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Nota di contenuto	Iridium Complexes in Organic Synthesis; Contents; Preface; List of Contributors; 1: Application of Iridium Catalysts in the Fine Chemicals Industry; 1.1 Introduction; 1.2 Industrial Requirements for Applying Catalysts; 1.2.1 Characteristics of the Manufacture of Enantiomerically Pure Products; 1.2.2 Process Development: Critical Factors for the Application of Catalysts; 1.2.3 Requirements for Practically Useful Catalysts; 1.2.3.1 Preparation Methods; 1.2.3.2 Catalysts Cost; 1.2.3.3 Availability of the Catalysts; 1.2.3.4 Catalytic Performance; 1.2.3.5 Separation 1.3 Enantioselective Hydrogenation of C=N Bonds 1.3.1 Catalysts and Scope; 1.3.2 Industrial Applications; 1.4 Enantioselective Hydrogenation of C=C Bonds; 1.4.1 Catalysts and Scope; 1.4.2 Industrial Applications; 1.5 Miscellaneous Catalytic Applications with Industrial Potential; 1.6 Conclusions and Outlook; References; 2: Dihydrido Iridium Triisopropylphosphine Complexes: From Organometallic Chemistry to Catalysis; 2.1 Introduction; 2.2 [Ir(COD)(NCMe)(PR <sub>3</sub> )]BF <sub>4</sub> (PR <sub>3</sub> = PiPr <sub>3</sub> , PMe <sub>3</sub> ) and Related Complexes as

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2.3 The Dihydrido Iridium Triisopropylphosphine Complex  $[\text{IrH}_2(\text{NCMe})_3(\text{PiPr}_3)]\text{BF}_4$  as Alkene Hydrogenation Catalysts  
2.4 The Dihydrido Iridium Triisopropylphosphine Complex  $[\text{IrH}_2(\text{NCMe})_3(\text{PiPr}_3)]\text{BF}_4$  as Alkyne Hydrogenation Catalysts;  
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Sommario/riassunto

Ranging from hydrogenation to hydroamination, cycloadditions and nanoparticles, this first handbook to comprehensively cover the topic of iridium in synthesis discusses the important advances in iridium-catalyzed reactions, namely the use of iridium complexes in enantioselective catalysis. A must for organic, complex and catalytic chemists, as well as those working with/on organometallics.