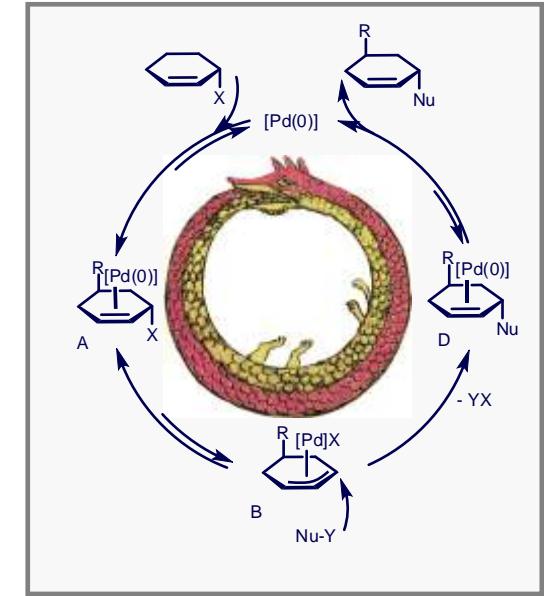


# IUSS Lectures

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**Moderna Catalisi Organometallica a Fini Sintetici**

# Principles of Homogeneous Organometallic Catalysis

- The TM-L Bond
- The Fundamental Organometallic Steps
- Basics of organometallic catalysis
- The catalytic chemistry of palladium (0):  $[Pd(0) \rightarrow Pd(II) \rightarrow Pd(0)]$

Generation of Pd(0) from Pd(II) complexes

Pd(0) sources

Syn carbopalladations:

C-C Cross-couplings reactions



Ouroboros from Lucas Jennis:  
*De Lapide Philosophico*\*

\* The Ouroboros is an ancient alchemic symbol depicting a dragon eating its own tail.