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# NOVEL ENANTIOSELECTIVE ORGANOCATALYTIC TRANSFORMATIONS INVOLVING RAUHUT CURRIER Reaction



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Novel enantioselective organocatalytic transformations involving Rauhut Currier (RC) reaction will be presented. The reaction started from symmetrical cyclohexadienones and allenoates to give tetrahydrobenzofuranones bearing a chiral tetrasubstituted stereogenic center in up to 96% ee with high diastereo-, regio-, and chemo-selectivity. In addition, a facile method for the construction of methylidene lactams will also be introduced. The reaction proceeds via an amidation/RC reaction sequence starting from symmetrical cyclohexadienone derivatives and acryloyl chloride promoted by a newly developed chiral acid-base type organocatalyst.

#### **Biography**

Hiroaki Sasai pursued PhD in 1985 from Keio University, Tokyo, Japan. After working as an Assistant Professor at Hokkaido University, he moved to the University of Tokyo (Lecturer and then Associate Professor) in 1992 and then moved to the current position in 1997. He is a recipient of 1995 PSJ Award for young scientists and the Fluka Prize "Reagent of the Year 1996". He also received CSJ Award for Creative Work in 2006, the Molecular Chirality Award in 2011, Synthetic Organic Chemistry Award in 2016 and Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology, Japan in 2018. His research interests lies in enantioselective catalysis and conceptually new functional materials.

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