

List of Publications on the Chemistry of Microorganisms and Enzymes

* = review articles

* Dieter Seebach, Hans-Otto Kalinowski
Enantiomerenreine Naturstoffe und Pharmaka aus billigen Vorläufern (Chiral Pool). - Zur Frage der chiral ökonomischen und ökologischen Totalsynthese
Nachr. Chem. Techn. **24**, 415 - 418 (1976)

Bernhard Seuring, Dieter Seebach
Synthese von vier chiralen, elektrophilen C₃- und C₄-Synthesebausteinen aus Hydroxycarbonsäuren
Helv. Chim. Acta **60**, 1175 - 1181 (1977)

Dieter Seebach, Max Züger
Ueber die Depolymerisierung von Poly-(R)-3-hydroxy-buttersäureester (PHB)
Helv. Chim. Acta **65**, 495 - 503 (1982)

Max F. Züger, Fabio Giovannini, Dieter Seebach
Herstellung von (R)-(-)-3-Hydroxy-2-methyl-propionsäureethylester durch Hefereduktion von α-Formyl-propionsäureethylester
Angew. Chem. **95**, 1024 (1983)
Angew. Chem. Int. Ed. Engl. **22**, 1012 (1983)

Dieter Seebach, Max F. Züger, Fabio Giovannini, Bernhard Sonnleitner, Armin Fiechter
Präparative mikrobiologische Reduktion von β-Oxoestern mit Thermoanaerobium brockii
Angew. Chem. **96**, 155 - 156 (1984)
Angew. Chem. Int. Ed. Engl. **23**, 151 - 152 (1984)

Dieter Seebach, Philippe Renaud, W. Bernd Schweizer, Max F. Züger, Marie-Josèphe Brienne
Preparation by Yeast Reduction and Determination of the Sense of Chirality of Enantiomerically Pure Ethyl (-)-4,4,4-Trichloro-3-hydroxy- and (+)- 4,4,4-Trifluoro-3-hydroxybutanoate
Helv. Chim. Acta **67**, 1843 - 1853 (1984)

Christian Schregenberger, Dieter Seebach
Synthesis and Determination of the Absolute Configuration of the Macrodiolide (+)-Conglobatin
Tetrahedron Lett. **25**, 5881 - 5884 (1984)

Dieter Seebach, Marius A. Sutter, Roland H. Weber, Max F. Züger
Yeast Reduction of Ethyl Acetoacetate: (S)-(+) Ethyl 3-Hydroxybutanoate (Butanoic acid, 3-hydroxy-, ethyl ester, (S))
Organic Syntheses **63**, 1 (1985), Collective Volume **VII**, 215 - 220 (1990)

Dieter Seebach, Fabio Giovannini, Bernd Lamatsch

Preparative Asymmetric Reduction of 3-Ketobutyrate and -valerate by Suspended Cells of Thermophilic Bacteria (*Thermoanaerobium brockii*) in Ordinary Laboratory Equipment

Helv. Chim. Acta **68**, 958 - 960 (1985)

Dieter Seebach, Martin Eberle

(R)-Ethyl 4-t-Butoxy-3-hydroxybutanote, a Versalite Chiral Building Block for EPC (Enantiomerically Pure Compound) Syntheses, by Yeast Reduction of Ethyl 4-t-Butoxy-3-oxobutanoate

Synthesis **1986**, 37 - 40

Jürg Ehrler, Fabio Giovannini, Bernd Lamatsch, Dieter Seebach

Stereoselectivity of Yeast Reductions - an Improved Procedure for the Preparation of Ethyl (S)-3-Hydroxybutanoate and (S)-Hydroxymethyl -butanoate

Chimia **40**, 172 - 173 (1986)

Dieter Seebach, Martin Eberle

Enantioselective Cleavage of meso-Nitrodiol Diacetates by an Esterase Concentrate from Fresh Pig Liver: Preparation of Useful Nitroaliphatic Building Blocks for EPC Syntheses

Chimia **40**, 315 - 318 (1986)

Christian Schregenberger, Dieter Seebach

Totalsynthese des Makrodiolids (+)-Conglobatin

Liebigs Ann. Chem. **1986**, 2081 - 2103

* Dieter Seebach, Silvio Roggo, Jürg Zimmermann

Biological-Chemical Preparation of 3-Hydroxycarboxylic Acids and Their Use in EPC-Syntheses

in "Stereochemistry of Organic and Bioorganic Transformations" Workshop Conferences Hoechst, Vol. **17**, Wilhelm Bartmann and K.Barry Sharpless, Editors, Verlag Chemie, Weinheim, 1987, 85 - 126

Martin Eberle, Martin Egli, Dieter Seebach

Enantioselektive Verseifung der Diacetate von 2-Nitro-1,3-dienol mit Schweineleber-Esterase und Herstellung enantiomerenreiner Derivate von 2-Nitro-allylalkoholen (chirale Verknüpfungsreagenzien)

Helv. Chim. Acta **71**, 1-23 (1988)

Jürg Ehrler, Dieter Seebach

Notiz über mikrobiologische Umsetzungen mit *Halobacterium halobium*: Reduktion von 3-Oxobutansäure-ethylester und Hydrolyse von 3-Hydroxy-butansäure-ethylester.

Cooperative Effekte von Reduktase und Hydrolase

Helv. Chim. Acta **72**, 793 - 799 (1989)

Jürg Ehrler, Dieter Seebach

Enantioselektive Verseifungen substituierter, achiraler 3-Acyloxy-propylester mit Lipasen: Herstellung chiraler Derivate von "Tris(hydroxymethyl)methan"

Liebigs Ann. Chem. **1990**, 379 - 388

Martin Eberle, Martin Missbach, Dieter Seebach
Enantioselective Saponification with Pig Liver Esterase (PLE): (1S,2S,3R)-3-Hydroxy-2-Nitrocyclohexyl Acetate (1,3-Cyclohexanediol, 2-nitro-, 1-acetate, [1S-(1 α ,2 β ,3 α)])
Organic Syntheses **69**, 19 - 30 (1990)

Dieter Seebach, Miguel A. Maestro, Michael Sefkow, Axel Neidlein, Francine Sternfeld, Geo Adam, Thimo Sommerfeld
A Highly Convergent Total Synthesis of (+)-Myxovirescine M2
Helv. Chim. Acta **74**, 2112 - 2118 (1991)

Michael Sefkow, Axel Neidlein, Thimo Sommerfeld, Francine Sternfeld, Miguel A. Maestro, Dieter Seebach
Total Synthesis of Myxovirescins, 2
Assembly of the "Northwestern" Part [C(15)-C(28)]
Liebigs Ann. Chem. **1994**, 719 - 729

Dieter Seebach, Guido F. Herrmann, Urs D. Lengweiler, Beat M. Bachmann, Walter Amrein
Synthese und enzymatischer Abbau von Dendrimeren aus (R)-3-Hydroxybuttersäure und Trimesinsäure
Angew. Chem. **108**, 2969 - 2972 (1996)
Angew. Chem. Int. Ed. Engl. **35**, 2795 - 2797 (1996)

Beat M. Bachmann, Dieter Seebach
Investigation of the Enzymatic Cleavage of Diastereomeric Oligo(3-hydroxybutanoates) Containing Two to Eight HB Units. A Model for the Stereoselectivity of PHB Depolymerase from *Alcaligenes faecalis* T₁
Macromolecules **32**, 1777 - 1784 (1999)

* Dieter Seebach, Monica G. Fritz
Detection, synthesis, structure, and function of oligo(3-hydroxyalkanoates): contributions by synthetic organic chemists
Int. J. Biol. Macromol. **25**, 217 - 236 (1999)

Christoph M. Krell, Dieter Seebach
Preparation of Free and of Specifically Protected Oligo[β -Malic Acids] for Enzymatic Degradation Studies
Eur. J. Org. Chem. **2000**, 1207 - 1218

Bernd Gasslmaier, Christoph M. Krell, Dieter Seebach, Eggehard Holler
Synthetic substrates and inhibitors of β -poly(L-malate)-hydrolase (polymalatase)
Eur. J. Biochem. **267**, 5101 - 5105 (2000)

Tobias Heck, Dieter Seebach, Steffen Osswald, Matthijs K. J. ter Wiel, Hans-Peter E. Kohler, Birgit Geueke
Kinetic Resolution of Aliphatic β -Amino Acid Amides by β -Aminopeptidases
ChemBioChem **10**, 1558 - 1561 (2009)

Tobias Heck, Artur Reimer, Dieter Seebach, James Gardiner, Gildas Deniau, Aneta Lukaszuk, Hans-Peter E. Kohler, Birgit Geueke

β -Aminopeptidases-Catalyzed Biotransformations of β^2 -Dipeptides: Kinetic Resolution and Enzymatic Coupling

ChemBioChem **11**, 1129 – 1136 (2010)

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