Title: “Adventures in the Chemistry of Transition Metal to Carbon Multiple Bonds”

Abstract: “A metal-carbon bond is the heart of the chemistry of organic reactions that are catalyzed by transition metals. Multiple (double or triple) metal-carbon bonds of a certain type will catalyze reactions in which carbon-carbon double or triple bonds are rearranged to give new carbon-carbon double or triple bonds. The discovery of a new type of metal-carbon double or triple bond in 1974 led to the design and synthesis of catalysts for these “metathesis” reactions and a Nobel Prize in 2005. Research on alkene and alkyne metathesis reactions continues today."