

# Erratum to: Asymmetric Organocatalysis

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Erratum to:

Shengming Ma (ed.), Asymmetric Catalysis from a Chinese Perspective  
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*In this Chapter, the citations of Fig. 3 “Chiral binol-based phosphoric acids” and Fig. 4 “Representative modified cinchona alkaloids” are incorrect.*

*Fig. 3 is erroneously cited on p. 164, in the first sentence of Sect. 3.1:*

## 3.1 Asymmetric Michael Addition Reactions

Chen reported an asymmetric direct vinylogous Michael addition (**Fig. 3**) of  $\alpha,\alpha$ -adicyanoolefins to enals (Scheme 13) [64. ...

*Fig. 3 should correctly replace the citation of Fig. 4 on p. 177, in Sect. 5.1:*

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### 5.1 Phosphoric Acid and Amide Catalysis

Chiral phosphoric acids of type **116**, were first demonstrated to catalyze Mannich reaction independently by Akiyama and Terada [97, 98]. This type of organocatalysts have unique structural feature containing a strong acidic hydroxy and a Lewis basic phosphoryl oxygen, which allow for the simultaneous activation of both nucleophiles and electrophiles by hydrogen bonding interactions. Moreover, the tunable 3,3'-substituents provide a diverse spectrum of catalysts for different enantioselective transformations. Indeed, they have been privileged organocatalysts widely applicable to a broad scope of asymmetric transformations (~~Fig. 4~~ **Fig. 3**) [99–101].

*Fig. 4 should correctly be cited on p. 189, Sect. 6:*

## 6 Chiral Organic Base Catalysis

An asymmetric direct vinylogous Michael reaction of activated vinyl malononitriles to nitroolefins catalyzed by modified cinchona alkaloid [DHQD]<sub>2</sub>PYR (**Fig. 4**) was reported by Chen (Scheme 61) [135]. Highly functionalized products with two vicinal chiral centers were generated with exclusive  $\gamma$ -selectivity and high diastereoand enantioselectivity.