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1.4.2.2 Lewis Acids; 1.4.2.3 Solid Acids

1.4.3 Base Activators 1.4.3.1 Metal Salts; 1.4.3.2 Amines; 1.4.3.3 Phase Transfer Catalyst; 1.4.4 Other Activators; 1.4.5 Enzymes; 2: Use of Tin and Other Metal Alkoxides; 3: Conversion of Carboxylic Acids into Esters without Use of Alcohols; 3.1 Reaction with Diazomethane; 3.2 Reaction with Alkyl Halides; 3.3 Treatment with Other Electrophiles; 4: Ester Interchange Reaction; Part Two: Synthetic Applications; 5: Kinetic Resolution; 5.1 Enzymatic Resolution; 5.2 Nonenzymatic Resolution; 5.3 Dynamic Kinetic Resolution; 5.4 Parallel Kinetic Resolution; 6: Asymmetric Desymmetrization

7: Miscellaneous Topics 7.1 Selective Esterification; 7.1.1 Differentiation between Primary, Secondary, and Tertiary Alcohols, and Phenols; 7.1.2 Differentiation between Identical or Similar Functions; 7.2 Use of Theoretical Amounts of Reactants; 7.3 New Reaction Media; 7.4 New Technologies; 7.5 Application to Natural Products Synthesis; 8: Industrial Uses; 8.1 Ethyl Acetate; 8.2 Acrylic Esters; 8.2.1 Methyl Methacrylate (MMA); 8.2.2 Alkyl Acrylates; 8.3 Polyesters; 8.4 Oils and Fats; 8.4.1 Food Emulsifiers; 8.4.2 Soaps; 8.5 Biodiesel Fuel; 8.6 Amino Acid Esters; 8.7 Macrolides 8.8 Flavoring Agents and Fragrances 8.9 Pyrethroids; Epilogue; References; Index

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Sommario/riassunto

Gathering together the widespread literature in the field, this monograph acts as a reference guide to this very important chemical reaction. Following an introduction, the book goes on to discuss methodology, before treating synthetic and industrial applications -- the latter being a new focus in this completely revised, updated and extended second edition. A must-have for organic, natural products and catalytic chemists, as well as those working in industry, of for lecturers in chemistry.

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