

## Publication

## Artificial metalloenzymes for enantioselective catalysis based on the biotin-avidin technology

**JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)****ID** 116748**Author(s)** Mao, Jincheng; Ward, Thomas R.**Author(s) at UniBasel** [Ward, Thomas R.](#) ;**Year** 2008**Title** Artificial metalloenzymes for enantioselective catalysis based on the biotin-avidin technology**Journal** Chimia**Volume** 62**Number** 12**Pages / Article-Number** 956-961**Keywords** Artificial metalloenzymes, Asymmetric catalysis, Biotin-(strept)avidin technology, Enantioselectivity

A review. Artificial metalloenzymes, based on the incorporation of a biotinylated catalytically active organometallic moiety within streptavidin, offer an attractive alternative to homogeneous, heterogeneous and enzymic catalysis. In this account, we outline our recent results and implications in the developments of such artificial metalloenzymes for various asym. transformations, including hydrogenation, transfer hydrogenation, allylic alkylation and sulfoxidn. [on SciFinder(R)]

**Publisher** Schweizerische Chemische Gesellschaft**ISSN/ISBN** 0009-4293**edoc-URL** <http://edoc.unibas.ch/dok/A5254464>**Full Text on edoc** Available;**Digital Object Identifier DOI** 10.2533/chimia.2008.956**ISI-Number** WOS:000262080300001**Document type (ISI)** Article