

# 23<sup>rd</sup> Thieme Lecture in Organic and Bioorganic Chemistry

## Very Strong and Confined Chiral Acids: Universal Catalysts for Asymmetric Synthesis?



### Prof. Dr. Benjamin List, Max-Planck-Institut für Kohlenforschung, Mülheim

**Ben List's** research focuses on organic synthesis and catalysis. He has contributed and pioneered fundamental concepts in organocatalysis including aminocatalysis, enamine catalysis, and asymmetric-counter-anion-directed catalysis (ACDC). After his discovery of the proline-catalyzed direct asymmetric intermolecular aldol reaction in 2000, Ben List's group has introduced the first proline-catalyzed asymmetric Mannich reaction, novel Michael additions,  $\alpha$ -aminations, enol-exo-aldolizations, and aldehyde  $\alpha$ -alkylations. His collaborative efforts have provided a clearer mechanistic understanding of enamine catalysis and established the basis for the design of new reactions and catalysts. His latest work deals with chiral anions in asymmetric catalysis. His general concept of asymmetric counteranion-directed catalysis (ACDC) has recently found widespread use in organocatalysis, transition metal catalysis, and Lewis acid catalysis.

The research of Ben List's group was recognized with many awards and lectureships, including the Otto-Bayer-Prize in 2012, the Horst-Pracejus-Preis and the Mukaiyama Award in 2013, the Arthur C. Cope Scholar Award in 2014 and the Gottfried Wilhelm Leibniz-Prize in 2016.

### 23<sup>rd</sup> Day of Organic Chemistry at the University of Stuttgart (TOCUS), October 11, 2019

- |         |   |
|---------|---|
| 9:00 am | Presentations of 12 doctoral students from the Universities of Stuttgart, Frankfurt, Heidelberg, Freiburg, Konstanz, KIT Karlsruhe, Tübingen, Ulm. Auditorium V 55.02   |
| 5:30 pm | Welcoming remarks: Susanne Haak, Georg Thieme Verlag, Stuttgart<br>Introduction by Prof. Dr. Clemens Richert, Institute of Organic Chemistry, University of Stuttgart   |
| 5:45 pm | Thieme Lecture: Prof. Dr. Benjamin List, Max-Planck-Institut für Kohlenforschung, Mülheim<br><b>'Very Strong and Confined Chiral Acids: Universal Catalysts for Asymmetric Synthesis?'</b>                        |
| 7:00 pm | Evening buffet and after dinner discussions (advanced booking for non-lecturers required)<br>Internationales Begegnungszentrum (IBZ) of the University of Stuttgart,<br>Robert-Leicht-Straße 161, 70569 Stuttgart |