

# Construction of Tetrasubstituted Stereocenters via Pd-Catalyzed Asymmetric Decarboxylative Cycloaddition

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The development of efficient methods for the construction of tetrasubstituted stereogenic centers is an important objective in asymmetric catalysis. In this poster, I will present our recent research results for the construction of tetrasubstituted stereogenic centers via palladium-catalyzed asymmetric decarboxylative cycloaddition of vinyl ethylene carbonates (VECs) with unsaturated electrophiles.<sup>1</sup> By using chiral palladium complex as catalysts under mild conditions, the transformations that enable rapid access diverse heterocyclic compounds bearing tetrasubstituted chiral centers in high yields and high levels of stereoselectivities. In addition, an efficient method for the construction of tertiary alcohols via asymmetric allylic hydroxylation and etherification of VECs will also be presented (Fig. 1).

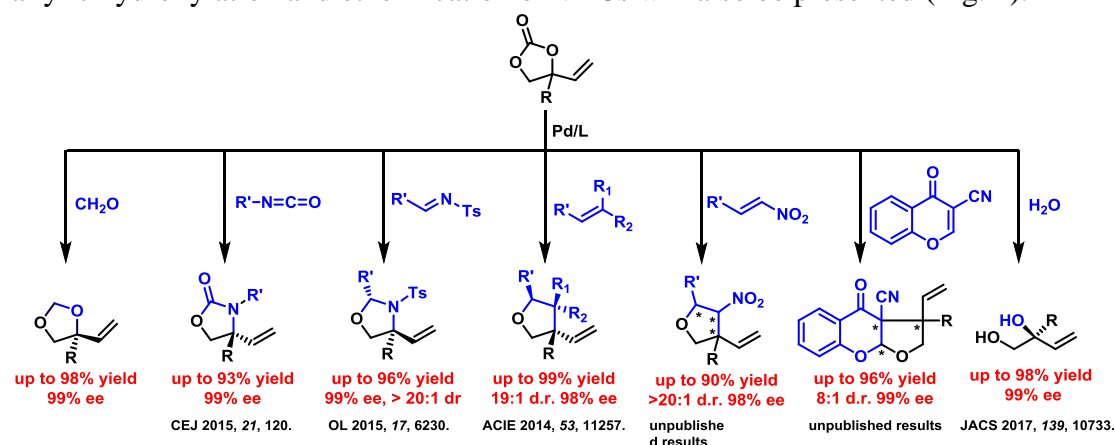


Fig. 1 Pd-Catalyzed asymmetric cycloaddition of VEC with various unsaturated electrophiles

## Reference

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[Field of research] Asymmetric Catalysis.