Rhodium has proven to be an extremely useful metal due to its ability to catalyze an array of synthetic transformations, with quite often-unique selectivity. Hydrogenation, C-H activation, allylic substitution, and numerous other reactions are catalyzed by this metal, which presumably accounts for the dramatic increase in the number of articles that have recently emerged on the topic.

P. Andrew Evans, the editor of this much-needed book, has assembled an internationally renowned team to present the first comprehensive coverage of this important area. The book features contributions from leaders in the field of rhodium-catalyzed reactions, and thereby provides a detailed account of the most current developments, including:

- Rhodium-Catalyzed Asymmetric Hydrogenation (Zhang)
- Rhodium-Catalyzed Hydroborations and Related Reactions (Brown)
- Rhodium-Catalyzed Asymmetric Addition of Organometallic Reagents to Electron Deficient Olefins (Hayashi)
- Recent Advances in Rhodium(I)-Catalyzed Asymmetric Olefin Isomerization and Hydroacylation Reactions (Fu)
- Stereoselective Rhodium(I)-Catalyzed Hydroformylation and Silylformylation Reactions and Their Application to Organic Synthesis (Leighton)
- Carbon-Carbon Bond-Forming Reactions Starting from Rh-H or Rh-Si Species (Matsuda)
- Rhodium(I)-Catalyzed Cycloisomerization and Cyclotrimerization Reactions (Ojima)
The Rhodium(I)-Catalyzed Alder-ene Reaction (Brummond)

Rhodium-Catalyzed Nucleophilic Ring Cleaving Reactions of Allylic Ethers and Amines (Fagnou)

Rhodium(I)-Catalyzed Allylic Substitution Reactions and their Applications to Target Directed Synthesis (Evans)

Rhodium(I)-Catalyzed [2+2+1] and [4+1] Carbocyclization Reactions (Jeong)

Rhodium(I)-Catalyzed [4+2] and [4+2+2] Carbocyclizations (Robinson)

Rhodium(I)-Catalyzed [5+2], [6+2], and [5+2+1] Cycloadditions: New Reactions for Organic Synthesis (Wender)

Rhodium(II)-Stabilized Carbenoids Containing both Donor and Acceptor Substituents (Davies)

Chiral Dirhodium(II)Carboxamidates for Asymmetric Cyclopropanation and Carbon-Hydrogen Insertion Reactions (Doyle)

Cyclopentane Construction by Rhodium(II)-Mediated Intramolecular C-H Insertion (Taber)

Rhodium(II)-Catalyzed Oxidative Amination (DuBois)

Rearrangement Processes of Oxonium and Ammonium Ylides Formed by Rhodium(II)-Catalyzed Carbene-Transfer (West)

Rhodium(II)-Catalyzed 1,3-Dipolar Cycloaddition Reactions (Austin)

"Modern Rhodium-Catalyzed Organic Reactions" is an essential reference text for researchers at all levels in the general area of organic chemistry. This book provides an invaluable overview of the most significant developments in this important area of research, and will no doubt be an essential text for researchers at academic institutions and professionals at pharmaceutical/agrochemical companies.

ABOUT THE AUTHOR

P. Andrew Evans is a Professor Department of Chemistry at Indiana University, Bloomington. He obtained a Ph.D from Cambridge University under the supervision of Professor Andrew B. Holmes, F.R.S, and was a NATO Postdoctoral Fellow at the University of Texas at Austin with Professor Philip D. Magnus, F.R.S. Professor Evans' research has been recognized on several occasions. Recent awards include a Camille Dreyfus Teacher-Scholar Award, a Johnson and Johnson Focused Giving Award and the Pfizer Award for Creativity in Organic Chemistry.