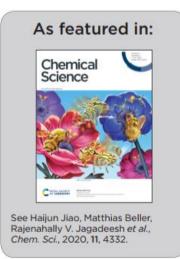


Showcasing research from Dr. Jagadeesh Rajenahally's laboratory, Department of Prof. Matthias Beller, Leibniz Institute for Catalysis, Germany.

General and selective synthesis of primary amines using Ni-based homogeneous catalysts

The development of base metal catalysts for industrially relevant amination and hydrogenation processes by applying abundant and green reagents is of central importance to produce amines, which represent highly privileged compounds widely used in chemistry, medicine, biology, energy, materials and the environment. Here, a Ni-triphos complex has been introduced as the first Ni-based homogeneous catalyst for both reductive amination of carbonyl compounds with ammonia and hydrogenation of nitroarenes to access all kinds of primary amines including the synthesis and amination of complex drug molecules and steroid derivatives.





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