# Scientific Symposium

## The journey of a catalyst

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## Abstract

The manifold aspects of developing asymmetric hydrogenation on an industrial scale are illustrated. We discuss process-related parameters and the scale-up of a new Ir-Crabtree/Pfaltz type catalyst. The combination of a diverse catalyst library with a high-throughput screening (HTS) approach enabled initial lead identification. Collaborations between academia and industry partners have successfully refined the catalyst structure to achieve performance relevant for industrial applications. The catalyst production involved two transition-metal catalyzed steps, including an HTS-optimized asymmetric transfer hydrogenation that provided access to the ligand backbone with excellent enantioselectivity. Catalyst production was quickly scaled up, and its performance in asymmetric hydrogenation was demonstrated on a kilogram scale, benefiting from the close collaboration between catalysis and synthesis experts in the Product & Manufacturing Service unit at Solvias.

**April 24th, 2024, 9:00 to 17:00**

**Solvias AG, Römerpark 2, 4303 Kaiseraugst, Switzerland**

**Free**

For inquiries or assistance with registration, please contact us at marketing@solvias.com.