



# Johnson Matthey Catalysts

For Immediate Release

## **Johnson Matthey Licenses Buchwald Coupling Technology from MIT**

West Deptford, NJ October 18, 2011

Johnson Matthey has been granted a global license to the full range of Buchwald bulky and electron rich dialkyl- biaryl- mono phosphine and related bis-phosphine ligands. The licensed patents include both the composition of matter of the family of ligands and the processes for use of catalysts containing these ligands in transition metal catalyzed carbon-heteroatom and carbon-carbon bond forming reactions.

The combination of these phosphine ligands such as X-Phos, S-Phos, Ru-Phos or Brett-Phos, with one of a number of palladium catalyst precursors has proven to be a convenient process for the in situ generation of active catalysts. These catalysts have demonstrated superior results in a broad range of applications including the well-known coupling reactions Heck-Mizoroki, Suzuki-Miyaura, Sonogashira, Buchwald-Hartwig, and alpha arylations.

Continuing its market leadership with the largest portfolio of advanced coupling technologies, the Buchwald range compliments Johnson Matthey's extensive offering of palladium catalysts and catalyst precursors.

"An integral part of our business model is to provide our customers with an optimal solution for their coupling process," says Gerard Compagnoni, General Manager, of the Catalysis and Chiral Technologies business unit. "The innovative Buchwald technology together with Johnson Matthey's proven expertise in efficiently scaling up novel palladium-based cross coupling catalyst systems is a winning combination."

### **About Johnson Matthey Catalysis and Chiral Technologies**

The Catalysis and Chiral Technologies business unit of Johnson Matthey Catalysts offers superior catalytic solutions to the pharmaceutical, fine chemical, agrochemical and nutraceutical markets. Our extensive range of technologies including precious metal, base metal, chemo-, bio-, catalysis and scavenging technologies combined with our proven expertise in developing the most efficient synthesis route provide value driven solutions for our customers.

Connie Schlegel  
Senior Market Analyst  
Johnson Matthey Catalysis and Chiral Technologies  
(856) 384-7151  
schlecx@jmus.com