## ORGANOMETALLICS

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## Editor's Page

## A Great Day for Organometallic Chemistry

October 5, 2005, the day on which it was announced that Yves Chauvin of the Institut Français du Pétrole, Robert H. Grubbs of the California Institute of Technology, and Richard R. Schrock of the Massachusetts Institute of Technology will share the 2005 Nobel Prize in Chemistry, was a great day for organometallic chemistry. The award recognizes a new type of reaction, carbon-carbon multiple bond metathesis, that has become of great importance in organic and polymer synthesis. Olefin metathesis, known since the 1950s, was a mystery in terms of mechanism until Chauvin in 1971 provided the correct explanation: that the metathesis reaction involves organometallic species, transition-metal-carbene complexes, as catalytic intermediates. The research of Dick Schrock and Bob Grubbs made olefin metathesis an extremely useful, broadly applicable process by providing novel families of metal-carbene catalysts, with those of Schrock based on molybdenum and tungsten and those of Grubbs based on ruthenium. Their catalysts proved to be very active and extremely versatile and were quickly shown to be outstandingly useful in synthesis: in the formation of different-sized rings (ringclosing metathesis), in the formation of useful polymers from unsaturated cyclic monomers (ring-opening metathesis polymerization), and from  $\alpha,\omega$ -diolefinic monomers ("admet" polymerization), to note the most important applications. Schrock also was able to develop metal—carbyne catalysts for acetylene metathesis. These discoveries truly added a new dimension to synthetic chemistry.

Schrock and Grubbs have published many of their papers in *Organometallics*. Dick Schrock was a founding Associate Editor of *Organometallics*, serving as such for its first eight years. Both have served stints as members of the *Organometallics* Editorial Advisory Board.

The editors of *Organometallics* express their most hearty congratulations to the three Nobel Laureates on this richly deserved award that recognizes their outstanding contributions which have helped to ensure the continuing vital importance of organometallic chemistry.

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