



Curriculum Vitae Prof. Dr. Dieter Enders



Name: Dieter Enders

Main research interests: Asymmetric synthesis, asymmetric transition metal catalysis, organocatalytic methods

The main objective of Dieter Enders' research is the development of selective new methods in the area of asymmetric synthesis and their application in the synthesis of natural and bioactive compounds.

Academic and Professional Career

- since 1985 Professor and Director at the Institute for Organic Chemistry at the Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen
- 1980 - 1985 Professor for Organic Chemistry at the University of Bonn
- 1979 - 1980 Private lecturer, Gießen
- 1979 Habilitation for Organic Chemistry at the University of Gießen
- 1974 - 1975 Postdoc, Harvard University, USA
- 1974 Promotion (PhD)
- 1972 Diploma, Gießen

Functions in Scientific Societies and Committees (Selection)

- 2008 - 2014 Member of the Senate of the Deutsche Forschungsgemeinschaft (DFG)
- 1998 - 2001 Spokesperson of Transferbereich 11 (DFG) „Stereoselektive Wirkstoffsynthese“

1994 - 2005 Spokesperson of the Sonderforschungsbereich 380 (DFG) „Asymmetrische Synthesen mit chemischen und biologischen Methoden“ (RWTH Aachen, Forschungszentrum Jülich, Heinrich-Heine-University Düsseldorf, University of Bonn)

Synthesis, Editor for Reviews

Tetrahedron: Asymmetry, Advisory Board

Targets in Heterocyclic Systems, Italian Chemical Society, Advisory Board

Letters in Organic Chemistry, Advisory Board

Topics in Heterocyclic Chemistry, Advisory Board

Auszeichnungen und verliehene Mitgliedschaften (Auswahl)

2014 Ryoji Noyori Prize of the Society of Synthetic Organic Chemistry, Japan (SSOCJ)

2013 Karl Ziegler-Vorlesung, Max-Planck-Institut für Kohlenforschung, Mülheim

2012 ERC Advanced Grant

2012 Corresponding Member, Akademie der Wissenschaften zu Göttingen

2010 Robert Robinson Award, Royal Society of Chemistry

2008 Arthur C. Cope Scholar Award, American Chemical Society

2007 Member of the National Academy of Sciences Leopoldina

2002 Emil Fischer Medal of the GDCh

2000 Max-Planck-Research Prize for Chemistry

1995 Yamada Prize, Japan

1993 Leibniz Award of the Deutsche Forschungsgemeinschaft (DFG)

1979 - 1980 Heisenberg Fellowship of the Deutsche Forschungsgemeinschaft (DFG)

1979 - 1984 Lecturer Fellowship of the Fonds der Chemischen Industrie

1978 Award of the Justus Liebig University Gießen

1977 - 1979 Habilitations-Stipendiat of the Deutsche Forschungsgemeinschaft (DFG)

1975 - 1977 Liebig Fellow of the Verband der Chemischen Industrie

1974 Prize for the best Dissertation (Justus Liebig University Gießen)

1972 - 1975 Studienstiftung des Deutschen Volkes

Major Scientific Interests

The main objective of Dieter Enders' research is the development of selective new methods in the area of asymmetric synthesis and their application in the synthesis of natural and bioactive compounds. Pheromones, flavours, alkaloids, polyketides, macrolides, sphingolipids and carbohydrates can be synthesized with high diastereo- and enantioselectivity by employing metalated chiral hydrazones, α -aminonitriles, lactams and sulfonates. Another research field is the asymmetric transition metal catalysis with ferrocene and carbene ligands. Nowadays the focus is on the development of new organocatalytic methods where small organic molecules such as the amino acid proline and N-heterocyclic carbenes are used as catalysts under metal-free conditions. Special emphasis is laid on asymmetric organocatalytic domino reactions.