CaRLa: Catalysis Research Laboratory

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The CaRLa (Catalysis Research Laboratory) is a collaboration between BASF and the University of Heidelberg. Projects focus on industrially relevant problems in homogeneous catalysis, for which examples in academia are also rare. The goal of each CaRLa-project is the transfer to an application or to a further process development, and as such there is a large emphasis on efficiency and atom economy.

Herein we present some select projects from our laboratory, for example, the carboxylation of olefins using CO₂ as a C₁ building-block,¹ the selective amination of alcohols with NH₃,² and the asymmetric reductive amination of ketones to amines with ee’s up to 87% and yields up to 99%.³