

LCC'S MOLECULES OF THE MONTH

Synthesis of chiral piperidines from pyridinium salts via rhodium-catalysed transfer hydrogenation

With their increased prevalence in FDA approved drugs, the requirement for chiral N-heterocycles is also expanding. However, effective methods for their synthesis from simple starting materials are scarce. This recently published article from Professor Jianliang Xiao, co-workers from the University, and LCC, reports the synthesis of chiral piperidines via rhodium-catalysed reactions. The method overcomes some notable shortcomings of asymmetric hydrogenation and traditional multistep synthesis, giving access to highly valuable chiral piperidines. The article was also featured in last months OPR&D "Highlights from the Literature" section.¹

Developing functional methods for chiral synthesis is the foundation of LCC. Through this, we can apply our expertise in the design and synthesis of novel variants of privileged scaffolds. Representative examples from LCC's >3K in stock synthons are shown below.

Please get in touch to see our collections. Custom sd files according to your specification requirements will be provided on request.

^{1.} Wu, J. et al. (2022) "Synthesis of chiral piperidines from pyridinium salts via rhodium-catalysed transfer hydrogenation," Nature Catalysis, 5(11), pp. 982–992.





