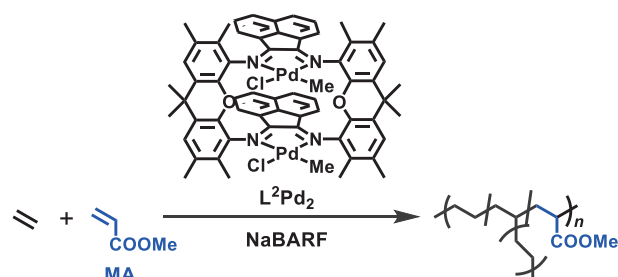


## Group Photos



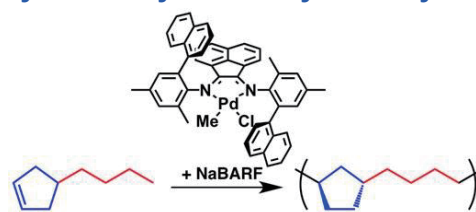
## Polymer Chemistry

### Polymer Synthesis by Double-Decker Type Dinuclear Catalysts



Macromolecules 2018, 51, 5048-5054.  
Angew. Chem., Int. Ed. 2014, 53, 9246-9250.

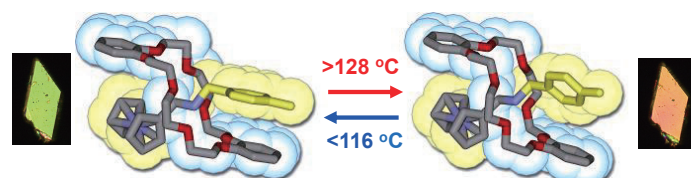
### New Polyolefins by Pd-Catalyzed Polymerization



J. Am. Chem. Soc. 2011, 133, 11106-11109.  
J. Am. Chem. Soc. 2009, 131, 10852-10853.

## Supramolecular Chemistry

### Dynamic Movement of Rotaxane in the Solid State



Nature Commun. 2016, 7, 13321.  
J. Am. Chem. Soc. 2012, 134, 17932-17944.