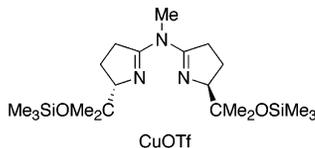


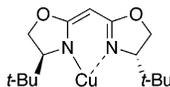
**139**

dr: 82:18 ( $N_2CHCOO$ d-menthyl);  
97% ee (*trans*), 95% ee (*cis*)  
Pfaltz, 1986 (ref. 166)



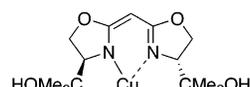
**140**

dr: 84:16 ( $N_2CHCOO$ d-menthyl);  
98% ee (*trans*), 99% ee (*cis*)  
Pfaltz, 1992 (ref. 167)



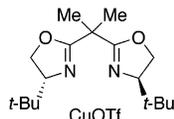
**141**

dr: 86:14 ( $N_2CHCOO$ -menthyl);  
98% ee (*trans*), 96% ee (*cis*)  
Masamune, 1990 (ref. 168)  
Pfaltz, 1991



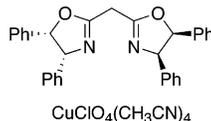
**142**

dr: 83:17 ( $N_2CHCOO$ d-menthyl);  
90% ee (*trans*), 90% ee (*cis*)  
Pfaltz, 1991 (ref. 169)



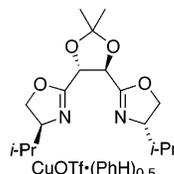
**143**

dr: 94:6 ( $N_2CHCOOBHT$ );  
99% ee (*trans*)  
Evans, 1991 (ref. 175)  
BHT = 2,6-di-tert-butyl-4-methylphenyl



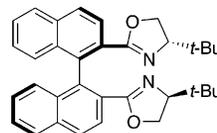
**144**

dr: 94:6 ( $N_2CHCOOCH(c-C_6H_{11})_2$ );  
36% ee (*trans*), 20% ee (*cis*)  
Masamune, 1991 (ref. 180)



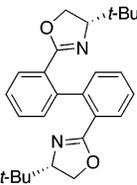
**145**

dr: 85:15 ( $N_2CHCOO$ -menthyl);  
89% ee (*trans*), 89% ee (*cis*)  
Andersson, 1996  
Knight, 1996 (ref. 170)



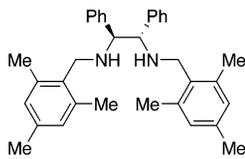
**146**

dr: 68:32 ( $N_2CHCOO$ -menthyl);  
95% ee (*trans*), 97% ee (*cis*)  
Hayashi, 1996 (ref. 171)



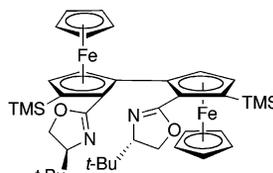
**147**

dr: 81:19 ( $N_2CHCOO$ -menthyl);  
84% ee (*trans*), 92% ee (*cis*)  
Ikeda, 1997 (ref. 172)



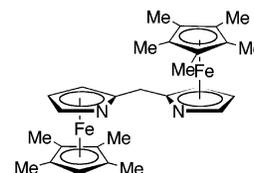
**148**

dr: 93:7 ( $N_2CHCOO$ -menthyl);  
96% ee (*trans*), 66% ee (*cis*)  
Kanemasa, 1994 (ref. 183)



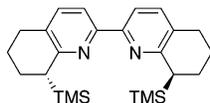
**149**

dr: 77:23 ( $N_2CHCOO$ -menthyl);  
90% ee (*trans*), 99% ee (*cis*)  
Ahn, 1997 (ref. 173)



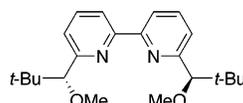
**150**

dr: 96:4 ( $N_2CHCOOBHT$ );  
94% ee (*trans*), 79% ee (*cis*)  
Fu, 1998 (ref. 185)



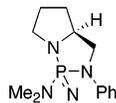
**151**

dr: 86:14 ( $N_2CHCOO$ t-Bu);  
92% ee (*trans*), 98% ee (*cis*)  
Katsuki, 1993 (ref. 181)



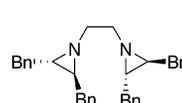
**152**

dr: 80:20 ( $N_2CHCOOEt$ );  
91% ee (*trans*), 82% ee (*cis*)  
Kwong, 1998 (ref. 182)



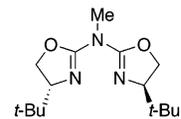
**153**

dr: 99:1 ( $N_2CHCOOEt$ );  
94% ee (*trans*)  
Buono, 1999 (ref. 186)



**154**

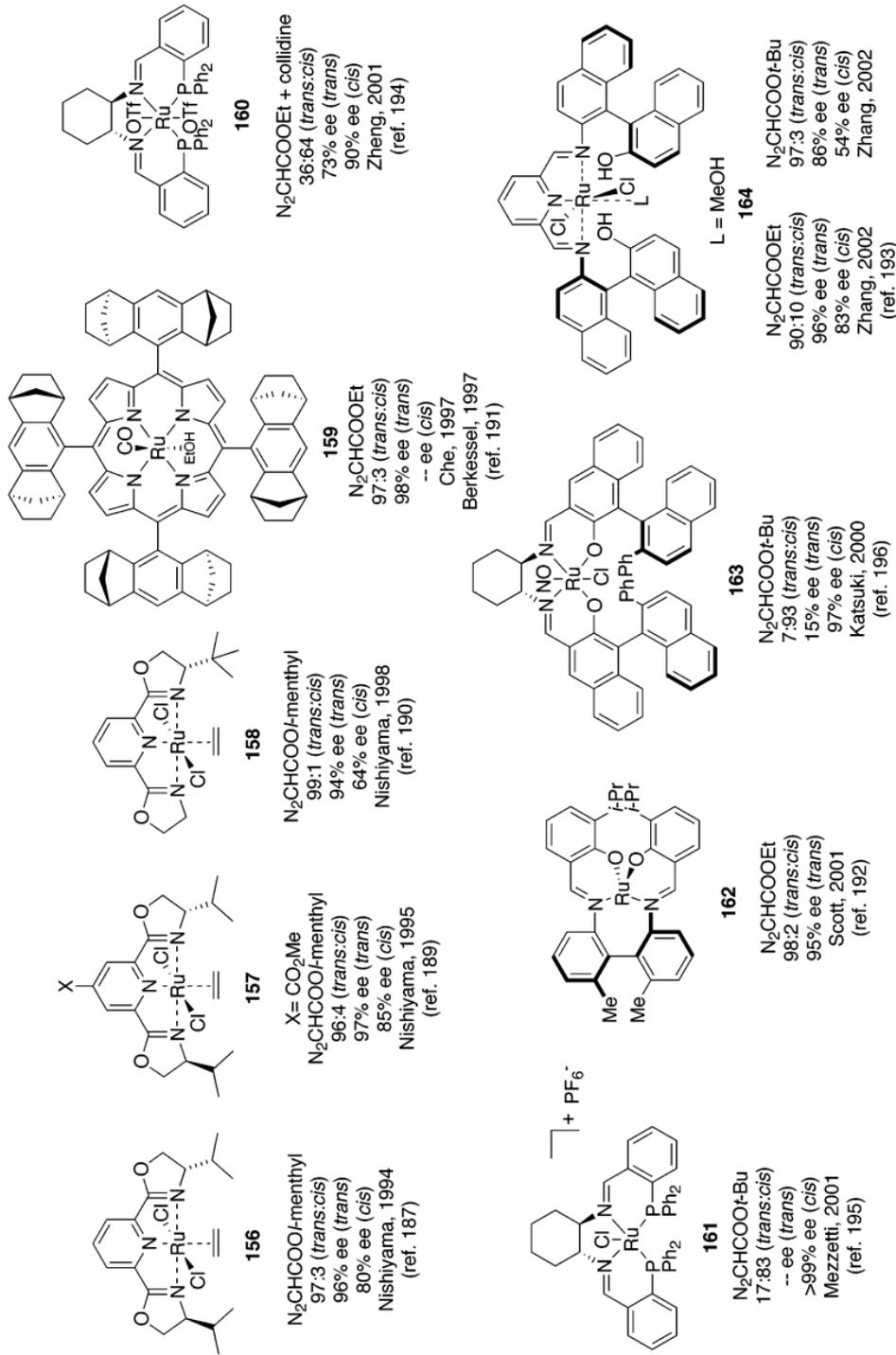
dr: 75:25 ( $N_2CHCOOEt$ );  
90% ee (*trans*)  
Tanner, Andersson, 1998  
(ref. 184)



**155**

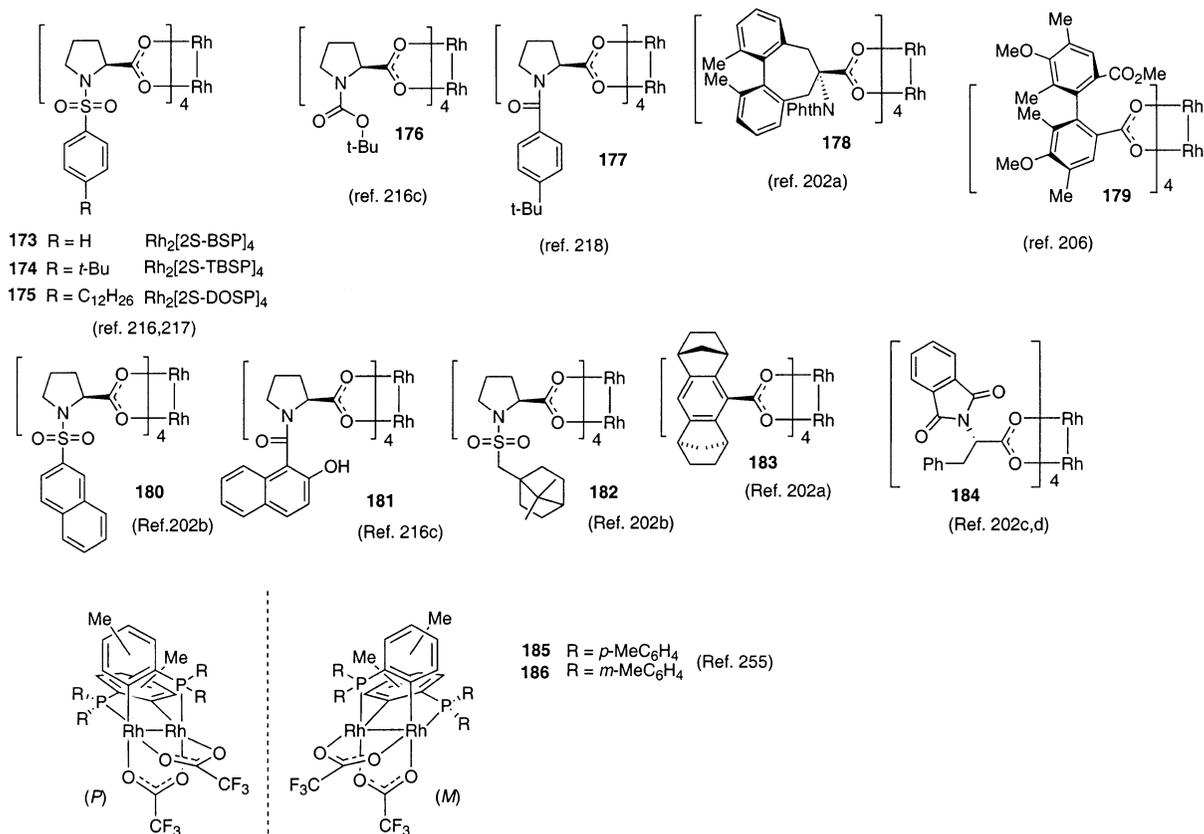
dr: 73:27 ( $N_2CHCOOEt$ );  
92% ee (*trans*), 84% ee (*cis*)  
Reiser, 2000 (ref. 174)

**Figure 21.** Chiral catalysts for the intermolecular Cu-catalyzed cyclopropanation and the diastereoselectivities and enantiomeric excesses observed for the cyclopropanation of styrene.

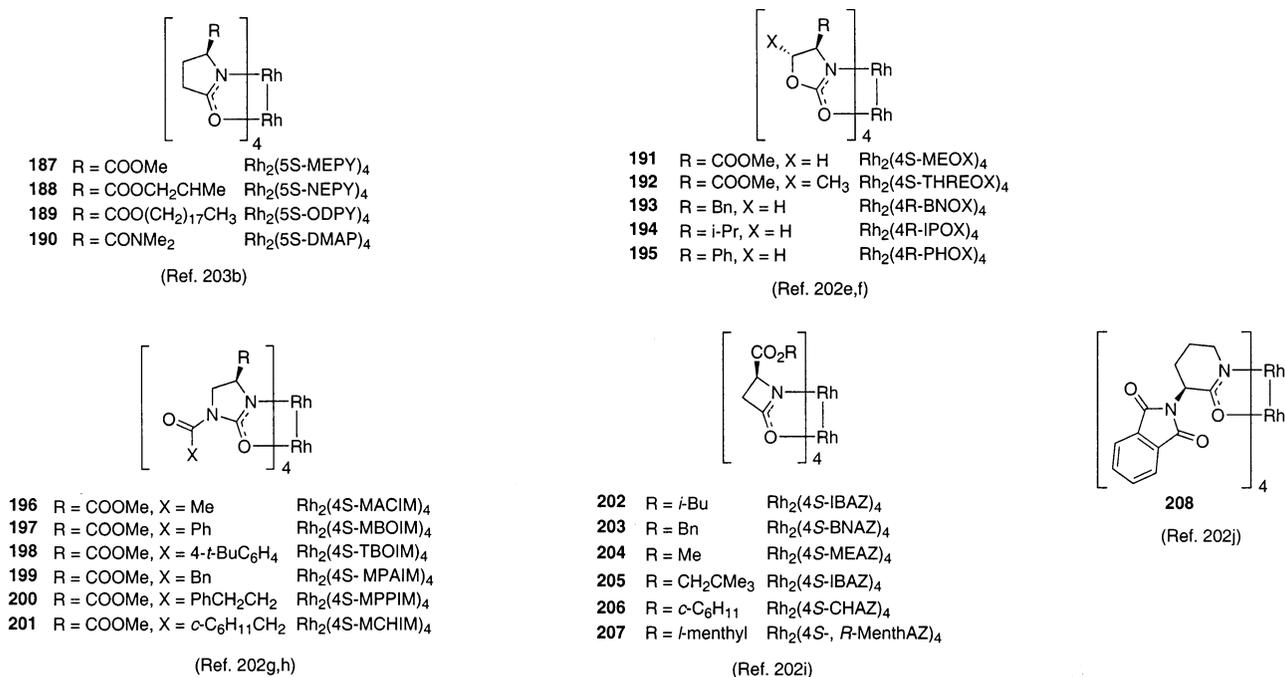


**Figure 26.** Ruthenium catalysts for the  $\text{N}_2\text{CHCOOR}$ -mediated cyclopropanation of alkenes.

## Dirhodium(II) Carboxylates



## Dirhodium(II) Carboxamidates



**Figure 28.** Most common chiral dirhodium catalysts for inter- and intramolecular cyclopropanations.