

## **Publikationsliste Prof. Dr. D. Seebach**

- 1 + Diplomarbeit: Dieter Seebach  
**Zur Reaktion von Bleitetraacetat mit 1,1-Diphenyl-2-hydroperoxy-propiomesitylen**  
Technische Hochschule Karlsruhe, **1961**
- 2 + Dissertation: Dieter Seebach  
**2,5-Dihydro-Furan-Peroxyde**  
Technische Hochschule Karlsruhe, **1964**
- 3 Rudolf Criegee, Dieter Seebach  
**Ein Bishydroperoxyd mit ungewöhnlicher Bildungstendenz**  
Chem. Ber. **96**, 2704 - 2711 (1963)
- 4 Dieter Seebach  
**Die Reaktion von 2,5-Dimethyl-furan mit Wasserstoffperoxyd**  
Chem. Ber. **96**, 2712 - 2722 (1963)
- 5 Dieter Seebach  
**Die Reaktion von Pentamethylpyrrol mit Wasserstoffperoxyd**  
Chem. Ber. **96**, 2723 - 2729 (1963)
- 6 Rudolf Criegee, Ulrich Zirngibl, Harald Furrer, Dieter Seebach, Günther Freund  
**Photosynthese substituierter Cyclobutene**  
Chem. Ber. **97**, 2942 - 2948 (1964)
- 7 Dieter Seebach  
**Über ein sehr labiles Bicyclo(2.2.0)hexen-Derivat**  
Chem. Ber. **97**, 2953 - 2958 (1964)
- 8 \* Dieter Seebach  
**Gespannte polycyclische Systeme aus Drei-und Vierring-Bausteinen**  
Angew. Chem. **77**, 119 - 129 (1965)  
Angew. Chem. Int. Ed. Engl. **4**, 121 - 131 (1965)

- 9 Rudolf Criegee, Haukur Kristinsson, Dieter Seebach, Fritz Zanker  
**Eine neuartige Synthese von Bicyclo(2.2.0)hexen-(2)-Derivaten**  
Chem. Ber. **98**, 2331 - 2338 (1965)
- 10 Rudolf Criegee, Dieter Seebach, Rudolf Ernst Winter, Bernt Börretzen,  
Hans-Albert Brune  
**Valenzisomerisierungen von Cyclobutenen**  
Chem. Ber. **98**, 2339 - 2352 (1965)
- 11 Elias J. Corey, Dieter Seebach  
**Carbanionen der 1,3-Dithiane, Reagentien zur C-C-Verknüpfung durch nucleophile Substitution oder Carbonyl-Addition**  
Angew. Chem. **77**, 1134 - 1135 (1965)  
Angew. Chem. Int. Ed. Engl. **4**, 1075 - 1077 (1965)
- 12 Elias J. Corey, Dieter Seebach  
**Synthese von 1,n-Dicarbonylverbindungen mit Carbanionen der 1,3-Dithiane**  
Angew. Chem. **77**, 1135 - 1136 (1965)  
Angew. Chem. Int. Ed. Engl. **4**, 1077 - 1078 (1965)
- 13 Elias J. Corey, Dieter Seebach  
**Phentylthiomethylolithium and Bis(phenylthio)methylolithium**  
J. Org. Chem. **31**, 4097 - 4099 (1966).
- 14 Dieter Seebach, Bruce W. Erickson, Gurbakhsh Singh  
**Synthesis of 1-Deuteroaldehydes. Benzaldehyde-1-d**  
J. Org. Chem. **31**, 4303 - 4304 (1966)
- 15 Elias J. Corey, Dieter Seebach, Robert Freedmann  
**Synthesis of  $\alpha$ -Silyl Ketones via 1,3-Dithianes**  
J. Am. Chem. Soc. **89**, 434 - 436 (1967)
- 16 Dieter Seebach  
**Metallierte Ortho-trithioameisensäureester**  
Angew. Chem. **79**, 468 - 469 (1967)  
Angew. Chem. Int. Ed. Engl. **6**, 442 - 443 (1967)

- 17 Dieter Seebach  
**Bis(phenylthio)carben**  
Angew. Chem. **79**, 469 - 470 (1967)  
Angew. Chem. Int. Ed. Engl. **6**, 443 - 444 (1967)
- 18 Dieter Seebach, Nicholas R. Jones, E. J. Corey  
**A New Synthetic Route to Cyclic Mono- and Diketone Derivatives via Bisthio Carbanions**  
J. Org. Chem. **33**, 300 - 305 (1967)
- 19 Dieter Seebach, Birgit Graf  
**1-Methyl-2,3,4-trimethylen-cyclobutenid-ion**  
Angew. Chem. **80**, 532 - 533 (1968)  
Angew. Chem. Int. Ed. Engl. **7**, 538 - 539 (1968)
- 20 Dennis M. Crouse, Dieter Seebach  
**Erzeugung und Reaktion von  $\alpha$ -Li-N,N-Dimethyl-acetamid und-propion- amid und von  $\alpha$ -Li-Acetonitril**  
Chem. Ber. **101**, 3113 - 3121 (1968)
- 21 Dieter Seebach, Dörthe Steinmüller  
**Herstellung von (S)-(2-Methylbutyl)- und (S)-(sek.Butyl)-ketonen aus optisch aktivem 2-Methylbutanol nach der Dithian-Methode**  
Angew. Chem. **80**, 617 - 618 (1968)  
Angew. Chem. Int. Ed. Engl. **7**, 619 - 620 (1968)
- 22 Dieter Seebach, Dörthe Steinmüller, Frieder Demuth  
**Synthese von (R)- und (S)-konfigurierten Aldehyden und Ketonen aus chiralen sek.-Alkylhalogeniden**  
Angew. Chem. **80**, 618 - 619 (1968)  
Angew. Chem. Int. Ed. Engl. **7**, 620 - 621 (1968)
- 23 \* Dieter Seebach  
**Die "Woodward-Hoffmann-Regeln"**  
**Orbitalsymmetriebetrachtungen bei synchron ablaufenden Valenz-isomerisierungen und Cycloadditionen**  
Fortschritte der chemischen Forschung **11**, 177 -215 (1968/1969)

- 24 + Dieter Seebach  
**Buchbesprechung: Carbonium Ions, an Introduction, von D. Bethell und V. Gold**  
Angew. Chem. **81**, 125 (1969)  
Angew. Chem. Int. Ed. Engl. **8**, 85 (1969)
- 25 Dieter Seebach, Albert K. Beck  
**Kinetic Evidence for the Existence of Free Bis(phenylthio)methylene in Solution**  
J. Am. Chem. Soc. **91**, 1540 - 1542 (1969)
- 26 Dieter Seebach, Neoklis Peleties  
**Mono-, Bis- und Tris(phenylseleno)methylolithium (selenstabilisierte Carbanionen)**  
Angew. Chem. **81**, 465 - 466 (1969)  
Angew. Chem. Int. Ed. Engl. **8**, 450 - 451 (1969)
- 27 + Habilitationsschrift: Dieter Seebach  
**Metallierte ortho-Trithioameisensäureester**  
**Nachweis von freien Bis-(arylthio)-carbenen in Lösung**  
**Selen-stabilisierte Carbanionen**  
Universität Karlsruhe (T.H.), Juli **1969**
- 28 \* Dieter Seebach  
**Methoden und Möglichkeiten der nucleophilen Acylierung**  
Angew. Chem. **81**, 690 - 700 (1969)  
Angew. Chem. Int. Ed. Engl. **8**, 639 - 649 (1969)
- 29 \* Dieter Seebach  
**Nucleophile Acylierung mit 2-Lithium-1,3-dithianen bzw.-1,3,5-trithianen**  
Synthesis **1**, 17 - 36 (1969)
- 30 Dieter Seebach, Henning Dörr, Bahram Bastani, Volker Ehrig  
**Asymmetrische Lösungsmittelkatalyse; 1,4-Bis(dimethylamino)-2,3-dimethoxybutan , ein neues chirales Medium**  
Angew. Chem. **81**, 1002 - 1003 (1969)  
Angew. Chem. Int. Ed. Engl. **8**, 982 - 983 (1969)
- 31 Dieter Seebach, Herbert F. Leitz  
**1,4-Addition von 2-Lithium-1,3-dithianen an substituierte  $\omega$ -Nitrostyrole**

Angew. Chem. **81**, 1047 -1048 (1969)  
Angew. Chem. Int. Ed. Engl. **8**, 983 - 984 (1969)

- 32 Dieter Seebach, Albert K. Beck, Hartmut B. Stegmann  
**Tris(phenylthio)methyl und Bis(phenylthio)methan durch Pyrolyse von Tetrakis-(phenylthio)methan und Hexakis(phenylthio)äthan**  
Tetrahedron Lett. **1970**, 1933 - 1936
- 33 Elias J. Corey, Dieter Seebach  
**1,3-Dithiane (m-Dithiane)**  
Organic Syntheses **50**, 72 - 74 (1970), Collective Volume **VI**, 556 - 559 (1988)
- 34 + Dieter Seebach  
**Buchbesprechung: Modern Reactions in Organic Synthesis von C. J.Timmons**  
Angew. Chem. **83**, 51 (1971)  
Angew. Chem. Int. Ed. Engl. **10**, 82 (1971)
- 35 Dieter Seebach, Hermann Daum  
**Asymmetric Induction of Photopinacolization in a Chiral Aminoether**  
J. Am. Chem. Soc. **93**, 2795 - 2796 (1971)
- 36 \* Dieter Seebach  
**Methoden zur Herstellung und Umwandlung isocyclischer Vierring-Verbindungen**  
Methoden der Organischen Chemie von Houben-Weyl, Herausgegeben von Eugen Müller, Band **IV/4**, S. 1 - 443, Georg Thieme Verlag, Stuttgart (1971)
- 37 Dieter Seebach, Albert K. Beck, Hartmut B. Stegmann  
**Homolyse der Äthan-C-C-Bindung, Nachweis von Tris(phenylthio)methyl durch <sup>13</sup>C-Markierung**  
Angew. Chem. **83**, 534 - 535 (1971)  
Angew. Chem. Int. Ed. Engl. **10**, 500 - 501 (1971)
- 38 Dieter Seebach, Herbert F. Leitz  
**Michael-Addition von metallierten Carbonsäureamiden an Nitrostyrole. Ein vereinfachter Zugang zu Tryptaminen**  
Angew. Chem. **83**, 542 - 544 (1971)  
Angew. Chem. Int. Ed. Engl. **10**, 501 - 503 (1971)

- 39 Dieter Seebach, Albert K. Beck  
**Aldehydes from 1sym-Trithiane: n-Pentadecanal**  
Organic Syntheses **51**, 39 - 43 (1971), Collective Volume **VI**, 869 - 872 (1988)
- 40 Dieter Seebach, Albert K. Beck  
**Cyclic Ketones from 1,3-Dithiane: Cyclobutanone**  
Organic Syntheses **51**, 76 - 81 (1971), Collective Volume **VI**, 316 - 319 (1988)
- 41 Dieter Seebach, Manfred Braun  
**Solvolyseversuche mit 7,7-Bis(alkylthio)norcaranen. Eine neue Methode der Homologisierung**  
Angew. Chem. **84**, 60 - 61 (1972)  
Angew. Chem. Int. Ed. Engl. **11**, 49 - 50 (1972)
- 42 Dieter Seebach, Volker Ehrig  
**Synthese des Lithiumenolates von (S)-(+)-sek.-Butyl-methyl-keton und Acylierung zu chiralen 1,3-Diketonen**  
Angew. Chem. **84**, 107 - 108 (1972)  
Angew. Chem. Int. Ed. Engl. **11**, 127 - 128 (1972)
- 43 + Dieter Seebach  
**Buchbesprechung: Spektroskopie: Spektroskopische Methoden in der organischen Chemie von D. H. Williams und I. Fleming**  
Chemie in unserer Zeit **6**, 31 (1972)
- 44 Dieter Seebach  
**Tris-phenylmercapto-methylolithium**  
**Ein ungewöhnliches Carbenoid**  
Chem. Ber. **105**, 487 - 510 (1972)
- 45 Dieter Seebach, Neoklis Peleties  
 **$\alpha$ -Phenylseleno-methylolithiumverbindungen**  
Chem. Ber. **105**, 511 - 520 (1972)
- 46 Dieter Seebach, Dieter Enders  
**C-C-Verknüpfungen in  $\alpha$ -Stellung zum Stickstoff sekundärer Amine, Lithium-dimethylnitrosamin**

Angew. Chem. **84**, 350 - 351 (1972)  
Angew. Chem. Int. Ed. Engl. **11**, 301 - 302 (1972)

- 47 Dieter Seebach, Bengt-Thomas Gröbel, Albert K. Beck, Manfred Braun, Karl-Heinz Geiß  
**Ketenthioacetale durch "Peterson-Carbonylolefinierung" mit metallierten Formyltrimethylsilyl-thioacetalen**  
Angew. Chem. **84**, 476 - 477 (1972)  
Angew. Chem. Int. Ed. Engl. **11**, 443 - 444 (1972)
- 48 Dieter Seebach, Karl-Heinz Geiß, Albert K. Beck, Birgit Graf, Hermann Daum  
**Herstellung von Polyalkylmercapto- und Polyarylmercapto-methanen, -äthanen und -äthylenen aus metallierten Orthothithioameisensäureestern**  
Chem. Ber. **105**, 3280 - 3300 (1972)
- 49 Dieter Seebach, Albert K. Beck  
**Einfache Darstellung von Hexakis(organylthio)äthanen**  
**Pyrolyse von Hexakis(arylthio)äthanen**  
**Hinweise auf eine C-C-Disssoziation**  
Chem. Ber. **105**, 3892 - 3904 (1972)
- 50 Dieter Seebach, Hartmut B. Stegmann, Klaus Scheffler, Albert K. Beck, Karl-Heinz Geiß  
**ESR-Spektroskopischer Beweis für die C-C-Disssoziation von Hexakis-(organylthio)äthanen und die S-C-Disssoziation von Tetrakis(organylthio)-methanen, Tris(organylthio)methyl-Radikale**  
Chem. Ber. **105**, 3905 - 3914 (1972)
- 51 Dieter Seebach, Dieter Enders  
**Metallierung am primären, sekundären und tertiären C-Atom offenkettiger und cyclischer Nitrosamine**  
Angew. Chem. **84**, 1186 - 1187 (1972)  
Angew. Chem. Int. Ed. Engl. **11**, 1101 - 1102 (1972)
- 52 Dieter Seebach, Dieter Enders  
**Reaktion metallierter Nitrosamine mit Nitrilen**  
**Eine neue Methode zur Darstellung von v-Triazolen**

Angew. Chem. **84**, 1187 (1972)  
Angew. Chem. Int. Ed. Engl. **11**, 1102 - 1103 (1972)

- 53 Dieter Seebach, Michael Kolb, Bengt-Thomas Gröbel  
**"Michael-artige" Addition an konjugierte Keten-thioacetale**  
Angew. Chem. **85**, 42 - 43 (1973)  
Angew. Chem. Int. Ed. Engl. **12**, 69 - 70 (1973)
- 54 Dieter Seebach, Dieter Enders, Bernd Renger, Werner Brügel  
**Isolierung und Identifizierung von v-Tetrazinderivaten aus dem Zerfall von Nitrosamin-Anionen**  
Angew. Chem. **85**, 504 (1973)  
Angew. Chem. Int. Ed. Engl. **12**, 495 (1973)
- 55 + Dieter Seebach  
**Buchbesprechung: Organic Reactions and Orbital Symmetry von T. L. Gilchrist, R. C. Storr**  
Angew. Chem. **85**, 594 (1973)
- 56 Dieter Seebach, Michael Kolb, Bengt-Thomas Gröbel  
**Umsetzung metallierter Trimethylsilylformaldehyd-thioacetale mit Carbonylverbindungen Eine einfache Methode grosser Anwendungsbreite zur Herstellung von Keten-thioacetalen**  
Chem. Ber. **106**, 2277 - 2290 (1973)
- 57 Dieter Seebach, Manfred Braun, Nicolaas Du Preez  
**Ringöffnung von Cyclopropanon Bis-methylthio-Acetalen zu Ketonen und Dimethyldisulfid in Trifluoressigsäure Br/SCH<sub>3</sub> - Austausch in Dibromcarbenaddukten**  
Tetrahedron Lett. **1973**, 3509 - 3512
- 58 Dieter Seebach, Manfred Teschner  
**Thiolierung von Aldehyd- und Keton-Lithiumenolaten**  
Tetrahedron Lett. **1973**, 5113 - 5116
- 59 Dieter Enders, Dieter Seebach  
**Nucleophile Thioacylierung mit Lösungen von Dimethyl-thiocarbamoyl- lithium**

Angew. Chem. **85**, 1104 (1973)  
Angew. Chem. Int. Ed. Engl. **12**, 1014 - 1015 (1973)

- 60 Dieter Seebach, Hartmut Meyer  
**Ergiebige Synthese von ( $\pm$ )-Pestalotin und ( $\pm$ )-Epipestalotin**  
**Optisch reines (-)-Pestalotin durch asymmetrische Synthese**  
Angew. Chem. **86**, 40 - 41 (1974)  
Angew. Chem. Int. Ed. Engl. **13**, 77 - 78 (1974)
- 61 Dieter Seebach, Bengt-Thomas Gröbel  
**Bequeme Darstellung von Vinylsilanen und deren Verwendung zur Ketonsynthese**  
Angew. Chem. **86**, 102 - 103 (1974)  
Angew. Chem. Int. Ed. Engl. **13**, 83 - 84 (1974)
- 62 Gerrit Roelofsen, Jan A. Kanters, Dieter Seebach  
**Kristall- und Molekülstruktur von Hexakis(phenylthio)äthan**  
Chem. Ber. **107**, 253 - 262 (1974)
- 63 Dieter Seebach, Elias J. Corey, Albert K. Beck  
**Lithio-1,3,5-trithiane**  
**Erzeugung, Umsetzung mit Elektrophilen und Verwendung als nucleophile**  
**Acylierungsmittel**  
Chem. Ber. **107**, 367 - 379 (1974)
- 64 Dieter Seebach, Helmut Neumann  
**Brom-Lithium-Austausch an Vinyl- und Aryl-bromiden mit tert. Butyllithium. Zur**  
**Ringerweiterung über Dibromcarbenaddukte**  
Chem. Ber. **107**, 847 - 853 (1974)
- 65 Dieter Seebach, Karl-Heinz Geiß  
**Doppelt metallierter Thiobenzylalkohol. - Thiobenzaldehyd-Dianion**  
Angew. Chem. **86**, 202 - 203 (1974)  
Angew. Chem. Int. Ed. Engl. **13**, 202 - 203 (1974)
- 66 Dieter Seebach, Manfred Braun  
**Cyclobutanone aus 1-Brom-1-lithio-cyclopropanen und Ketonen**  
Angew. Chem. **86**, 279 - 280 (1974)  
Angew. Chem. Int. Ed. Engl. **13**, 277 - 278 (1974)

- 67 Dieter Seebach, Hermann Daum  
**Asymmetrische Hydrierungen mit 1,4-Bis((dimethylamino)-(2S,3S)- und-(2R,3R)-butan-2,3-diol(DBD)/Lithiumaluminiumhydrid**  
Chem. Ber. **107**, 1748 - 1763 (1974)
- 68 Hans Bock, Gerhard Wagner, Klaus Wittel, Jürgen Sauer, Dieter Seebach  
**n/π-Konjugation in heterosubstituierten Äthylenen**  
Chem. Ber. **107**, 1869 - 1881 (1974)
- 69 Dieter Seebach, Volker Ehrig  
**Addition von Oxoalkan-Polyanionen an Nitroolefine**  
**Neue Synthese von Cyclohexanonen**  
Angew. Chem. **86**, 446 - 447 (1974)  
Angew. Chem. Int. Ed. Engl. **13**, 401 - 402 (1974)
- 70 Karl-Heinz Geiß, Bernhard Seuring, Reimund Pieter, Dieter Seebach  
**Doppelt metalliertes 2-Propen-1-thiol -Thioacrolein-Dianon**  
Angew. Chem. **86**, 484 - 486 (1974)  
Angew. Chem. Int. Ed. Engl. **13**, 479 - 480 (1974)
- 71 Dieter Seebach, Michael Kolb, Bengt-Thomas Gröbel  
**Homologative Transformation of Aldehydes and Ketones to α, β-unsaturated Ketones through metalated Ketene Thioacetals**  
Tetrahedron Lett. **1974**, 3171 - 3174
- 72 \* Dieter Seebach, Michael Kolb  
**Umpolung (dipole inversion) of carbonyl reactivity**  
Chemistry and Industry (London), **1974**, 687 - 692
- 73 Dieter Seebach, Dieter Enders  
**Synthesis of α-Heterosubstituted Nitrosamines**  
**Novel Test Substances for Cancer and Mutagenesis Research?**  
J. Med. Chem. **17**, 1225 - 1227 (1974)
- 74 Dieter Seebach, Albert K. Beck  
**Sekundäre und tertiäre Phenylthio- und Phenylseleno-alkyllithium- verbindungen als neuartige Reagentien zur C-C-Verknüpfung**

Angew. Chem. **86**, 859 - 860 (1974)  
Angew. Chem. Int. Ed. Engl. **13**, 806 - 807 (1974)

- 75 \* Dieter Seebach, Dieter Enders  
**Umpolung der Reaktivität von Aminen**  
**Nucleophile  $\alpha$ -sek.-Aminoalkylierung über metallierte Nitrosamine**  
Angew. Chem. **87**, 1 - 18 (1975)  
Angew. Chem. Int. Ed. Engl. **14**, 15 - 32 (1975)
- 76 Dieter Seebach, Rainer Bürstinghaus  
**Michael-Additionen metallierter Thioacetale an cyclische Enone**  
Angew. Chem. **87**, 37 - 38 (1975)  
Angew. Chem. Int. Ed. Engl. **14**, 57 - 58 (1975)
- 77 Hartmut B. Stegmann, Klaus Scheffler, Dieter Seebach  
**Spindichte-Verteilung in Tris(organylthio)methyl-Radikalen**  
Chem. Ber. **108**, 64 - 70 (1975)
- 78 Dieter Seebach, Albert K. Beck  
**Mono-und Bis(phenyltelluro)methyllithium**  
Chem. Ber. **108**, 314 - 321 (1975)
- 79 Dieter Seebach, Elias J. Corey  
**Generation and Synthetic Applications of 2-Lithio-1,3-dithianes**  
J. Org. Chem. **40**, 231 - 237 (1975)
- 80 Dieter Seebach, Dieter Enders  
**Lithiierte Methylnitrosamine**  
**Nucleophile  $\alpha$ -sek.-Aminomethylierung**  
Chem. Ber. **108**, 1293 - 1320 (1975)
- 81 Dieter Seebach, Herbert F. Leitz, Volker Ehrig  
**Michael-Additionen von Lithiumenolaten und schwefelsubstituierten**  
**Lithiumorganylen an Nitroolefine**  
Chem. Ber. **108**, 1924 - 1945 (1975)
- 82 Dieter Seebach, Volker Ehrig, Herbert F. Leitz, Rainer Henning  
**Umwandlungen von Michael-Addukten an Nitroolefine in Carbonyl- verbindungen,**

**1,4-Diaminobutane, Indole und Isochinoline**

Chem. Ber. **108**, 1946 - 1960 (1975)

- 83 Volker Ehrig, Dieter Seebach  
**Reaktionen polymetallierter Carbonylverbindungen mit Nitroolefinen.**  
**Eine neue Ringschluss- und Anellierungsmethode**  
Chem. Ber. **108**, 1961 - 1973 (1975)
- 84 Peter Bischof, Rolf Gleiter, Rolf Dach, Dieter Enders, Dieter Seebach  
**Zur Wechselwirkung einsamer Elektronenpaare in  $\Delta^2$  Tetrazenen.**  
**Photoelektronenspektroskopische Untersuchungen**  
Tetrahedron **31**, 1415 - 1417 (1975)
- 85 Dieter Seebach, Rainer Bürstinghaus  
**S-Methyl Thiocarboxylates from Aldehydes and Ketones through Ketene Thioacetals. Reductive Nucleophile Thiocarbonylation**  
Synthesis **1975**, 461 - 462
- 86 Manfred Braun, Reinhard Dammann, Dieter Seebach  
**Umsetzung von 1-Brom-1-lithiocyclopropanen mit Ketonen und Aldehyden.**  
**Oxaspiropentane, Cyclobutanone, Cyclopropylketone und Lactone.**  
Chem. Ber. **108**, 1368 - 1390 (1975)
- 87 Dieter Seebach, Hok-An Oei  
**Zum Mechanismus der elektrochemischen Pinakolisierung. Die erste asymmetrische Elektrosynthese in chiralem Medium**  
Angew. Chem. **87**, 629 - 630 (1975)  
Angew. Chem. Int. Ed. Engl. **14**, 634 - 636 (1975)
- 88 \* Dieter Seebach  
**Neue links- und rechtshändige Werkzeuge für den Chemiker**  
Schriftenreihe des Verbands der Chemischen Industrie  
Fonds der Chemischen Industrie  
25 Jahre Fonds der Chemischen Industrie 1950 - 1975, Frankfurt, **1975**,  
S.13-29
- 89 \* Dieter Seebach  
**Neue Wege in der Organischen Synthese?**

Schriftenreihe des Verbands der Chemischen Industrie,  
Fonds der Chemischen Industrie  
25 Jahre Fonds der Chemischen Industrie 1950 - 1975, Frankfurt, **1975**,  
S. 57 - 63.

- 90 Hans-Otto Kalinowski, Dieter Seebach, Gerhard Crass  
**Alkylierung von  $\text{Ti}^{\text{I}}$ -Alkoholaten. Eine nützliche Variante der Williamson-Synthese**  
Angew. Chem. **87**, 812 - 813 (1975)  
Angew. Chem. Int. Ed. Engl. **14**, 762 - 764 (1975)
- 91 Hartmut Meyer, Dieter Seebach  
**Synthese einiger Pilzmetabolite mit 4-Methoxy-5,6-dihydro-2-pyron-Struktur**  
Liebigs Ann. Chem. **1975**, 2261 - 2278
- 92 Manfred Braun, Dieter Seebach  
**Darstellung und "disproportionierende Hydrolyse" von Cyclopropanonthioacetalen. Eine neue Homologisierungsmethode**  
Chem. Ber. **109**, 669 - 691 (1976)
- 93 Bengt-Thomas Gröbel, Rainer Bürstinghaus, Dieter Seebach  
**Preparation of  $\alpha$ -Haloesters by Homologation of Aldehydes and Ketones through  $\alpha$ -Trimethylsilylvinyl Sulfides and Ketene Thioacetals**  
Synthesis **1976**, 121 - 124
- 94 Dieter Seebach, Winfried Lubosch, Dieter Enders  
**Nucleophile Thioacylierung mit Thiocarbamoyllithium-Derivaten von sek. Aminen**  
Chem. Ber. **109**, 1309 - 1323 (1976)
- 95 Hans-Otto Kalinowski, Bernd Renger, Dieter Seebach  
**Die magnetische Nichtäquivalenz der C-Atome prochiraler Diphenylmethylgruppen in der  $^{13}\text{C}$ -NMR-Spektroskopie**  
Angew. Chem. **88**, 256 - 257 (1976)  
Angew. Chem. Int. Ed. Engl. **15**, 234 - 235 (1976)
- 96 Hisao Yamaguchi, Kenji Kawada, Toshihiko Okamoto, Ernst Egert, Hans Jörg Lindner, Manfred Braun, Reinhard Dammann, Michael Liesner, Helmut Neumann, Dieter Seebach

**Stereospezifische Br/OAc-Substitution an syn- und anti-11-Brom-2,3-benzotricyclo[4.4.1.0]undecen-4-onen. Die Retentive Substitution am Dreiring**  
Chem. Ber. **109**, 1589 - 1600 (1976)

- 97 Dieter Seebach, Manfred Teschner  
**Herstellung  $\alpha$ -thiolierter Carbonylverbindungen**  
Chem. Ber. **109**, 1601 - 1616 (1976)
- 98 Dieter Seebach, Winfried Lubosch  
**Nucleophile Aminoalkylierung. Lithiertes N,N-Dimethyl-thiopivalamid**  
Angew. Chem. **88**, 339 - 340 (1976)  
Angew. Chem. Int. Ed. Engl. **15**, 313 (1976)
- 99 \* Dieter Seebach, Karl-Heinz Geiß  
**New Applications of Organometallic Reagents in Organic Synthesis**  
Proceedings of a Symposium at the ACS National Meeting in New York City,  
April 6 - 9th, 1976, Ed. D. Seyferth  
J. Organomet. Chem., Library **1**, Elsevier Scientific Publishing Company,  
Amsterdam, 1976, 1 - 92
- 100 Dieter Seebach, Karl-Heinz Geiß, Manat Pohmakotr  
**Das Magnesium-Derivat des Thioacrolein-Dianions. Ein einfacher Zugang zu Vinyl- und Divinyloxiranen**  
Angew. Chem. **88**, 449 - 450 (1976)  
Angew. Chem. Int. Ed. Engl. **15**, 437 - 438 (1976)
- 101 Dieter Seebach, Eva-Maria Wilka  
**Alkylation of 2-Lithio-1,3-dithianes with Arenesulfonates of Primary Alcohols**  
Synthesis **1976**, 476 - 478
- 102 Robert W. Gray, Christopher B. Chapleo, Tiziana Vergnani, André Dreiding,  
Michael Liesner, Dieter Seebach  
**Contribution to the Problem of Nucleophilic Substitution Reactions at Small-Ring Carbon Atoms Occurring with Retention of Configuration**  
Helv. Chim. Acta **59**, 1547 - 1552 (1976)
- 103 Dieter Seebach, Norbert Meyer  
**Doppelt metalliertes Methanol, ein nucleophiles, Hydroxymethylierungs- reagens**

Angew. Chem. **88**, 484 (1976)

Angew. Chem. Int. Ed. Engl. **15**, 438 (1976)

- 104 Dieter Enders, Tillman Hassel, Reimund Pieter, Bernd Renger, Dieter Seebach  
**Reductive Denitrosation of Nitrosamines to Secondary Amines with Hydrogen / Raney Nickel**  
Synthesis **1976**, 548 - 550
- 105 Dieter Seebach, Friedrich Lehr  
 **$\alpha,\alpha$ -Doppeldeprotonierte Nitroalkane. Erhöhung der Nitronat-C-Nucleophilie**  
Angew. Chem. **88**, 540 - 541 (1976)  
Angew. Chem. Int. Ed. Engl. **15**, 505 - 506 (1976)
- 106 Dieter Seebach, Volker Ehrig, Manfred Teschner  
**Erzeugung und Reaktionen des chiralen Lithiumenolats von (+)-(S)-3-Methyl-2-pentanon**  
Liebigs Ann. Chem. **1976**, 1357 - 1369
- 107 \* 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)
- 108 \* Dieter Seebach, Karl-Heinz Geiß, Michael Kolb, Albert K. Beck  
**Verwendung von Schwefel- und Selenderivaten in der Organischen Synthese**  
Modern Synthetic Methods 1976, Vol. **1**, Ed. R. Scheffold, Sauerländer AG, Aarau, 1976, 173 - 299
- 109 Rainer Henning, Friedrich Lehr, Dieter Seebach  
 **$\alpha,\beta$  -Doppeldeprotonierte Nitroalkane: Super-Enamine?**  
Helv. Chim. Acta **59**, 2213 - 2217 (1976)
- 110 + Dieter Seebach  
**Verbotene Reaktionen**  
Studienführer Chemie, Ed. VAC (Vereinigung der Assistenten an den chemischen Laboratorien der ETH Zürich), ETH-Zentrum, CH-8092 Zürich, **1976**, 108 – 115

- 111 Reinhard Dammann, Manfred Braun, Dieter Seebach  
 **$\gamma$ -Lakton-cis-anellierung an  $\Delta_2$ -und  $\Delta_3$ -Cholesten**  
Helv. Chim. Acta **59**, 2821 - 2829 (1976)
- 112 Helmut Neumann, Dieter Seebach  
**Stereospecific Preparation of Terminal Vinyllithium Derivatives by Br/Li-Exchange with t-Butyllithium**  
Tetrahedron Lett. **1976**, 4839 - 4842
- 113 + Dieter Seebach  
**Buchbesprechung: "Frontier Orbitals and Organic Chemical Reactions" von I. Fleming**  
Nachr. Chem. Techn. **25**, 33 (1976)
- 114 Rainer Bürstinghaus, Dieter Seebach  
**1,4-Additionen lithierter Bis(methylthio)methane an cyclische Enone**  
Chem. Ber. **110**, 841-851 (1977)
- 115 Bengt-Thomas Gröbel, Dieter Seebach  
**Erzeugung von und Olefinierung mit  $\alpha$ -S-, -Se-, -Si- und -Sn-per-heterosubstituierten (Trimethylsilyl)methylolithium-Verbindungen**  
Chem. Ber. **110**, 852 - 866 (1977)
- 116 Bengt-Thomas Gröbel, Dieter Seebach  
**Erzeugung und Reaktionen von  $\alpha$ -(Trimethylsilyl)-,  $\alpha$ -(Phenylthio)- und  $\alpha$ -(Phenylseleno) vinyllithium-Verbindungen**  
Chem. Ber. **110**, 867 - 877 (1977)
- 117 Dieter Seebach, Hans-Otto Kalinowski, Bahram Bastani, Gerhard Crass, Hermann Daum, Henning Dörr, Nicolaas P. Du Preez, Volker Ehrig, Werner Langer, Christa Nüssler, Hoc-An Oei, Manfred Schmidt  
**Herstellung von Hilfsstoffen für die asymmetrische Synthese aus Weinsäure. Addition von Butyllithium an Aldehyde in chiralem Medium**  
Helv. Chim. Acta **60**, 301 - 325 (1977)
- 118 Dieter Seebach, Rainer Henning, Friedrich Lehr, Jutta Gonnermann  
**Carbon Alkylation of  $\alpha,\alpha$ -and  $\alpha,\beta$ -Doubly Deprotonated Nitroalkanes**  
Tetrahedron Lett. **1977**, 1161 – 1164

- 119 Albert K. Beck, Marvin S. Hoekstra, Dieter Seebach  
**1,3-Diketones by 1:1-Reactions of Li-Enolates with Acid Chlorides Generation of Kinetic Enolates with Mesityl Lithium**  
Tetrahedron Lett. **1977**, 1187 - 1190
- 120 Dieter Seebach, Bernhard Seuring, Hans-Otto Kalinowski, Winfried Lubosch, Bernd Renger  
**Synthese und Bestimmung der absoluten Konfiguration von Pyrenophorin und Vermiculin**  
Angew. Chem. **89**, 270 - 271 (1977)  
Angew. Chem. Int. Ed. Engl. **16**, 264 - 265 (1977)
- 121 Manat Pohmakotr, Dieter Seebach  
**Doppelt deprotoniertes Allylacetophenon. Erstes Beispiel für einen "direkten E<sup>5</sup>-Synthesebaustein"**  
Angew. Chem. **89**, 333 - 334 (1977)  
Angew. Chem. Int. Ed. Engl. **16**, 320 - 321 (1977)
- 122 Dieter Seebach, Marvin S. Hoekstra, Gerd Protschuk  
**4-Hydroxy-2-cyclopenten-1-one aus Ketonen und 3-Nitropropionylchlorid. Eine einfache Methode zum Aufbau von Fünfringen**  
Angew. Chem. **89**, 334 - 335 (1977)  
Angew. Chem. Int. Ed. Engl. **16**, 321 - 322 (1977)
- 123 Karl-Heinz Geiß, Dieter Seebach, Bernhard Seuring  
**Doppelmetallierung von Benzyl- und Allylmercaptanen; das Thiobenzaldehyd-und Thioacrolein-Dianion**  
Chem. Ber. **110**, 1833 - 1851 (1977)
- 124 Dieter Seebach, Dieter Enders, Bernd Renger  
**Lithiierung und elektrophile Substitution an  $\alpha$ -Methylengruppen von Nitrosaminen. Umpolung der Reaktivität sekundärer Amine**  
Chem. Ber. **110**, 1852 - 1865 (1977)
- 125 Bernd Renger, Hans-Otto Kalinowski, Dieter Seebach  
**Regio- und stereochemischer Verlauf der Reaktionen von substituierten 2-Lithio-N-nitrosopiperidinen**  
Chem. Ber. **110**, 1866 - 1878 (1977)

- 126 Dieter Seebach, Dieter Enders, Rolf Dach, Reimund Pieter  
**Reaktion metallierter Nitrosamine mit Nitrilen. Eine neue Methode zur Darstellung von  $\nu$ -Triazolen**  
Chem. Ber. **110**, 1879 - 1886 (1977)
- 127 Hans Jörg Lindner, Brigitte Kitschke, Michael Liesner, Dieter Seebach  
**Neues über den Mechanismus der retentiven Substitution am Dreiring von Propellanen**  
Helv. Chim. Acta **60**, 1151 - 1154 (1977)
- 128 Bernhard Seuring, Dieter Seebach  
**Synthese von vier chiralen, elektrophilen C<sub>3</sub>- und C<sub>4</sub>-Synthesebausteinen aus Hydroxycarbonsäuren**  
Helv. Chim. Acta **60**, 1175 - 1181 (1977)
- 129 Dieter Seebach, Hok-An Oei, Hermann Daum  
**Asymmetrische Synthese bei Photo-, Elektro- und Alkalimetall-Pinakolisierungen von Benzaldehyd und Phenonen im chiralen Medium DDB**  
Chem. Ber. **110**, 2316 - 2333 (1977)
- 130 Bernd Renger, Dieter Seebach  
**Reaktionen von 1-Nitrosamino-allyllithiumverbindungen. Reversibilität der Carbonyladdition**  
Chem. Ber. **110**, 2334 - 2354 (1977)
- 131 \* Bengt-Thomas Gröbel, Dieter Seebach  
**Umpolung of the Reactivity of Carbonyl Compounds Through Sulfur Containing Reagents**  
Synthesis **1977**, 357 - 402
- 132 Dieter Seebach, Michael Kolb  
**Zur Umpolung der Carbonylreakтивität; Deprotonierung von Ketenthioacetalen zu 1,1-dithiosubstituierten Allyl- und Pentadienyllithiumverbindungen sowie deren Reaktionen mit Elektrophilen**  
Liebigs Ann. Chem. **1977**, 811 - 829

- 133 Dieter Seebach, Rainer Bürstinghaus, Bengt-Thomas Gröbel, Michael Kolb  
**Zur Umpolung der Carbonylreakтивität; N<sup>2</sup>/E<sup>1</sup>- und N<sup>4</sup>/E<sup>1</sup>-Reaktion von 1,1-diheterosubstituierten Olefinen und Dienen**  
Liebigs Ann. Chem. **1977**, 830 - 845
- 134 Dieter Seebach, Norbert Meyer, Albert K. Beck  
**α-Heterosubstituierte Organyllithiumverbindungen durch Selen/Lithium Austausch; gezielte Kopplung von Carbonylverbindungen**  
Liebigs Ann. Chem. **1977**, 846 - 858
- 135 Rainer Schlecker, Dieter Seebach  
**Generation and Reactions of Tetrasubstituted N-Lithiomethyl-succinimides**  
Helv. Chim. Acta **60**, 1459 - 1471 (1977)
- 136 Rainer Schlecker, Udo Henkel, Dieter Seebach  
**Ueber den Mechanismus des Zerfalls perheterosubstituierter Ethane. Hexakis(alkylthio)- und Tetrakis(methylthio)bis(trimethylsilyl)-ethane**  
Chem. Ber. **110**, 2880 - 2904 (1977)
- 137 Hans-Otto Kalinowski, Winfried Lubosch, Dieter Seebach  
**1H- und 13C-NMR-spektroskopische Untersuchungen an Thioamidderivaten; Ringstromeffekt in der 13C-NMR-Spektroskopie**  
Chem. Ber. **110**, 3733 - 3744 (1977)
- 138 Rainer Schlecker, Dieter Seebach, Winfried Lubosch  
**CH-Acidität in α-Stellung zum N-Atom in N,N-Dialkylamiden mit sterisch geschützter Carbonylgruppe. Zur nucleophilen Aminoalkylierung**  
Helv. Chim. Acta **61**, 512 - 526 (1978)
- 139 Dieter Seebach, Tillmann Hassel  
**2,4,6-Tri-tert-butylphenoxy (TBPO) als sterisch wirksame Carbonylschutzgruppe . - Ein neues nucleophiles Dimethylaminomethylierungsmittel**  
Angew. Chem. **90**, 296 - 297 (1978)  
Angew. Chem. Int. Ed. Engl. **17**, 274 (1978)
- 140 Dieter Seebach, Rainer Henning, Friedrich Lehr  
**Doppelte Deprotonierung von 3-Nitropopen und 4-Nitro-1-butene: Derivate ihrer Dianionen als neuartige Reagentien zur CC-Verknüpfung**

Angew. Chem. **90**, 479 - 480 (1978)  
Angew. Chem. Int. Ed. Engl. **17**, 458 - 459 (1978)

- 141 Dieter Seebach, Rolf Dach, Dieter Enders, Bernd Renger, Martin Jansen,  
Gerold Brachtel  
**1,4,5,6-Tetrahydro-v-tetrazin-Derivate**  
Helv. Chim. Acta **61**, 1622 - 1647 (1978)
- 142 Bernd Renger, Helmut Hügel, Werner Wykypiel, Dieter Seebach  
**Drei neue Varianten der C-C-Verknüpfung mit Nitrosaminen (Erzeugung und  
Herstellung sowie Umsetzungen von Kalium- und Zinn-Derivaten; Acylierung mit  
α-Ketonitrilen**  
Chem. Ber. **111**, 2630 - 2645 (1978)
- 143 Norbert Meyer, Dieter Seebach  
**Lithium-ortho-lithiobenzylalkoholate**  
Angew. Chem. **90**, 553 - 554 (1978)  
Angew. Chem. Int. Ed. Engl. **17**, 521 - 522 (1978)
- 144 Helmut Neumann, Dieter Seebach  
**Brom/Lithium-Austausch an Vinylbromiden mit 2 Moläquiv. tert-Butyllithium.  
Umsetzungen von Vinyllithiumverbindungen mit Hetero- und Kohlenstoff-  
Elektrophilen**  
Chem. Ber. **111**, 2785 - 2812 (1978)
- 145 Ernest W. Colvin, Dieter Seebach  
**Silyl Nitronates: Improved Nitro-aldol Reactions and Reductive Routes to 2-  
Aminoalcohols**  
J. Chem. Soc., Chem. Commun. **1978**, 689 - 691
- 146 Tillmann Hassel, Dieter Seebach  
**Steric Carbonyl Protection . Metalation and Cleavage of Highly Hindered Ureas**  
Helv. Chim. Acta **61**, 2237 - 2240 (1978)
- 147 Dieter Seebach, Ingrid Willert, Albert K. Beck, Bengt-Thomas Gröbel  
**2-Stannylyl-1,3-dithiane. Herstellung, Sn/Li-Transmetallierung und Verwendung für  
Cyclisierungen**  
Helv. Chim. Acta **61**, 2510 - 2523 (1978)

- 148 Manfred Nitsche, Dieter Seebach, Albert K. Beck  
**Kinetische Analyse des Zerfalls von Tris(arylthio)methylolithium-Verbindungen. Beweis für das Vorliegen von freiem Bis(phenylthio)carben in Tetrahydrofuran-Lösung**  
Chem. Ber. **111**, 3644 - 3664 (1978)
- 149 Dieter Seebach, Werner Wykypiel, Winfried Lubosch, Hans-Otto Kalinowski  
**Zum stereochemischen Verlauf der elektrophilen Substitution an CH-Gruppen in  $\alpha$ -Stellung zum N-Atom behinderter Amide**  
Helv. Chim. Acta **61**, 3100 - 3102 (1978)
- 150 Bernhard Seuring, Dieter Seebach  
**Synthese und Bestimmung der absoluten Konfiguration von Norpyrenophorin, Pyrenophorin und Vermiculin**  
Liebigs Ann. Chem. **1978**, 2044 - 2073
- 151 Dieter Enders, Reimund Pieter, Bernd Renger, Dieter Seebach  
**Nucleophilic  $\alpha$ -sec-Aminoalkylation: 2(Diphenylhydroxymethyl)pyrrolidine**  
Organic Syntheses **58**, 113 - 122 (1978), Collective Volume **VI**, 542 - 549 (1988)
- 152 Dieter Seebach, Rainer Henning, Jutta Gonnermann  
**Zweifache Deprotonierung von 2-Aryl-1-nitroethanen. Umpolung der Nitroolefin-Reaktivität**  
Chem. Ber. **112**, 234 - 248 (1979)
- 153 \* Dieter Seebach, Ernest W. Colvin, Friedrich Lehr, Thomas Weller  
**Nitroaliphatic Compounds - Ideal Intermediates in Organic Synthesis?**  
Chimia **33**, 1 - 18 (1979)
- 154 Manat Pohmakotr, Karl-Heinz Geiß, Dieter Seebach  
**Anwendungen der Magnesiumderivate von Thioacrolein-Dianionen zur Synthese schwefelfreier Verbindungen (Vinyl- und Divinylepoxyde, Acylcyclo-pentene)**  
Chem. Ber. **112**, 1420 - 1439 (1979)
- 155 Dieter Seebach, Manat Pohmakotr  
**Syntheses of (+)-(S,S)-(cis-6-Methyltetrahydropyran-2-yl)acetic Acid and of (-)-**

**R,R-Didesoxy-pyrenophorine Using a New d<sup>5</sup>-Reagent**

Helv. Chim. Acta **62**, 843 - 846 (1979)

156 \* Dieter Seebach

**Methoden der Reaktivitätsumpolung**

Angew. Chem. **91**, 259 - 278 (1979)

Angew. Chem. Int. Ed. Engl. **18**, 239 - 258 (1979)

157 Tillmann Hassel, Dieter Seebach

**Ein metallierter Allylharnstoff mit sterisch geschützter Carbonylgruppe als neuartiges "d<sup>3</sup>-Reagens"**

Angew. Chem. **91**, 427 - 428 (1979)

Angew. Chem. Int. Ed. Engl. **18**, 399 - 400 (1979)

158 Reinhard Dammann, Dieter Seebach

**Ueber die Umlagerung von Bromcyclopropylcarbinolen zu Homoallylderivaten und Cyclobutanonen**

Chem. Ber. **112**, 2167 - 2176 (1979)

159 Dieter Seebach, Reinhard Dammann, Hans Jörg Lindner, Britte Kitschke

**Stereoselektive Bildung von Oxaspiropentanen und Spiropentylketonen.**

**Zur Stereochemie der nucleophilen Substitution am Cyclopropan**

Helv. Chim. Acta **62**, 1143 - 1161 (1979)

160 Dieter Seebach, Helmut Neumann, Reinhard Dammann

**Intramolekulare Inversionssubstitution am Dreiring von 7 exo-Brom- bicyclo-[4.1.0]heptan-3 endo-ol unter Bildung eines Tetrahydrofuranringes**

Helv. Chim. Acta **62**, 1162 - 1170 (1979)

161 Manat Pohmakotr, Dieter Seebach

**Dianion Derivatives of Methyl- and Isopropyl-2,4-Pentadienedithioate as d<sup>5</sup>-Reagents**

Tetrahedron Lett. **1979**, 2271 - 2274

162 Dieter Seebach, Werner Wykypiel

**Safe One-Pot Carbon-Carbon Bond Formation with Lithiated Nitrosamines**

**Including Denitrosation by Sequential Reduction with Lithium Aluminium Hydride**

**and Raney-Nickel**

Synthesis **1979**, 423 - 424

- 163 Dieter Seebach, Werner Langer  
**Enantioselektive 1,2-Additionen von Li-, Mg-, Zn- und Cu-organischen Verbindungen und von Li-Enolaten an Carbonylverbindungen im chiralen Medium DDB**  
Helv. Chim. Acta **62**, 1701 - 1709 (1979)
- 164 Werner Langer, Dieter Seebach  
**Enantioselektive 1,4-Additionen von metallorganischen Verbindungen an konjugierte Systeme im chiralen Medium DDB**  
Helv. Chim. Acta **62**, 1710 - 1722 (1979)
- 165 Dieter Seebach, Herbert Siegel, Klaus Müllen, Kurt Hiltbrunner  
**Direkte  $^{13}\text{C}$ -NMR-spektroskopische Beobachtung von Cyclopropyliden-Bromlithiumcarbenoiden**  
Angew. Chem. **91**, 844 - 845 (1979)  
Angew. Chem. Int. Ed. Engl. **18**, 784- 785 (1979)
- 166 Herbert Siegel, Kurt Hiltbrunner, Dieter Seebach  
 **$^{13}\text{C}$ -NMR-Spektren von Tribrommethyl- und 1,1-Dibromethylolithium**  
Angew. Chem. **91**, 845 - 846 (1979)  
Angew. Chem. Int. Ed. Engl. **18**, 785 -786 (1979)
- 167 + Dieter Seebach  
**H.C. Brown und G. Wittig - Nobelpreis für synthetische organische Chemie**  
Neue Zürcher Zeitung, 7. November **1979** (Nr. 259), S. 57
- 168 Dieter Seebach, Friedrich Lehr  
**Lithium- und Kupfer-Derivate von  $\alpha.\alpha$ -doppeldeprotonierten Nitroalkanen. - Erzeugung, Eigenschaften und Umsetzungen mit Alkyl- und Allylhalogeniden**  
Helv. Chim. Acta **62**, 2239 - 2257 (1979)
- 169 Friedrich Lehr, Jutta Gonnermann, Dieter Seebach  
**Umsetzungen von Dilithio-nitroalkanen und -allylnitroderivaten mit Carbonylverbindungen**  
Helv. Chim. Acta **62**, 2258 - 2275 (1979)

- 170 Dieter Seebach, Rita Locher  
 **$\alpha,\beta$ -Ungesättigte Carbonylverbindungen mit sterisch geschützter Carbonylgruppe.  
- Erzwungene  $\alpha^3$ - versus  $\alpha^1$ -Reaktivität**  
Angew. Chem. **91**, 1024 - 1025 (1979)  
Angew. Chem. Int. Ed. Engl. **18**, 957 - 958 (1979)
- 171 Ernst Hungerbühler, Dieter Seebach, Daniel Wasmuth  
**Chirale Reagentien aus Weinsäure .. 1-Benzylxy-3,4- epoxy--2-butanol, ein  
vielseitiges Zwischenprodukt für die Enantiomerensynthese**  
Angew. Chem. **91**, 1025 - 1026 (1979)  
Angew. Chem. Int. Ed. Engl. **18**, 958 - 860 (1979)
- 172 Dieter Seebach, Gerhard Crass, Eva-Maria Wilka, Don Hilvert, Edi Brunner  
**Three New Chiral Aminoethers from Tartaric Acid for Improved Asymmetric  
Syntheses with Organolithium Reactions**  
Helv. Chim. Acta **62**, 2695 - 2698 (1979)
- 173 Hans Bock, Georg Brähler, Udo Henkel, Rainer Schlecker, Dieter Seebach  
**Die Oxidation von Hexathioethanen zu Tetrathioethen-Radikalkationen**  
Chem. Ber. **113**, 289 - 301 (1980)
- 174 Winfried Lubosch, Dieter Seebach  
**Nucleophile Aminoalkylierung mit Thiopivalamiden**  
Helv. Chim. Acta **63**, 102 - 116 (1980)
- 175 Dieter Seebach, Daniel Wasmuth  
**Herstellung von erythro-2-Hydroxybernsteinsäure-Derivaten aus Aepfelsäureester**  
Helv. Chim. Acta **63**, 197 - 200 (1980)
- 176 René Amstutz, Dieter Seebach, Paul Seiler, Bernd Schweizer, Jack D. Dunitz  
**Kristallstruktur von 2-Lithio-2-methyl-1,3-dithian-Tetramethyl-ethylenediamin  
(1/1)**  
Angew. Chem. **92**, 59 - 60 (1980)  
Angew. Chem. Int. Ed. Engl. **19**, 54 - 54 (1980)
- 177 Herbert Siegel, Dieter Seebach  
**A Convenient Synthesis of  $^{13}\text{C}$ -Bromoform and  $^{13}\text{C}$ -Tetrabromomethane from**

**13C-Iodomethane Labelling Through 13:CBr2**

J. Lab. Comp. Radiopharm. **17**, 279 - 287 (1980)

- 178 Norbert Meyer, Dieter Seebach  
**Doppelt metalliertes Methanol. Alkohol-d<sup>1</sup>- und -d<sup>3</sup>-Reagenzien**  
Chem. Ber. **113**, 1290 - 1303 (1980)
- 179 Norbert Meyer, Dieter Seebach  
**Direkte ortho-Metallierung von Benzylalkoholen. Eine neuartige Herstellung von ortho-substituierten Benzylalkoholen**  
Chem. Ber. **113**, 1304 - 1319 (1980)
- 180 + Dieter Seebach  
**Autoreferat H.C. Brown, G. Wittig und die Umpolung**  
(Berner Chemische Gesellschaft, 16. Januar 1980)  
Chimia **34**, 185 - 186 (1980)
- 181 Ernest W. Colvin, Albert K. Beck, Bahram Bastani, Dieter Seebach, Yasushi Kai, Jack-D. Dunitz  
**Synthesis, Properties and Crystal Structure of Silyl Nitronates (Silyl Esters of aci-Nitroalkanes): Towards the SN<sub>2</sub> Reaction Path with Retention of Configuration at Silicon**  
Helv. Chim. Acta **63**, 697 - 710 (1980)
- 182 Jean-Claude Gfeller, Albert K. Beck, Dieter Seebach  
**Erhöhung der Nachweisempfindlichkeit von Cyclosporin A durch Derivatisierung mit 2-Naphthylselenylchlorid**  
Helv. Chim. Acta **63**, 728 - 732 (1980)
- 183 Manfred Schmidt, René Amstutz, Gerhard Crass, Dieter Seebach  
**Herstellung einiger chiraler Aminodiole aus Weinsäure. Chirale Lithiumalanate für asymmetrische Hydrierungen**  
Chem. Ber. **113**, 1691 - 1707 (1980)
- 184 Hans Paulsen, Elke Sumfleth, Volker Sinnwell, Norbert Meyer, Dieter Seebach  
**Direkte Hydroxymethylierung zu verzweigten Zuckern mit einem Hydroxymethyl-d<sup>1</sup>-Reagenz**  
Chem. Ber. **113**, 2055 - 2061 (1980)

- 185 Werner Wykypiel, Dieter Seebach  
**A Nitrosamine Route to ( $\pm$ )-Macrostomine**  
Tetrahedron Lett. **21**, 1927 - 1930 (1980)
- 186 \* Dieter Seebach, Ernst Hungerbühler  
**Syntheses of Enantiomerically Pure Compounds (EPC-Syntheses). - Tartaric Acid, an Ideal Source of Chiral Building Blocks for Synthesis?**  
Modern Synthetic Methods 1980, Vol. **2**, Ed. R. Scheffold, Salle + Sauerländer, Frankfurt/Aarau, 1980, 91 - 173
- 187 Ernst Hungerbühler, Reto Naef, Daniel Wasmuth, Dieter Seebach, Hans-Rudolf Loosli, Adolf Wehrli  
**Synthese optisch aktiver 2-Methyl- und 2-Aethyl-1,6-dioxaspiro[4.4]-nonan- und -[4.5]decan-Pheromone aus einem gemeinsamen chiralen Vorläufer**  
Helv. Chim. Acta **63**, 1960 - 1970 (1980)
- 188 Max Züger, Thomas Weller, Dieter Seebach  
**2,3-Disubstituted  $\gamma$ -Butyrolactams from the Michael-Additions of Doubly Deprotonated, Optically Active  $\beta$ -Hydroxycarboxylates to Nitroolefins**  
Helv. Chim. Acta **63**, 2005 - 2009 (1980)
- 189 Dieter Seebach, Herbert Siegel, Josef Gabriel, Robert Hässig  
**Tieftemperatur  $^{13}\text{C}$ -NMR-Spektren von  $^{13}\text{C}$ - und  $^6\text{Li}$ -markierten Chlor-, Brom- und Jod-Lithium-Carbenoiden**  
Helv. Chim. Acta **63**, 2046 - 2053 (1980)
- 190 Beat Weidmann, Dieter Seebach  
**Methyl-triisopropoxy-titanium, a Highly Selective Nucleophilic Methylating Reagent**  
Helv. Chim. Acta **63**, 2451 - 2454 (1980)
- 191 Beat Weidmann, Leo Widler, Alan G. Olivero, Christopher D. Maycock, Dieter Seebach  
**Selectivities in the Reactions of Alkyl-, Aryl- and Heterosubstituted Organotitanium Compounds**  
Helv. Chim. Acta **64**, 357 - 361 (1981)

- 192 Jean-Jacques Lohmann, Dieter Seebach, Max A. Syfrig, Masaaki Yoshifuji  
**Lithiertes N-Pivaloyl-tetrahydroisochinolin - ein Supernucleophil**  
Angew. Chem. **93**, 125 - 126 (1981)  
Angew. Chem. Int. Ed. Engl. **20**, 128 - 129 (1981)
- 193 Hans-Otto Kalinowski, Gerhard Crass, Dieter Seebach  
**Veretherungen von Diolen, Triolen und Hydroxycarbonsäurederivaten über Thallium(I)-alkoholate. Eine neue Variante der Williamson-Reaktion**  
Chem. Ber. **114**, 477 - 487 (1981)
- 194 Paul Knochel, Dieter Seebach  
**Nitroallylation par le Nitro-2 Pivaloyloxy-3 Propène. Un Réactif  $a^2/a^2'$**   
Nouv. J. Chim. **5**, 75 - 77 (1981)
- 195 Dieter Seebach, Masaaki Yoshifuji  
**2-Bis(dimethylamino)phosphinoyl-1-lithio-1,2,3,4-tetrahydroisoquinoline. A Highly Nucleophilic d<sup>1</sup>-Reagent for the Preparation of 1-Substituted Tetrahydroisoquinolines**  
Helv. Chim. Acta **64**, 643 - 647 (1981)
- 196 Ernst Hungerbühler, Dieter Seebach  
**Chirale elektrophile Synthesebausteine mit vier verschiedenen funktionellen Gruppen aus Weinsäure, 2,3-und 3,4-Epoxy-butandiolderivate in allen vier stereoisomeren Formen**  
Helv. Chim. Acta **64**, 687 - 702 (1981)
- 197 Dieter Seebach, Thomas Weller, Gerd Protschuk, Albert K. Beck, Marvin S. Hoekstra  
**Herstellung von 1,3-Diketonen und von Nitro-diketonen durch (1:1)-Acylierungen von Lithiumenolaten mit Acylchloriden**  
Helv. Chim. Acta **64**, 716 - 735 (1981)
- 198 Thomas Weller, Dieter Seebach, Raymond E. Davis, Brian B. Laird  
**3-Hydroxy-4-nitro-cyclohexanone aus Ketonen und 4-Nitrobuttersäurechlorid. Eine ringerweiternde Fünfringanellierung**  
Helv. Chim. Acta **64**, 736 - 760 (1981)
- 199 Dieter Seebach, Albert K. Beck, Friedrich Lehr, Thomas Weller, Ernest W. Colvin  
**Diastereoselektive Synthese von  $\beta$ -Nitro- und  $\beta$ -Aminoalkoholen**

Angew. Chem. **93**, 422 - 424 (1981)  
Angew. Chem. Int. Ed. Engl. **20**, 397 - 399 (1981)

- 200 René Amstutz, Jack D. Dunitz, Dieter Seebach  
**Kristallstruktur von 2-Lithio-2-phenyl-1,3-dithian-Tetrahydrofuran-Tetramethylethylendiamin (1/1/1); "X - X"-Elektronendichteverteilung in Lithiomethyl- und Lithio-phenyl-dithian**  
Angew. Chem. **93**, 487 - 488 (1981)  
Angew. Chem. Int. Ed. Engl. **20**, 465 - 466 (1981)
- 201 Rita Locher und Dieter Seebach  
**Michael-Addition von Lithiumacetylid an Propenyltritylketon**  
Angew. Chem. **93**, 614 - 615, 1981  
Angew. Chem. Int. Ed. Engl. **20**, 569 - 570 (1981)
- 202 Werner Wykypiel, Jean-Jacques Lohmann, Dieter Seebach  
**Lithiierung in  $\alpha$ -Stellung zum N-Atom von Triphenylacetamiden aus cyclischen sekundären Aminen. Umlagerung metallierter Triphenylacetamide unter 1,3-Verschiebung der Carbonylgruppe**  
Helv. Chim. Acta **64**, 1337 - 1346 (1981)
- 203 Dieter Seebach, Jerzy Golinski  
**Synthesis of Open-Chain 2,3-Disubstituted 4-nitroketones by Diastereoselective Michael-addition of (E)-Enamines to (E)-Nitroolefins.**  
**A Topological Rule for C, C-Bond Forming Processes between Prochiral Centres**  
Helv. Chim. Acta **64**, 1413 - 1423 (1981)
- 204 Ernst Hungerbühler, Dieter Seebach, Daniel Wasmuth  
**Doppelt und dreifach funktionalisierte, enantiomerenreine C<sub>4</sub>-Synthese-bausteine aus  $\beta$ -Hydroxybuttersäure, Aepfelsäure und Weinsäure**  
Helv. Chim. Acta **64**, 1467 - 1487 (1981)
- 205 Beat Weidmann, Christopher D. Maycock, Dieter Seebach  
**Alkyl-, Aryl-, Vinyl- and Heterosubstituted Organozirconium Compounds. Selective Nucleophiles of Low Basicity**  
Helv. Chim. Acta **64**, 1552 - 1557 (1981)

- 206 Paul Knochel, Dieter Seebach  
**Nitroallylation of Highly Reactive Organolithium Compounds by 2-Nitro-3-Pivaloyloxy-1-Propene (NPP)**  
Tetrahedron Lett. **22**, 3223 - 3226 (1981)
- 207 Ernest W. Colvin, Alan D. Robertson, Dieter Seebach, Albert K. Beck  
**The Reactions of Silyl Nitronates with Organolithium Reagents**  
J. Chem. Soc., Chem. Commun. **1981**, 952 - 953
- 208 René Amstutz, Ernst Hungerbühler, Dieter Seebach  
**Revidierte Struktur des Makrodiolids Colletodiol**  
Helv. Chim. Acta **64**, 1796 - 1799 (1981)
- 209 Ernest W. Colvin, Albert K. Beck, Dieter Seebach  
**Improved Nitroaldol Reactions and Reductive Routes to Vicinal Aminoalcohols**  
Helv. Chim. Acta **64**, 2264 - 2271 (1981)
- 210 Alan G. Olivero, Beat Weidmann, Dieter Seebach  
**Enantioselective Addition of Chiral Organotitanium Derivatives to Aldehydes**  
Helv. Chim. Acta **64**, 2485 - 2488 (1981)
- 211 Dieter Seebach, Daniel Wasmuth  
**Alkylierung von Aminosäuren ohne Verlust der optischen Aktivität:  
α- und β-Alkylierung eines Asparaginsäure-Derivates**  
Angew. Chem. **93**, 1007 - 1008 (1981)  
Angew. Chem. Int. Ed. Engl. **20**, 971 - (1981)
- 212 \* Dieter Seebach, Manat Pohmakotr  
**Generation of Dienone and Trienone Dianion Derivatives**  
Tetrahedron **37**, 4047 - 4058 (1981) [Tetrahedron Symposia-in-Print  
No. 2 on "New General Synthetic Methods"]
- 213 Reto Naef, Dieter Seebach  
**Direkte diastereoselektive Verzweigung der Weinsäure über ein Enolat**  
Angew. Chem. **93**, 1113 (1981)  
Angew. Chem. Int. Ed. Engl. **20**, 1030 -1031 (1981)

- 214 René Amstutz, W. Bernd Schweizer, Dieter Seebach, Jack D. Dunitz  
**Tetrameric Cubic Structures of two Solvated Lithium Enolates**  
Helv. Chim. Acta **64**, 2617 - 2621 (1981)
- 215 Dieter Seebach, René Amstutz, Jack D. Dunitz  
**Mechanistic Implications of the Tetrameric Cubic Structure of Lithium Enolates**  
Helv. Chim. Acta **64**, 2622 - 2626 (1981)
- 216 Dieter Seebach, Reto Naef  
**Enantioselective Generation and Diastereoselective Reactions of Chiral Enolates Derived from  $\alpha$ -Heterosubstituted Carboxylic Acids**  
Helv. Chim. Acta **64**, 2704 - 2708 (1981)
- 217 Raghao S. Mali, Manat Pohmakotr, Beat Weidmann, Dieter Seebach  
**A Short Synthesis of (R,R)-(-)-Pyrenophorin from (S)-Propylene Oxide and a 3-Pentenoic Acid d<sup>5</sup>-Reagent**  
Liebigs Ann. Chem. **1981**, 2272 - 2284
- 218 Wolfgang Seidel, Dieter Seebach  
**Grahamimycin A1**  
**Synthesis and Determination of Configuration and Chirality**  
Tetrahedron Lett. **23**, 159 - 162 (1982)
- 219 Dieter Seebach, Ernst Hungerbühler, Reto Naef, Peter Schnurrenberger, Beat Weidmann, Max Züger  
**Titanate-Mediated Transesterifications with Functionalized Substrates**  
Synthesis **1982**, 138 - 142
- 220 Thomas Weller, Dieter Seebach  
**Synthesis of ( $\pm$ )-1-Desoxy-2-Lycorinone and of a Possible trans-Dihydro-Lycoricidine Precursor**  
Tetrahedron Lett. **23**, 935 - 938 (1982)
- 221 Yasushi Kai, Paul Knochel, Stefan Kwiatkowski, Jack D. Dunitz, Jean F. M. Oth, Dieter Seebach  
**Structure, Synthesis, and Properties of Some Persubstituted 1,2-Dinitroethanes. In Quest of Nitrocyclopropyl-Anion Derivatives**  
Helv. Chim. Acta **65**, 137 - 161 (1982)

- 222 Daniel Wasmuth, Duilio Arigoni, Dieter Seebach  
**Zum stereochemischen Verlauf der Biosynthese von 2-Oxo-pantolacton:Synthese von stereospezifisch indiziertem Pantolacton aus Aepfelsäure**  
Helv. Chim. Acta **65**, 344 - 352 (1982)  
Erratum: Helv. Chim. Acta **65**, 620 (1982)
- 223 Triptikumar Mukhopadhyay, Dieter Seebach  
**Substitution of HMPT by the Cyclic Urea DMPU as a Cosolvent for Highly Reactive Nucleophiles and Bases**  
Helv. Chim. Acta **65**, 385 - 391 (1982)
- 224 Dieter Seebach, Manat Pohmakotr, Christian Schregenberger, Beat Weidmann, Raghao S. Mali, Srisuke Pohmakotr  
**d<sup>5</sup>-Reactions of Doubly Deprotonated  $\gamma$ ,  $\delta$ -Unsaturated CarbonylDerivatives with Electrophiles. A Novel Approach to the Synthesis of Tetrahydrofuran and Tetrahydropyran Derivatives**  
Helv. Chim. Acta **65**, 419 - 450 (1982)
- 225 Dieter Seebach, Max Züger  
**Ueber die Depolymerisierung von Poly-(R)-3-hydroxy-buttersäureester (PHB)**  
Helv. Chim. Acta **65**, 495 - 503 (1982)
- 226 Dieter Seebach, Rainer Henning, Triptikumar Mukhopadhyay  
**Doubly Deprotonated Methyl 3-Nitropropanoate, an Acrylic Ester d<sup>2</sup>-Reagent**  
Chem. Ber. **115**, 1705 - 1720 (1982)
- 227 Robert Hässig, Herbert Siegel, Dieter Seebach  
**Herstellung von substituierten Methylenencyclopropanen aus geminalen Dibromcyclopropanen und Carbonylverbindungen**  
Chem. Ber. **115**, 1990 - 1997 (1982)
- 228 Leo Widler, Dieter Seebach  
**Diastereoselektive Synthese von  $\beta$ -Methyl-homoallylalkoholen durch lk-Addition von (2-Butenyl)triphenoxytitan an Aldehyde**  
Helv. Chim. Acta **65**, 1085 - 1089 (1982)

- 229 Dieter Seebach, Albert K. Beck, Triptikumar Mukhopadhyay, Elizabeth Thomas  
**Diastereoselektive Synthesis of Nitroaldol Derivatives**  
Helv. Chim. Acta **65**, 1101 - 1133 (1982)
- 230 Peter Schnurrenberger, Max F. Züger, Dieter Seebach  
**Herstellung von Methylestern durch Umesterung funktionalisierter Substrate mit Titansäureestern als Katalysatoren**  
Helv. Chim. Acta **65**, 1197 - 1201 (1982)
- 231 Stefan J. Blarer, W. Bernd Schweizer, Dieter Seebach  
**Asymmetrische Michael-Additionen. Praktisch vollständig diastereo- und enantioselektive Alkylierung des Enamins aus Cyclohexanon und Prolinylmethyläther durch d-Nitrostyrole zu u-2-(1'-Aryl-2'-nitro-äthyl)-cyclohexanonen**  
Helv. Chim. Acta **65**, 1637 - 1654 (1982)
- 232 Paul Knochel, Dieter Seebach  
**Synthesis and Reactions of Substituted Nitro-Allylating Reagents**  
Tetrahedron Letters **23**, 3897 - 3900 (1982)
- 233 \* Dieter Seebach, Vladimir Prelog  
**Spezifikation des sterischen Verlaufs von asymmetrischen Synthesen**  
Angew. Chem. **94**, 696 - 702 (1982)  
Angew. Chem. Int. Ed. Engl. **21**, 654 - 660 (1982)
- 234 Dieter Seebach, Leo Widler  
**A Case of Highly Diastereoselective Addition to Unsymmetrical Ketones; lk-Addition of (2-Alkenyl)triphenoxytitanium Derivatives**  
Helv. Chim. Acta **65**, 1972 - 1981 (1982)
- 235 Paul Knochel, Dieter Seebach  
**Dehydratisierung von Nitroaldolen mit Dicyclohexylcarbodiimid: Herstellung von Nitroolefinen unter milden Bedingungen**  
Synthesis **1982**, 1017 - 1018
- 236 Dieter Seebach, Martin Schiess  
**Alkylative Amination of Non-enolizable Aldehydes**

**with Alkyl(dialkylamino)titanium Derivatives**

Helv. Chim. Acta **65**, 2598 - 2602 (1982)

237 \* Beat Weidmann, Dieter Seebach

**Organometallverbindungen von Titan und Zirconium als selektive nucleophile Reagentien für die Organische Synthese**

Angew. Chem. **95**, 12 - 26 (1983)

Angew. Chem. Int. Ed. Engl. **22**, 31 - 45 (1983)

238 Dieter Seebach, Robert Hässig, Josef Gabriel

**$^{13}\text{C}$ -NMR-Spektroskopie von Organolithiumverbindungen bei tiefen Temperaturen. Strukturinformation aus der  $^{13}\text{C}$ ,  $^6\text{Li}$ -Kopplung**

Helv. Chim. Acta **66**, 308 - 337 (1983)

239 Dieter Seebach, Hans-Otto Kalinowski, Werner Langer, Gerhard Crass, Eva-Maria Wilka

**Chiral Media for Asymmetric Solvent Inductions. (S, S)-(+)-1,4-Bis-(dimethylamino)-2,3-Dimethoxybutane from (R, R)-(+)-Tartaric Acid Diethyl Ester**  
Organic Syntheses **61**, 24 - 34 (1983), Collective Volume **VII**, 41 - 50 (1990)

240 Dieter Seebach, August Hidber

**Enantioselective Addition of Butyllithium in the Presence of the Chiral Cosolvent DDB. (+)-(R)-Phenyl-1-pentanol**

Organic Syntheses **61**, 42 - 47 (1983), Collective Volume **VII**, 447 - 450 (1990)

241 \* Dieter Seebach, Beat Weidmann, Leo Widler

**Titanium and Zirconium Derivatives in Organic Synthesis.  
A Review with Procedures**

Modern Synthetic Methods 1983, Vol. **3**, Ed. R. Scheffold,

Salle + Sauerländer (Aarau, Switzerland) and J. Wiley and Sons (New York, USA), 1983, 217 - 353

242 Stefan J. Blarer, Dieter Seebach

**Asymmetrische Michael-Additionen. Stereoselektive Alkylierungen des (R)- und (S)-Enamins aus Cyclohexanon und 2-(Methoxymethyl)pyrrolidin durch  $\alpha$ -(Methoxycarbonyl)zimtsäure-methylester**

Chem. Ber. **116**, 2250 - 2260 (1983)

- 243 Marius A. Sutter, Dieter Seebach  
**Synthese von (2E,4E,6S,7R,10E,12E,14S,15R)-6,7,14,15-Tetramethyl- 16-dioxa-2,4,10,12-cyclohexadecatetraen-1,9-dion. - Ein Modellsystem für Elaiophylin**  
Liebigs Ann. Chem. **1983**, 939 - 949
- 244 \* Dieter Seebach, Jean-Jacques Lohmann, Max A. Syfrig, Masaaki Yoshifuji  
**Alkylation of the Isoquinoline Skeleton in the 1-Position**  
Tetrahedron **39**, 1963 (1983) [Tetrahedron Symposia-in-Print  
No. **9** on "Heteroatom-Directed Metallations in Heterocyclic Synthesis" ]
- 245 Dieter Seebach, Johannes D. Aebi  
 **$\alpha$ -Alkylation of Threonine**  
Tetrahedron Lett. **24**, 3311 - 3314 (1983)
- 246 Dieter Seebach, Theodor Weber  
 **$\alpha$ -Alkylation of a Cysteine Derivative without Racemization and without the Use of a Chiral Auxiliary**  
Tetrahedron Lett. **24**, 3315 - 3318 (1983)
- 247 Martin Schiess, Dieter Seebach  
**N-Methyl-C-(trichlortitanio)formimidoylchlorid. Ein effizientes Reagenz zur Homologisierung von Aldehyden und Ketonen zu  $\alpha$ -Hydroxy-carbonsäureamiden**  
Helv. Chim. Acta **66**, 1618 - 1623 (1983)
- 248 Dieter Seebach, Michael Boes, Reto Naef, W. Bernd Schweizer  
**Alkylation of Amino Acids without Loss of the Optical Activity: Preparation of  $\alpha$ -Substituted Proline Derivates. A Case of Self-Reproduction of Chirality**  
J. Am. Chem. Soc. **105**, 5390 - 5398 (1983)
- 249 Stefan J. Blarer, Dieter Seebach  
**Asymmetrische Michael-Additionen. Regio-, diastereo- und enantioselektive Alkylierungen der Enamine aus  $\beta$ -Tetralonen und (S)-2-(Methoxymethyl)pyrrolidin ("Prolinolmethylether") durch  $\omega$ -Nitrostyrole**  
Chem. Ber. **116**, 3086 - 3096 (1983)
- 250 Robert Hässig, Dieter Seebach  
**Bestimmung der Struktur von Phenyläthinyllithium in Lösung**

**mittels Tieftemperatur-NMR-Spektroskopie**

Helv. Chim Acta **66**, 2269 - 2273 (1983)

- 251 \* Dieter Seebach, Albert K. Beck, Martin Schiess, Leo Widler, Anne Wonnacott  
**Some recent advances in the use of titanium reagents for organic synthesis**  
Pure & Appl. Chem. **55**, 1807 - 1822 (1983)
- 252 Reto Naef, Dieter Seebach  
**Vierstufige EPC-Synthese von (+)- oder (-)-Frontalin aus Milchsäure. -Eine erste Anwendung des Prinzips der Selbstreproduktion der Chiralität in der Naturstoffsynthese**  
Liebigs Ann. Chem. **1983**, 1930 - 1936
- 253 \* Dieter Seebach, August Hidber  
**Synthese bei Temperaturen unter -80°C**  
Chimia **37**, 449 - 462 (1983)
- 254 Johannes D. Aebi, Marius A. Sutter, Daniel Wasmuth, Dieter Seebach  
**Enantiomerenreine Synthesebausteine aus verzweigter Aepfelsäure**  
Liebigs Ann. Chem. **1983**, 2114 - 2126;  
(Berichtigung: Liebigs Ann. Chem. **1984**, 407)
- 255 Suvit Thaisrivongs, Dieter Seebach  
**Diastereoselective Benzyloxymercuration/Demercuration of Derivatives of  $\gamma$ -Alkyl- $\delta$ -hydroxy- $\alpha,\beta$ -unsaturated Esters. A New Strategy for the Synthesis of Aldol-Type Products**  
J. Am. Chem. Soc. **105**, 7407 - 7413 (1983)
- 256 Max F. Züger, Fabio Giovannini, Dieter Seebach  
**Herstellung von (*R*)-(-)-3-Hydroxy-2-methyl-propionsäureethylester durch Hefereduktion von  $\alpha$ -Formyl-propionsäureethylester**  
Angew. Chem. **95**, 1024 (1983)  
Angew. Chem. Int. Ed. Engl. **22**, 1012 (1983)
- 257 René Amstutz, Thomas Laube, W. Bernd Schweizer, Dieter Seebach, Jack D. Dunitz  
**Further Investigation of the Nature of the C-Li Bond. Structures of a Phenylthiomethyl lithium Complex and of a Methylthiomethyl lithium Complex**  
Helv. Chim. Acta **67**, 224 - 236 (1984)

- 258 Dieter Seebach, Paul Knochel  
**2'-Nitro-2'-propen-1'-yl 2,2-Dimethylpropanoate (NPP), A multiple Coupling Reagent**  
Helv. Chim. Acta **67**, 261 - 283 (1984)
- 259 Carmen Nájera, Miguel Yus, Dieter Seebach  
**C-Metallierte chirale Alkoxide als d<sup>2</sup>- und d<sup>3</sup>-Reagenzien für die Synthese enantiomerenreiner Produkte (EPC-Synthese)**  
Helv. Chim. Acta **67**, 289 - 300 (1984)
- 260 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)
- 261 Dieter Seebach, Max A. Syfrig  
**Diastereoselektive Hydroxyalkylierungen in 1-Stellung von 2-Pivaloyl-1,2,3,4-tetrahydroisochinolin über ein Magnesiumderivat**  
Angew. Chem. **96**, 235 - 236 (1984)  
Angew. Chem. Int. Ed. Engl. **23**, 248 - 249 (1984)
- 262 Robert Hässig, Dieter Seebach, Herbert Siegel  
**Herstellung von Allenen aus geminalen Dibromolefinen und Aldehyden**  
Chem. Ber. **117**, 1877- 1884 (1984)
- 263 Peter Schnurrenberger, Ernst Hungerbühler, Dieter Seebach  
**(+)-Colletodiol -Synthesis from (S,S) -Tartaric Acid and (R)-3-Hydroxy-butyrinic Acid**  
Tetrahedron Lett. **25**, 2209 - 2212 (1984)
- 264 \* Dieter Seebach, Reto Naef, Giorgio Calderari  
**α-Alkylation of α-Heterosubstituted Carboxylic Acids without Racemization. EPC-Syntheses of Tertiary Alcohols and Thiols**  
Tetrahedron **40**, 1313 - 1324 (1984) [Tetrahedron Symposia-in-Print No. **15** on "Synthesis of Chiral Non-Racemic Compounds"]

- 265 Dieter Seebach, Johannes D. Aebi  
 **$\alpha$ -Alkylation of Serine with Self-Reproduction of the Center of Chirality**  
Tetrahedron Lett. **25**, 2545 - 2548 (1984)
- 266 Josef Gabriel, Dieter Seebach  
**Synthese und NMR-Spektren einiger  $^{13}\text{C}$ -markierter Thio- und Seleno-äther, -acetale und -orthoester**  
Helv. Chim Acta **67**, 1070 - 1082 (1984)
- 267 Dieter Seebach, Josef Gabriel, Robert Hässig  
**Low Temperature  $^{13}\text{C}$ -NMR Spectra of  $^6\text{Li}$ - and  $^{13}\text{C}$ -Labelled Sulfur- and Selenium-Substituted Organolithium Derivatives**  
Helv. Chim. Acta **67**, 1083 - 1099 (1984)
- 268 Carmen Nájera, Miguel Yus, Robert Hässig, Dieter Seebach  
**Fluoro(phenylsulfinyl)methylolithium. Note on the  $^{13}\text{C}$ -NMR Spectrum of a Fluorocarbenoid**  
Helv. Chim. Acta **67**, 1100 - 1103 (1984)
- 269 Dieter Seebach, Max F. Züger  
**On the Preparation of Methyl and Ethyl (R)-(-)-3-Hydroxy-Valerate by Depolymerization of a Mixed PHB/PHV Biopolymer**  
Tetrahedron Lett. **25**, 2747 - 2750 (1984)
- 270 Dieter Seebach, Walter Bauer, Jesper Hansen, Thomas Laube, W. Bernd Schweizer, Jack-D. Dunitz  
**Crystal and Molecular Structure of 1-Lithio-3,6-diethoxy-2,5-dimethyl-1,2-dihydropyrazine, the Lithiated Bis-lactim Ether of the Diketopiperazine from Alanine**  
J. Chem. Soc., Chem. Commun. **1984**, 853 - 854
- 271 Dieter Seebach, Matthias Dust, Reto Naef, Markus Bänziger  
**Synthese und Bestimmung der absoluten Konfiguration von (+)-Delesserin, einem Inhaltsstoff der roten Meeresalge Delesseria sanguinea (Lamouroux)**  
Angew. Chem. **96**, 498 (1984)  
Angew. Chem. Int. Ed. Engl. **23**, 530 (1984)
- 272 Robert Häner, Thomas Laube, Dieter Seebach  
**Reversal of Product Configuration in Michael Addition of Lithium Enolates**

**to E- and Z-1-Nitro-1-propene**

Chimia **38**, 255 - 257 (1984)

- 273 René Imwinkelried, Dieter Seebach  
**Aminierende, reduktive Kupplung aromatischer Aldehyde mit Tris(dialkylamino)methylvanadium (IV) zu N,N,N',N"-Tetraalkyl-1,2-diaryläthylendiaminen**  
Helv. Chim. Acta **67**, 1496 - 1502 (1984)
- 274 Dieter Seebach, Claudia Betschart, Martin Schiess  
**Diastereoselektive Synthese neuartiger Mannich-Basen mittels Titanderivaten**  
Helv. Chim. Acta **67**, 1593 - 1597 (1984)
- 275 Dieter Seebach, Theodor Weber  
**Hydroxyalkylierungen von Cystein über das Enolat von (2R,5R)-2(tert-Butyl)-1-aza-3-oxa-7-thiabicyclo[3.3.0]octan-4-on und unter Selbstreproduktion des Chiralitätszentrums**  
Helv. Chim. Acta **67**, 1650 - 1661 (1984)
- 276 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)
- 277 Walter Bauer, Dieter Seebach  
**Bestimmung des Aggregationsgrads lithiumorganischer Verbindungen durch Kryoskopie in Tetrahydrofuran**  
Helv. Chim. Acta **67**, 1972 - 1988 (1984)
- 278 + Dieter Seebach  
**Alkylierung von Hydroxy- und Aminosäuren unter Erhaltung oder unter Selbstreproduktion des Chiralitätszentrums** (Autorenreferat)  
Mitteilungsblatt der Chemischen Gesellschaft der Deutschen Demokratischen Republik **31**( Heft 11) 249 - 251 (1984)
- 279 \* Dieter Seebach  
**Crystal Structures and Stereoselective Reactions of Organic Lithium Derivatives**  
Proceedings of The Robert A. Welch Foundation Conferences on Chemical

Research. **XXVII.** Stereospecificity in Chemistry and Biochemistry, Nov. 7 - 9, 1983,  
published in Houston, Texas (1984), pg. 93-145

- 280 Christian Schregenberger, Dieter Seebach  
**Synthesis and Determination of the Absolute Configuration of the Macrodiolide (+)-Conglobatin**  
Tetrahedron Lett. **25**, 5881 - 5884 (1984)
- 281 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)
- 282 Dieter Seebach, Johannes Aebi, Daniel Wasmuth  
**Diastereoselective  $\alpha$ -Alkylation of  $\beta$ -Hydroxycarboxylic Esters through Alkoxide Enolates: (+)-Diethyl (2S,3R)-3-Allyl-2-Hydroxysuccinate from (-)-Diethyl S-Malate (Butanedioic acid, 2-hydroxy-3-(2-propenyl)-,diethyl ester, [S-(R,S)])**  
Organic Syntheses **63**, 109 - 120 (1985), Collective Volume **VII**, 153 - 159 (1990)
- 283 Dieter Seebach, Marlyse Coquoz  
 **$\alpha$ -Alkylation of (S)-Glyceric Acid through the tert-Butylthioester of (2R,4S)-2-tert-Butyl-1,3-dioxolane-4-carboxylic Acid**  
Chimia **39**, 20 - 22 (1985)
- 284 Reto Naef, Dieter Seebach  
**Herstellung enantiomerenreiner cis- oder trans-konfigurierter 2-(tert-Butyl)-3-methylimidazolidin-4-one aus den Aminosäuren (S)-Alanin, (S)-Phenylalanin, (R)-Phenylglycin, (S)-Methionin und (S)-Valin**  
Helv. Chim. Acta **68**, 135 - 143 (1985)
- 285 Dieter Seebach, Johannes D. Aebi, Reto Naef, Theodor Weber  
 **$\alpha$ -Alkylation of Amino Acids without Racemization. Preparation of Either (S)- or (R)- $\alpha$ -Methyldopa from (S)-Alanine**  
Helv. Chim. Acta **68**, 144 - 154 (1985)
- 286 Theodor Weber, Dieter Seebach  
**Alkylierung in der 2-Stellung von (2S,4R)-4-Hydroxyprolin unter Retention**  
Helv. Chim. Acta **68**, 155 - 161 (1985)

- 287 Dieter Seebach, Albert K. Beck, Jerzy Golinski, John N. Hay, Thomas Laube  
**Ueber den sterischen Verlauf der Umsetzung von Enaminen aus offenkettigen Aldehyden und Ketonen mit Nitroolefinen zu 2,3-disubstituierten 4-Nitro-ketonen**  
Helv. Chim. Acta **68**, 162 - 172 (1985)
- 288 Dieter Seebach, Mümtaz Ertas, Rita Locher, W. Bernd Schweizer  
**Tritylketone und Tritylenone, Beiträge zur sterisch erzwungenen Michael-addition und zur diastereoselektiven Aldol-Addition**  
Helv. Chim Acta **68**, 264 - 282 (1985)
- 289 Walter Bauer, Thomas Laube, Dieter Seebach  
**Crystal and Molecular Structure of a THF-solvated Lithium Amide Enolate Dimer**  
Chem. Ber. **118**, 764 - 773 (1985)
- 290 Dieter Seebach, Michael A. Brook  
**Reversed Stereochemical Course of the Michael-Addition of Cyclohexanone to  $\beta$ -Nitrostyrenes by Using 1-(Trimethylsiloxy)cyclohexene/Dichloro - (diisopropoxy)titanium**  
Helv. Chim. Acta **68**, 319 - 324 (1985)
- 291 Leo Widler, Theodor Weber, Dieter Seebach  
**d<sup>1</sup>- und d<sup>3</sup>-selektive Umsetzungen von schwefelsubstituierten Allyl-Titan-Derivaten mit Aldehyden und Ketonen**  
Chem. Ber. **118**, 1329 - 1344 (1985)
- 292 Dieter Seebach, Jesper Hansen, Paul Seiler, Jack M. Gromek  
**On the Steric Course of Addition of 1-Lithio- and 1-Magnesio-2-pivaloyl-1,2,3,4-tetrahydroisoquinoline to Aldehydes and Ketones. An X-Ray Crystal Structure Determination of the Organomagnesium Reagent**  
J. Organomet. Chem. **285**, 1 - 13 (1985)
- 293 + Dieter Seebach  
**Neue Synthesemethoden aus Röntgenstrukturdaten**  
Jahresbericht 1984 der ETH (Eidgenössischen Technischen Hochschule)  
Zürich, Mai **1985**, S. 31 - 33

- 294 Martin Eyer, Dieter Seebach  
**I-2-Nitro-1,3-alkanediols by Stereoselective Addition of Nitroethanol to Aldehydes. - On the Asymmetric electrophilic Addition to Double Bonds**  
J. Am. Chem. Soc. **107**, 3601 - 3606 (1985)
- 295 Dieter Seebach, David D. Miller, Stefan Müller, Theodor Weber  
**The Chiral Glycine Enolate Derivative from 1-Benzoyl-2-(tert-butyl)-3-methyl-1,3-imidazolidin-4-one is Alkylated in the 5-Position with Relative Topicity lk**  
Helv. Chim. Acta **68**, 949 - 952 (1985)
- 296 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)
- 297 Mümtaz Ertas, Dieter Seebach  
**Selektive Herstellung von l- oder u-Aldolen aus Äthyl-trityl-keton und aromatischen Aldehyden über Lithium- bzw. Aluminium-Enolate**  
Helv. Chim. Acta **68**, 961 - 968 (1985)
- 298 Dieter Seebach, Giorgio Calderari, Walter L. Meyer, Andrew Merritt, Louis Odermann  
**Stereoselective (3+3)-Carbocyclization of Enamines with Nitroallylating Reagents**  
Chimia **39**, 183 - 184 (1985)
- 299 Dieter Seebach, Antoine Fadel  
**N,O-Acetals from Pivalaldehyde and Amino Acids for the  $\alpha$ -Alkylation with Self-Reproduction of the Center of Chirality.**  
**Enolates of 3-Benzoyl-2-(tert-butyl)-1,3-oxazolidin-5-ones**  
Helv. Chim. Acta **68**, 1243 - 1250 (1985)
- 300 Thomas Laube, Jack D. Dunitz, Dieter Seebach  
**Ueber die Wechselwirkung zwischen Lithium-enolaten und sekundären Aminen in Lösung und im Kristall**  
Helv. Chim. Acta **68**, 1373 - 1393 (1985)
- 301 \* Dieter Seebach  
**New applications of organometallic derivates of Li,Mg,B,Al,Si,Ti & V in selective**

## **syntheses**

in "Organic Synthesis: an interdisciplinary challenge", Editors: Jacques Streith, Horst Prinzbach, Gottfried Schill (Proceedings of the 5th IUPAC Conference on Organic Synthesis, Freiburg/Breisgau, 1984) Blackwell Scientific Publications Ltd., Oxford, GB **1985**, 77 - 99.

- 302 Dieter Seebach, Isabelle M. P. Huber  
**Herstellung diastereomerenreiner l- oder u-konfigurierter 1-hydroxy -benzylirter Tetrahydroisochinolin-Vorläufer für Aporphin-, Protoberberin, Quettamin- und Phthalid-Alkaloide**  
**(Stereoselektive Synthese von ( $\pm$ )-Ushinsunin und ( $\pm$ )-Oliverolin )**  
Chimia **39**, 233 - 234 (1985)
- 303 René Imwinkelried, Dieter Seebach,  
**Allylierung von Aldehyden unter Veretherung mit Dialkoxydichlorotitan und Allyltrimethylsilan; eine asymmetrische Variante der Sakurai-Reaktion**  
Angew. Chem. **97**, 781 - 782 (1985)  
Angew. Chem. Int. Ed. Engl. **24**, 765 - 766 (1985)
- 304 Dieter Seebach, Hak-Fun Chow, Richard F. W. Jackson, Kevin Lawson, Marius-A-Sutter, Suvit Thaisrivongs, Jürg Zimmermann  
**Total Synthesis of (+)-11,11'-Di-O-methylelaiphylidene: An Aglycone of Elaiophylin**  
J. Am. Chem. Soc. **107**, 5292 - 5293 (1985)
- 305 Dieter Seebach, Albert K. Beck, Silvio Roggo, Anne Wonnacott  
**Enantioselektive Addition von Arylgruppen an aromatische Aldehyde mit Aryltitan-Binaphthol-Derivaten**  
Chem. Ber. **118**, 3673 - 3682 (1985)
- 306 Dieter Seebach, Martin Schiess, W. Bernd Schweizer  
**On the Stereochemical Course of Asymmetric Mannich Reactions**  
Chimia **39**, 272 - 273 (1985)
- 307 Johannes D. Aebi, Dieter Seebach  
**Enantioselektive  $\alpha$ -Alkylierung von Asparagin- und Glutaminsäure über die Dilithium-enolatocarboxylate von 2-[3-Benzoyl-2-(tert-butyl)-1-methyl-5-oxoimidazolidin-4-yl]essigsäure und 3-[3-Benzoyl-2-(tert-butyl)-1-methyl-5-**

**oxoimidazolidin-4-yl]propionsäure**

Helv. Chim. Acta **68**, 1507 - 1518 (1985)

- 308 Giorgio Calderari, Dieter Seebach  
**Asymmetrische Michael-Additionen. Stereoselektive Alkylierung chiraler, nicht racemischer Enolate durch Nitroolefine.**  
**Herstellung enantiomerenreiner  $\gamma$ -Aminobuttersäure- und Bernsteinsäure-Derivate**  
Helv. Chim. Acta **68**, 1592 - 1604 (1985)
- 309 Robert Häner, Thomas Laube, Dieter Seebach  
**Regio- and Diastereoselective Preparation of Aldols from  $\alpha$ -Branched Ketone Enolates Generated from BHT Ester Enolates and Organolithium Reagents - In Situ Generation and Trapping of Ketenes from Ester Enolates**  
J. Am. Chem. Soc. **107**, 5396 - 5403 (1985)
- 310 Dieter Seebach, René Amstutz, Thomas Laube, W. Bernd Schweizer, Jack D. Dunitz  
**Structures of Three Lithium Ester Enolates by X-ray Diffraction: Derivation of Reaction Path for Cleavage into Ketene and Alcoholate**  
J. Am. Chem. Soc. **107**, 5403 - 5409 (1985)
- 311 Urs Wuthier, Hüng Viet Pham, Ernö Pretsch, Daniel Ammann, Albert K. Beck, Dieter-Seebach, Wilhelm Simon  
**Zur Anionenselektivität von Distannylderivaten in Membranen**  
Helv. Chim. Acta **68**, 1822 - 1827 (1985)
- 312 Josef Heinzer, Jean F. M. Oth, Dieter Seebach  
**Quantitative Line-Shape Analysis of Temperature- and Concentration-Dependent  $^{13}\text{C}$ -NMR Spectra of  $^6\text{Li}$ - and  $^{13}\text{C}$ -Labelled Organolithium Compounds**  
Helv. Chim. Acta **68**, 1848 - 1862 (1985)
- 313 \* Dieter Seebach, Giorgio Calderari, Paul Knochel  
**Trifluoroacetoxy-phenylselenation of nitroolefins.**  
**Regioselective preparation of nitroallylic alcohol derivatives and their use as multiple coupling reagents**  
Tetrahedron **41**, 4861 - 4872 (1985) [Tetrahedron Symposia-in-Print No. **23** on "Recent Aspects of Organoselenium Chemistry"]

- 314 Robert Häner, Dieter Seebach  
**Nitration of the DHBA Cyclopropanecarboxylate Enolate - a New and Efficient Route to 1-Aminocyclopropane-1-carboxylic Acid**  
Chimia **39**, 356 - 357 (1985)
- 315 Richard F. W. Jackson, Marius A. Sutter, Dieter Seebach  
**Preparation of (2E,4E,6S,7S,10E,12E,14S,15S,1'S)-7,15-Bis (1'-hydroxymethylethyl)-6,14-dimethyl-8,16-dioxa-2,4,10,12-cyclohexadecatetraene-1,9-dione. - A Building Block for the Synthesis of Elaiophylin**  
Liebigs Ann. Chem. **1985**, 2313 - 2327
- 316 Dieter Seebach, Philippe Renaud  
**Chirale Synthesebausteine durch Kolbe-Elektrolyse enantiomerenreiner β-Hydroxy-carbonsäurederivate. (R)- und (S)-Methyl- sowie (R)-Trifluormethyl-γ-butyrolactone und -δ-valerolactone**  
Helv. Chim. Acta **68**, 2342 - 2349 (1985)
- 317 Helgard G. Raubenheimer, Dieter Seebach  
**Convenient *in situ* Generation of an Active Titanium (III)-Reagent for Stereoselective Pinacolization of Aromatic Aldehydes**  
Chimia **40**, 12 - 13 (1986)
- 318 Dieter Seebach, Albert K. Beck, Philippe Renaud  
**Di- und trifluorsubstituierte Dilithium Verbindungen für die Organische Synthese**  
Angew. Chem. **98**, 96 - 97 (1986)  
Angew. Chem. Int. Ed. Engl. **25**, 98 - 99 (1986)
- 319 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
- 320 René Amstutz, Jack D. Dunitz, Thomas Laube, W. Bernd Schweizer, Dieter Seebach  
**Die Geometrie von Lithium-Komplexen mit koordinativ gebundenen Carbonylverbindungen und die Struktur eines Lithiumdienolates**  
Chem. Ber. **119**, 434 - 443 (1986)

- 321 Urs Brändli, Martin Eyer, Dieter Seebach  
**Regioselektive Erzeugung und diastereoselektive Umsetzungen in  $\beta$ -Stellung zur Nitrogruppe sekundärer Nitroalkane über  $\alpha,\beta$ -doppelt deprotonierte Derivate (Super-enamine)**  
Chem. Ber. **119**, 575 - 588 (1986)
- 322 Dieter Seebach, René Imwinkelried, Gerhard Stucky  
**Optisch aktive Alkohole aus 1,3-Dioxan-4-onen; eine praktikable Variante der asymmetrischen Synthese unter nucleophiler Substitution an Acetalzentren**  
Angew. Chem. **98**, 182 - 183, 1986  
Angew. Chem. Int. Ed. Engl. **25**, 178 - 180 (1986)
- 323 Walter L. Meyer, Michael J. Brannon, Andrew Merritt, Dieter Seebach  
**Annulation of 2-Formyl-2-Cyclohexenones by Reaction with Enamines**  
Tetrahedron Lett. **27**, 1449 - 1452 (1986)
- 324 Robert Häner, W. Bernd Schweizer, Paul Seiler, Dieter Seebach  
**Aldol Addition of a Lithium Ketone Enolate with Persubstituted Double Bond - a Reversal of the Usual Stereochemical Course**  
Chimia **40**, 97 - 98 (1986)
- 325 \* Dieter Seebach, René Imwinkelried, Theodor Weber  
**EPC Syntheses with C,C Bond Formation via Acetals and Enamines**  
Modern Synthetic Methods 1986, Vol. **4**, Ed. R. Scheffold,  
Springer Verlag Berlin, Heidelberg, New York, Tokyo, 1986, 125 - 259
- 326 Robert Fitzi, Dieter Seebach  
**Enantiomerentrennung von (R,S)-2-(tert-Butyl)-3-methyl-4-imidazolidinon, einem chiralen Baustein für die Aminosäuresynthese**  
Angew. Chem. **98**, 363 - 364 (1986); Berichtigung: ibid **98**, 842 (1986)  
Angew. Chem. Int. Ed. Engl. **25**, 345 - 346 (1986); Erratum: ibid **25**, 766 (1986)
- 327 Hak-Fun Chow, Dieter Seebach  
**Diastereoselective Aldol Addition Using Boron Trichloride or Alkoxydichloroborane**  
Helv. Chim. Acta **69**, 604 - 614 (1986)

- 328 Philippe Renaud, Dieter Seebach  
**Electrochemical Decarboxylation of Hydroxyproline: A Simple Three-Step Conversion of (2S,4R)-4-Hydroxy-proline to (R)- $\gamma$ -Amino- $\beta$ -hydroxy -butanoic Acid (GABOB)**  
Synthesis **1986**, 424 - 426
- 329 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)
- 330 + Jack D. Dunitz, Dieter Seebach  
**Prelog Symposium, Israel, March 16 - 19, 1986**  
(Report from the Conference at the Weizmann Institute, Rehovot)  
Chimia **40**, 174 (1986)
- 331 Dieter Seebach, Hak-Fun Chow, Richard F. W. Jackson, Marius A. Sutter, Suvit-Thaisrivongs, Jürg Zimmermann  
**(+)-11,11'-Di-O-methylelaeophylidene - Preparation from Elaeophylin and Total Synthesis from (R)-3-Hydroxybutyrate and (S)-Malate**  
Liebigs Ann. Chem. **1986**, 1281 - 1308
- 332 Dieter Seebach, Jürg Zimmermann  
**1,3-Dioxanone Derivates from  $\beta$ -Hydroxy-carboxylic Acids and Pivalaldehyde. Versatile Building Blocks for Syntheses of Enantiomerically Pure Compounds. A Chiral Acetoacetic Acid Derivative**  
Helv. Chim. Acta **69**, 1147 - 1152 (1986)
- 333 + Dieter Seebach  
**Vladimir Prelog - Jahrgang 1906**  
Nachr. Chem. Tech. Lab. **34**, 810 - 811 (1986)
- 334 Theodor Weber, Roland Aeschimann, Thomas Maetzke, Dieter Seebach  
**Methionin als Vorläufer zur enantioselektiven Synthese  $\alpha$ -verzweigter Vinylglycine und anderer Aminosäuren**  
Helv. Chim. Acta **69**, 1365 - 1377 (1986)

- 335 Philippe Renaud, Dieter Seebach  
**Herstellung chiraler Synthesebausteine aus Aminosäuren und Peptiden durch oxidative elektrolytische Decarboxylierung und TiCl<sub>4</sub>-induzierte Umsetzung mit Nucleophilen**  
Angew. Chem. **98**, 836 - 838 (1986)  
Angew. Chem. Int. Ed. Engl. **25**, 843 - 844 (1986)
- 336 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)
- 337 Robert Häner, Thomas Maetzke, Dieter Seebach  
**Generation and Reactions of Lithiated tert-Butyl and 2,6-Di(tert-butyl)-4-methylphenyl Cyclopropanecarboxylates**  
Helv. Chim. Acta **69**, 1655 - 1665 (1986)
- 338 Philippe Renaud, Dieter Seebach  
**Enantiomerenreine Pyrrolidin-Derivate aus trans-4-Hydroxy-L-prolin durch elektrochemische oxidative Decarboxylierung und Titanetrachlorid-vermittelte Umsetzung mit Nukleophilen**  
Helv. Chim. Acta **69**, 1704 - 1710 (1986)
- 339 Christian Schregenberger, Dieter Seebach  
**Totalsynthese des Makrodiolids (+)-Conglobatin**  
Liebigs Ann. Chem. **1986**, 2081 - 2103
- 340 \* 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
- 341 Dieter Seebach, Robert Häner  
**C-Alkylation of Phenylthio Aziridine Carboxylates**  
Chemistry Lett. Jpn. **1987**, 49 - 52

- 342 Dieter Seebach, Eusebio Juaristi, David D. Miller, Christof Schickli, Theodor Weber  
**Addition of Chiral Glycine, Methionine, and Vinylglycine Enolate Derivatives to Aldehydes and Ketones in the Preparation of Enantiomerically Pure  $\alpha$ -Amino- $\beta$ -hydroxy Acids**  
Helv. Chim. Acta **70**, 237 - 261 (1987)
- 343 Walter L. Meyer, W. Bernd Schweizer, Albert K. Beck, Werner Scheifele,  
Dieter Seebach, Stuart L. Schreiber, Sarah E. Kelly  
**Revised Structure of the Fungal Germination Self-Inhibitor Gloeosporone**  
Helv. Chim. Acta **70**, 281 - 291 (1987)
- 344 Philippe Renaud, Marianne Hürzeler, Dieter Seebach  
**Elektrochemische Oxidation von (S)-Äpfelsäurederivaten: ein Weg zu enantiomerenreinen alkylierten Malonaldehydsäure-estern**  
Helv. Chim. Acta **70**, 292 - 298 (1987)
- 345 Dieter Seebach, René Imwinkelried, Gerhard Stucky  
**Optisch aktive Alkohole aus 1,3-Dioxan-4-onen: eine praktikable Variante der enantioselektiven Synthese unter nucleophiler Substitution an Acetal-Zentren**  
Helv. Chim. Acta **70**, 448 - 464 (1987)
- 346 Michael A. Brook, Dieter Seebach  
**Cyclic nitronates from the diastereoselective addition of 1-tri- methylsilyloxy-cyclohexene to nitroolefins. Starting materials for stereoselective Henry-reactions and 1,3-dipolar cycloadditions**  
Can. J. Chem. **65**, 836 - 850 (1987)
- 347 René Imwinkelried, Martin Schiess, Dieter Seebach  
**Diisopropyl (2S,3S)-2,3-O-Isopropylidenetartrate (1,3-Dioxolane-4,5-dicarboxylic acid, 2,2-dimethyl-bis(1-methylethyl)ester, (4R-trans)-)**  
Organic Syntheses **65**, 230 - 235, 1987, Collective Volume **VIII**, 201 - 204 (1993)
- 348 Dieter Seebach, Heinrich Estermann  
 **$\alpha$ -Alkylation of  $\beta$ -Aminobutanoates with lk-1.2-Induction**  
Tetrahedron Lett. **28**, 3103 - 3106 (1987)

- 349 Dieter Seebach, Albert K. Beck, René Imwinkelried, Silvio Roggo, Anne Wonnacott  
**Chirale Alkoxytitan(IV)-Komplexe für enantioselektive nucleophile Additionen an Aldehyde und als Lewis-Säuren in Diels-Alder-Reaktionen**  
Helv. Chim. Acta **70**, 954 - 974 (1987)
- 350 Jürg Zimmermann, Dieter Seebach  
**Brominations of Cyclic Acetals from  $\alpha$ -Amino Acids and  $\alpha$ - or  $\beta$ -Hydroxy Acids with N-Bromosuccinimide**  
Helv. Chim. Acta **70**, 1104 - 1114 (1987)
- 351 Dieter Seebach, Johannes D. Aebi, Marlyse Gander-Coquoz, Reto Naef  
**Stereoselektive Alkylierung an C( $\alpha$ ) von Serin, Glycerinsäure, Threonin und Weinsäure über heterocyclische Enolate mit exocyclischer Doppelbindung**  
Helv. Chim. Acta **70**, 1194 - 1216 (1987)
- 352 Dieter Seebach, Bernardo Herradon  
**Diastereoselective Elaboration of the Carbon Skeleton of  $\beta$ -Hydroxyesters from Yeast Reductions. Preparation of (2S)-2-Hydroxy-cyclohexane Carboxylic Acids with Three Contiguous Stereogenic Centers**  
Tetrahedron Lett. **28**, 3791 - 3794 (1987)
- 353 Axel Griesbeck, Dieter Seebach  
**Einfache Umwandlung von (-)-(R)-3-Hydroxybuttersäure in das (+)-(S)-Enantiomere und dessen Lacton (-)-(S)-4-Methyloxetan-2-on**  
Helv. Chim. Acta **70**, 1320 - 1325 (1987)
- 354 Axel Griesbeck, Dieter Seebach  
**Herstellung enantiomerenreiner Derivate von 3-Amino- und 3-Mercapto-buttersäure durch SN2-Ringöffnung des  $\beta$ -Lactons und eines 1,3-Dioxanons aus der 3-Hydroxybuttersäure**  
Helv. Chim. Acta **70**, 1326 - 1332 (1987)
- 355 Dieter Seebach, Isabelle M.P. Huber, Max A. Syfrig  
**Diastereoselektive Hydroxyalkylierungen in 1-Stellung von Tetrahydro-isochinolinen und Synthese von Aporphin-, Protoberberin- und Phthalid Alkaloiden**  
Helv. Chim. Acta **70**, 1357 - 1379 (1987)

- 356 Dieter Seebach, Robert Häner, Thomas Vettiger  
**Nucleophile Ringöffnung von  $\alpha$ -Nitrocyclopropancarbonsäure-arylestern mit sterisch geschützter, aber elektronisch wirksamer Carbonyl- und Nitro-Gruppe. Ein neues Prinzip der  $\alpha$ -Aminosäure-Synthese (Aminobutansäure-a<sup>4</sup>-Synthon)**  
Helv. Chim. Acta **70**, 1507 - 1515 (1987)
- 357 Dieter Seebach, Silvio Roggo, Thomas Maetzke, Hans Braunschweiger, Jacques Cercus, Manfred Krieger  
**Diastereo- und enantioselektive Reduktion von  $\beta$ -Ketoestern mit Cyclopentanon-, Cyclohexanon-, Piperidon- und Tetralon-Struktur durch nicht fermentierende Bäcker-Hefe**  
Helv. Chim. Acta **70**, 1605 - 1615 (1987)
- 358 Geo Adam, Regina Zibuck, Dieter Seebach  
**Total Synthesis of (+)-Gloeosporone: Assignment of Absolut Configuration**  
J. Am. Chem. Soc. **109**, 6176 - 6177 (1987)
- 359 Peter Schnurrenberger, Ernst Hungerbühler, Dieter Seebach  
**Total Synthesis of (+)-Colletodiol from (S,S)-Tartrate and (R)-3-Hydroxy butanoate**  
Liebigs Ann. Chem. **1987**, 733 - 744
- 360 Robert Häner, Bernardo Olano, Dieter Seebach  
**Preparation and C-Alkylation of Enantiomerically Pure S-Phenyl Aziridin-carbothioates. On the Structure of Small-Ring Ester Lithium Enolates**  
Helv. Chim. Acta **70**, 1676 - 1693 (1987)
- 361 Robin Polt, Dieter Seebach  
**Alkylation of Imidazolidinone Dipeptide Derivatives: Preparation of Enantiomerically Pure Di- and Tripeptides by 'Chirality Transfer' via a Pivalaldehyde N,N-Acetal Center**  
Helv. Chim. Acta **70**, 1930 - 1936 (1987)
- 362 Isabelle M.P. Huber, Dieter Seebach  
**EPC-Synthesis of Tetrahydroisoquinolines by Diastereoselective Alkylation at the 1-Position of Phenylalanine-Derived Precursors. Synthesis of the Alkaloid (+)-Corlumine**  
Helv. Chim. Acta **70**, 1944 - 1954 (1987)

- 363 Norbert Krause, Dieter Seebach  
**Zur Chemie acetylenischer Titan-Verbindungen**  
Chem. Ber. **120**, 1845 - 1851 (1987)
- 364 Yoshihiro Noda, Dieter Seebach  
**Reactions of Chiral 2-(*tert*-Butyl)-2*H*,4*H*-1,3-dioxin-4-ones Bearing Functional Groups in the 6-Position and Diastereoselective Catalytic Hydrogenation to *cis*-2,6-Disubstituted 1,3-Dioxan-4-ones**  
Helv. Chim. Acta **70**, 2137 - 2145 (1987)
- 365 Claudia Betschart, Dieter Seebach  
**Aminierende reduktive Kupplung aromatischer Aldehyde mit niedervalenten Titan-Reagentien zu 1,2-Diarylethylendiaminen**  
Helv. Chim. Acta **70**, 2215 - 2231 (1987)
- 366 + Dieter Seebach  
Geburtstagsadresse  
**Commemoration of Prof. Dr. Teruaki Mukaiyama's 60th birthday**  
Kokenkai, Tokyo University, **1987**
- 367 Martin Eberle, Martin Egli, Dieter Seebach  
**Enantioselektive Verseifung der Diacetate von 2-Nitro-1,3-diolen mit Schweineleber-Esterase und Herstellung enantiomerenreiner Derivate von 2-Nitroallylalkoholen (chirale Verknüpfungsreagenzien)**  
Helv. Chim. Acta **71**, 1-23 (1988)
- 368 Dieter Seebach, Urs Brändli, Peter Schnurrenberger, Michael Przybylski  
**High-Yield Synthesis of 20-, 24-, and 28-Membered Macropentolide, -hexolide, and -heptolide, Respectively, from (R)- or (S)-3-Hydroxybutanoic Acid under Yamaguchi's Macrolactonization Conditions**  
Helv. Chim. Acta **71**, 155 - 167 (1988)
- 369 Marlyse Gander-Coquoz, Dieter Seebach  
**Herstellung enantiomerenreiner,  $\alpha$ -alkylierter Lysin-, Ornithin- und Tryptophan-Derivate**  
Helv. Chim. Acta **71**, 224 - 236 (1988)

- 370 Regina Zibuck, Dieter Seebach  
**Note on the Preparation of 1,2-Diketones from Acetylenes**  
Helv. Chim. Acta **71**, 237 - 240 (1988)
- 371 Dieter Seebach, Geo Adam, Thomas Gees, Martin Schiess, Wolfgang Weigand  
**Scope and Limitations of the TiCl<sub>4</sub>-Mediated Additions of Isocyanides to Aldehydes and Ketones with Formation of  $\alpha$ -Hydroxycarboxylic Acid Amides**  
Chem. Ber. **121**, 507 - 517 (1988)
- 372 Dieter Seebach, Thomas Maetzke, Richard K. Haynes, Michael N. Paddon-Row, Stephen S. Wong  
**Low-Temperature X-Ray Crystal-Structure Analysis of the Thermally Unstable Lithiated 2-Butenyl tert-Butyl Sulfide: A Comparison with Model ab initio MO Calculations**  
Helv. Chim. Acta **71**, 299 - 311 (1988)
- 373 Geo Adam, Dieter Seebach  
**(2S,3R)-2-Benzylxyloxy-3,4-epoxybutan-1-ol; A Versatile Synthetic Building Block Formally Derived From (u)-Tartaric Acid**  
Synthesis **1988**, 373 - 376
- 374 Dieter Seebach  
**Editorial**  
**Revolution der Publikationstechnik aus der Sicht eines Konsumenten**  
Chimia **42**, 122 (1988)
- 375 Albert K. Beck, Dieter Seebach  
**Large-Scale Preparation of (S)- $\alpha$ -Methylmethionine from the Parent Amino Acid**  
Chimia **42**, 142 - 144 (1988)
- 376 Dieter Seebach, Gerhard Stucky, Philippe Renaud  
**Chirale Synthesebausteine aus Aminosäuren über einen elektrochemischen Schlüsselschritt: Herstellung von (R)-2-tert-Butyl-3-methoxycarbonyl-1,3-oxazolinien aus (S)-Serin und (S)-Threonin**  
Chimia **42**, 176 - 178 (1988)
- 377 Norbert Krause, Dieter Seebach  
**The Ring Opening of Unsymmetrical Allylic, Benzylic, Propargylic, and Si-**

**Substituted Epoxides by Titanium Acetylides: A Convenient Access to Certain 2-Substituted 3-Butyn-1-ols**

Chem. Ber. **121**, 1315 - 1320 (1988)

- 378 Dieter Seebach, Jürg Zimmermann, Urs Gysel, Regula Ziegler, Tae-Kyu Ha  
**Totally Stereoselective Additions to 2,6-Disubstituted 1,3-Dioxin-4-ones (Chiral Acetoacetic Acid Derivatives). Synthetic and Mechanistic Aspects of Remote Stereoselectivity**  
J. Am. Chem. Soc. **110**, 4763 - 4772 (1988)
- 379 Jürg Zimmermann, Dieter Seebach, Tae-Kyu Ha  
**α-Alkylierung von β-Hydroxycarbonsäuren über 1,3-Dioxan-4-on-Enolate**  
Helv. Chim. Acta **71**, 1143 - 1155 (1988)
- 380 Dieter Seebach, Stefan G. Müller, Urs Gysel, Jürg Zimmermann  
**Präparative chromatographische Enantiomerentrennung von synthetisch nützlichen cyclischen Acetalen**  
Helv. Chim. Acta **71**, 1303 - 1318 (1988)
- 381 Robert Fitzi, Dieter Seebach  
**Resolution and Use in α-Amino Acid Synthesis of Imidazolidinone Glycine Derivatives**  
Tetrahedron **44**, 5277 - 5292 (1988)  
[Tetrahedron Symposia-in-Print No. **33** on "α-Amino Acid Synthesis"]
- 382 D. Seebach  
**In Memory of Prof. Dr. Gen-ichi Tsuchihashi**  
in "Memorial Writings for Prof. Dr. Gen-ichi Tsuchihashi", K. Aramaki, S. Iwata, H.-Ohta, S. Ogawa, K. Ogura, K. Kaya, M. Kinoshita, K. Kondo, Y. Saito, Y.-Shizusato, T. Suehiro, T. Sugai, K. Suzuki, K. Tatsuta, H. Honda, S. Morita, S.-Yamamura (Eds.), Keio University, Yokohama, Japan, 1988
- 383 Dieter Seebach, Gerhard Stucky  
**Reaktivität von (*R*)-2-*tert*-Butyldihydrooxazol-Derivaten aus Serin und Threonin - neuartige und vielseitig einsetzbare chirale Synthesebausteine**  
Angew. Chem. **100**, 1398 - 1404 (1988)  
Angew. Chem. Int. Ed. Engl. **27**, 1351 - 1353 (1988)

- 384 Heinrich Estermann, Dieter Seebach  
**Diastereoselektive Alkylierung von 3-Aminobutansäure in der 2-Stellung**  
Helv. Chim. Acta **71**, 1824 - 1839 (1988)
- 385 Claudia Betschart, Beat Schmidt, Dieter Seebach  
**Anwendungsbreite der reduktiven Kupplung aromatischer Aldimin-Derivate mit niedervalenten Titan-Reagenzien zu 1,2-Diarylethylendiaminen**  
Helv. Chim. Acta **71**, 1999 - 2021 (1988)
- 386 \* Dieter Seebach  
**Struktur und Reaktivität von Lithiumenolaten vom Pinakolon zur selektiven C-Alkylierung von Peptiden - Schwierigkeiten und Möglichkeiten durch komplexe Strukturen**  
Angew. Chem. **100**, 1685 - 1715 (1988)  
Angew. Chem. Int. Ed. Engl. **27**, 1624 - 1654 (1988)
- 387 Willi Amberg, Dieter Seebach  
**Direkte Michael-Additionen von Silylgruppen an  $\alpha,\beta$ -ungesättigte  $\beta$ -Aryl-ketone und ein  $\alpha$ -Benzylidenlakton mit Mischungen aus Kupfer(I)-cyanid Butyllithium und Chlorsilanen**  
Angew. Chem. **100**, 1786 - 1787 (1988)  
Angew. Chem. Int. Ed. Engl. **27**, 1718 - 1719 (1988)
- 388 Michael A. Brook, R. Faggiani, C.J.L. Lock, Dieter Seebach  
***u,l-4a,5,6,7,8,8a-Hexahydro-4-phenyl-8a-(trimethylsiloxy)-4H-1,2--benzoxazine 2-Oxide***  
Acta Cryst. C **44**, 1981 - 1984 (1988)
- 389 René Imwinkelried, Dieter Seebach  
**3'-Nitro-1-phenylethanol by Addition of Methyltriisopropoxytitanium to m-Nitrobenzaldehyde**  
Organic Syntheses **67**, 180 - 185 (1989), Collective Volume **VIII**, 495 - 501
- 390 Martin Egli, Robin Polt, Dieter Seebach  
**Diastereoselective Cyclization of a Glycyl-alanine Azomethine to an Imidazolidinone: Determination of the Product Configuration by X-Ray Analysis**  
Chimia **43**, 4-5 (1989)

391 \* Claudia Betschart, Dieter Seebach

**Anwendungen niedervalenter Titan-Reagentien in der Organischen Synthese**

Chimia **43**, 39 - 49 (1989)

392 Robin Polt, Dieter Seebach

**Stereoselektive Alkylation of Glycine Units in Dipeptide Derivatives: "Chirality Transfer" via a Pivalaldehyde N,N-Acetal Center**

J. Am. Chem. Soc. **111**, 2622 - 2632 (1989)

393 Dieter Seebach, Roland Charczuk, Christian Gerber, Philippe Renaud, Heinz Berner, Helmut Schneider

**Elektrochemische Decarboxylierung von L-Threonin- und Oligopeptid-Derivaten unter Bildung von N-Acyl-N,O-acetalen: Herstellung von Oligopeptiden mit Carboxamid- oder Phosphonat-C-Terminus**

Helv. Chim. Acta **72**, 401 - 425 (1989)

394 Thomas Maetzke, Dieter Seebach

**Röntgenstrukturanalyse von 2,4,6-Tri(*tert*-butyl)phenyllithium · N,N,N',N'-Tetramethylpropan-1,2-diamin: eine monomere Organolithium-Verbindung**

Helv. Chim. Acta **72**, 624 - 630 (1989)

395 Dieter Seebach, Ulf Mißlitz, Peter Uhlmann

**Das Dienolat von (*R*)-2-*tert*-Butyl-6-methyl-1,3-dioxin-4(2*H*)-on -ein-chirales Acetessigester-*d*<sup>4</sup>-Reagens**

Angew. Chem. **101**, 484 - 485 (1989)

Angew. Chem. Int. Ed. Engl. **28**, 472 - 473 (1989)

396 Bernardo Herradon, Dieter Seebach

**Mono- and Dialkylation of Derivatives of (1*R*,2*S*)-2-Hydroxycyclopentanecarboxylic Acid and -cyclohexanecarboxylic Acid *via* Bicyclic Dioxanones: Selective Generation of Three Contiguous Stereogenic Centers on a Cyclohexane Ring**

Helv. Chim. Acta **72**, 690 - 714 (1989)

397 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)

- 398 Dieter Seebach, Adrian Thaler, Albert K. Beck  
**Solubilization of Peptides in Non-polar Organic Solvents by the Addition of Inorganic Salts: Facts and Implications**  
Helv. Chim. Acta **72**, 857 - 867 (1989)
- 399 Dieter Seebach, André Jeanguenat, Jürgen Schmidt, Thomas Maetzke  
**Chirale Synthesebausteine aus Aminosäuren: Dihydrothiazol-Derivate ( $\Delta^4$ -Thiazoline) aus Cystein**  
Chimia **43**, 314 - 317 (1989)
- 400 Dieter Seebach, Urs Brändli, Hans-Martin Müller, Max Dobler, Martin Egli, Michael Przybylski, Klaus Schneider  
**On the Macrolactonization of  $\beta$ -Hydroxy Acids. Crystal Structure of the Pentolide and the Hexolide from (*R*)-3-Hydroxybutanoic Acid. Molecular Modeling Studies of the Tetrolide**  
Helv. Chim. Acta **72**, 1704 - 1717 (1989)
- 401 Thierry Haag, Tuncer Arslan, Dieter Seebach  
**Preparative  $\beta$ -Ketoester Reductions and Ester Hydrolyses by Yeast, Using Free Cells in Organic Media**  
Chimia **43**, 351 - 353 (1989)
- 402 Gerhard Stucky, Dieter Seebach  
**Substitutionen und Additionen an (*R*)-2-*tert*-Butyl- $\Delta^4$ -1,3-oxazolin-3-carbonsäure-methylester**  
Chem. Ber. **122**, 2365 - 2375 (1989)
- 403 Dieter Seebach, Gerhard Stucky, Elmar Pfammatter  
**Cycloadditionen an die Doppelbindung von (*R*)-2-*tert*-Butyl- $\Delta^4$ -1,3-oxazolin-3-carbonsäure-methylestern**  
Chem. Ber. **122**, 2377 - 2389 (1989)
- 404 Dieter Seebach, Edward Dziadulewicz, Linda Behrendt, Sergio Cantoreggi, Robert Fitzi  
**Synthesis of Nonproteinogenic (*R*)- or (*S*)-Amino Acids. Analogues of Phenylalanine, Isotopically Labelled and Cyclic Amino Acids from**

***tert*-Butyl 2-(*tert*-Butyl)-3-methyl-4-oxo-1-imidazolidinecarboxylate (Boc-BMI)**

Liebigs Ann. Chem. **1989**, 1215 - 1232

- 405 Dieter Seebach, Geo Adam, Regina Zibuck, Wilhelm Simon, Marizel Rouilly, Walter L. Meyer, James F. Hinton, Thomas A. Privett, George E. Templeton, Dana K. Heiny, Ulrich Gisi, Heinz Binder  
**Gloeosporone - A Macrolide Fungal Germination Self-Inhibitor.**  
**Total Synthesis and Activity**  
Liebigs Ann. Chem. **1989**, 1233 - 1240
- 406 Thomas Vettiger, Dieter Seebach  
**Nucleophile Ringöffnung von 1-Nitro-1-cyclopropancarbonsäure-arylestern mit sterisch geschützter, aber elektronisch wirksamer Carbonyl- und Nitrogruppe. Ein neues Prinzip der Aminosäuresynthese**  
Liebigs Ann. Chem. **1990**, 195 - 201
- 407 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
- 408 Mária Acs, Christoph von dem Bussche, Dieter Seebach  
**An Efficient Method of Preparing (*R*)- and (*S*)-4,4,4-Trifluoro-3-hydroxybutanoic Acid: Resolution with (*R*)- or (*S*)-1-Phenylethylamine**  
Chimia **44**, 90 - 92 (1990)
- 409 Dieter Seebach, Albert K. Beck, Urs Brändli, Dieter Müller, Michael Przybylski, Klaus Schneider  
**Partial Depolymerization and Solubilization of Poly[*(R*)-3-hydroxy-butanoate] (PHB) and Its Copolymer with (*R*)-3-Hydroxyvalerate (BIOPOL<sup>®</sup>) by Treatment with Li-Amides/LiCl in Tetrahydrofuran at Low Temperature**  
Chimia **44**, 112 - 116 (1990)
- 410 Richard Breitschuh, Dieter Seebach  
**Herstellung von (*S*)-4-Methyloxetan-2-on ( $\beta$ -Butyrolacton) durch Lactonisierung von (*R*)-3-Hydroxybuttersäure mit Orthoessigsäuretriethylester**  
Chimia **44**, 216 - 218 (1990)

- 411 Horst Kessler, Matthias Gehrke, Jörg Lautz, Matthias Köck, Dieter Seebach, Adrian Thaler  
**Complexation and medium effects on the conformation of cyclosporin A studied by NMR spectroscopy and molecular dynamics calculations**  
Biochemical Pharmacology **40**, 169 - 173 (1990), erratum ibid. **40**, 2185-2186
- 412 Dieter Seebach, Thomas Vettiger, Hans-Martin Müller, Dietmar Plattner, Walter Petter  
**Stereoselective Hydroxy Alkylation of (S)-2-Azetidine Carboxylic Acid**  
Liebigs Ann. Chem. **1990**, 687 - 695
- 413 Albert K. Beck, Markus Gautschi, Dieter Seebach  
**Die Geschichte einer Acetalisierung und die überraschende Dimerisierung eines 1,3-Dioxan-4-ons zu einem Zwölfring [2-(*tert*-Butyl)-6-(trifluoromethyl)-1,3-dioxan-4-on und 2,8-D(*tert*-butyl)-6,12-bis(trifluoromethyl)-1,3,7,9-tetraoxacyclodecan-4,10-dion aus *rac*-, (*R*)- und (*S*)-4,4,4-Trifluoro-3-hydroxybutansäure und Pivalaldehyd]**  
Chimia **44**, 291 - 295 (1990)
- 414 Dieter Seebach  
**How I became a Peptide Chemist**  
On the occasion of the 10 year anniversary LONZA Japan on October 5, 1990, in Tokyo  
Nohrin Nenkin Kaikan, Pastorale  
Lonza Brochure, Lonza Ltd. Basle, 1990
- 415 Ekkehardt Hahn, Thomas Maetzke, Dietmar A. Plattner, Dieter Seebach  
**Röntgenstrukturanalyse des dimeren 2,2-Diphenylcyclopropanthiocarbonsäure-S-*tert*-butylester-Lithium-Enolat · TMEDA-Komplexes: ein "ganz normales" Ester-Enolat und ein "ganz normales" Methylencyclopropan-Derivat**  
Chem. Ber. **123**, 2059 - 2064 (1990)
- 416 Martin Eberle, Martin Missbach, Dieter Seebach  
**Enantioselective Saponification with Pig Liver Esterase (PLE): (1*S*,2*S*,3*R*)-3-Hydroxy-2-Nitrocyclohexyl Acetate (1,3-Cyclohexanediol, 2-nitro-, 1-acetate, [1*S*-(1*α*,2*β*,3*α*)])**  
Organic Syntheses **69**, 19 - 30 (1990), Collective Volume **VIII**, 332 - 338
- 417 Dieter Seebach, Martin Missbach, Giorgio Calderari, Martin Eberle  
**[3+3]-Carbocyclizations of Nitroallylic Esters and Enamines with Stereoselective**

**Formation of up to Six New Stereogenic Centers**

J. Am. Chem. Soc. **112**, 7625 - 7638 (1990)

- 418 Dieter Seebach, Geo Adam, Christoph von dem Bussche-Hünnefeld, Ulrich Gisi, Heinz Binder  
**EPC-Synthesis and Fungistatic Activity of a Gloeosporone Analog with an  $\omega$ -Hydroxybutyl instead of the Pentyl Side Chain on the Macroyclic Ring**  
Liebigs Ann. Chem. **1990**, 1007 - 1012
- 419 Thomas Maetzke, Clemens Pirmin Hidber, Dieter Seebach  
**X-ray Crystal Structure Analysis of (*N*-Isopropylbenzamide)lithium Tetrahydrofuran: An Aza Analogous Ketone Lithium Enolate**  
J. Am. Chem. Soc. **112**, 8248 - 8250 (1990)
- 420 Dieter Seebach  
**Ein Chemie-Nobelpreis für die Organische Synthese**  
Neue Zürcher Zeitung, 14. November **1990** (Nr. 265), S. 65
- 421 \* Dieter Seebach  
**Organische Synthese - wohin?**  
Angew. Chem. **102**, 1363 - 1409 (1990)  
Angew. Chem. Int. Ed. Engl. **29**, 1320 - 1367 (1990)
- 422 Thomas Maetzke, Dieter Seebach  
**X-ray Crystal Structure Analysis of an Octameric Lithium *N*-Isopropylbenzamide Aza Enolate Complex**  
Organometallics **9**, 3032 - 3037 (1990)
- 423 Wilhelm Amberg, Dieter Seebach  
**(*E,R,R*)-5-Alkyliden-2-*tert*-butyl-6-methyl-1,3-dioxan-4-one: Herstellung aus (*R*)-3-Hydroxybuttersäure, Cuprat-Additionen und Hydrolysen zu 3-Hydroxycarbonsäuren mit chiralen sekundären Alkylgruppen in 2-Stellung**  
Chem. Ber. **123**, 2413 - 2428 (1990)
- 424 Wilhelm Amberg, Dieter Seebach  
**(2*R*)-5-Alkyl-2-*tert*-butyl-6-methyl-4*H*-1,3-dioxin-4-one als Zwischenprodukte zur Herstellung von  $\alpha,\beta,\beta$ -trisubstituierten  $\beta$ -Hydroxycarbonsäuren unter**

**Selbstregeneration des stereogenen Zentrums von (*R*)-3-Hydroxybuttersäure**

Chem. Ber. **123**, 2429 - 2438 (1990)

425 Wilhelm Amberg, Dieter Seebach

**Direkte Michael-artige Addition von Si-Gruppen an  $\beta$ -Aryl- $\alpha,\beta$ -ungesättigte Carbonylverbindungen mit  $\text{R}_3\text{SiCl}/\text{Bu}_2\text{Cu}(\text{CN})\text{Li}_2$**

Chem. Ber. **123**, 2439 - 2444 (1990)

426 Dieter Seebach, Hans Bossler, Hansjörg Gründler, Shin-ichiro Shoda,

Roland Wenger

**C-Alkylation of Peptides through Polylithiated and LiCl-Solvated Derivatives Containing Sarcosine Li-Enolate Units**

Helv. Chim. Acta **74**, 197 - 224 (1991)

427 Beat Schmidt, Dieter Seebach

**Katalytische und stöchiometrische enantioselektive Additionen von Diethylzink an Aldehyde mit Hilfe eines neuartigen chiralen Spirotitanats**

Angew. Chem. **103**, 100 - 101 (1991)

Angew. Chem. Int. Ed. Engl. **30**, 99 - 101 (1991)

428 Dieter Seebach, Thomas Maetzke, Walter Petter, Bernhard Klötzer, Dietmar A. Plattner  
**Pyramidalization and Reactivity of Trigonal Centers.**

**X-ray Crystal Structure Analysis of Two Silyl Enol Ethers from 1-Benzoyl- and 1-(Methoxycarbonyl)-2-*tert*-butyl-3,5-dimethyl-4-imidazolidinone (Reagents for Amino Acid Synthesis)**

J. Am. Chem. Soc. **113**, 1781 - 1786 (1991)

429 Eusebio Juaristi, Delia Quintana, Bernd Lamatsch, Dieter Seebach

**Asymmetric Synthesis of  $\beta$ -Amino Acids. 1. Highly Diastereoselective Addition of a Racemic  $\beta$ -Alanine Enolate Derivative to Electrophiles**

J. Org. Chem. **56**, 2553 - 2557 (1991)

430 Dieter Seebach, Urs Gysel, Joachim N. Kinkel

**Hoch effiziente, präparative chromatographische Enantiomerentrennung von 2-Phenyl-1,3-dioxin-4-onen an Cellulose-triacetat und Cuprat-Additionen zu  $\beta$ -Hydroxycarbonsäure-Derivaten**

Chimia **45**, 114 - 117 (1991)

- 431 Adrian Thaler, Dieter Seebach, Francis Cardinaux  
**Lithium-Salt Effects in Peptide Synthesis. Part I: Conditions for the Use of Lithium-Salts in Coupling Reactions**  
Helv. Chim. Acta **74**, 617 - 627 (1991)
- 432 Adrian Thaler, Dieter Seebach, Francis Cardinaux  
**Lithium-Salt Effects in Peptide Synthesis. Part II: Improvement of Degree of Resin Swelling and of Efficiency of Coupling in Solid-Phase Synthesis**  
Helv. Chim. Acta **74**, 628 - 643 (1991)
- 433 Dieter Seebach  
**(R)-Polyhydroxybutyrate in the Hands of a Synthetic Organic Chemist**  
Thirty-Second National Organic Chemistry Symposium, The Division of Organic Chemistry of the American Chemical Society, June 16-20, 1991, Program and Abstracts, The University of Minnesota, Minneapolis, Minnesota, USA, 181 - 195 (1991)
- 434 Christof P. Schickli, Dieter Seebach  
**Herstellung chiraler elektrophiler Glycin- und (E)-2,3-Dehydroamino-säure-Derivate aus 2-t-Butyl-3-methyl-4-oxo-1-imidazolidincarbonsäure-t-butylester (Boc-BMI)**  
Liebigs Ann. Chem. **1991**, 655 - 668
- 435 Dieter Seebach, H. Michael Bürger, Christof P. Schickli  
**Stereoselektive Umsetzungen von *rac*-, (R)- oder (S)-5-Alkyliden-2-t-butyl-3-methyl-4-oxo-1-imidazolidincarbonsäure-t-butylestern (chirale 2,3-Dehydroaminoäure-Derivate) und Herstellung einiger nichtproteinogener Aminosäuren**  
Liebigs Ann. Chem. **1991**, 669 - 684
- 436 Dieter Seebach, Adrian Thaler, Denis Blaser, Soo Y. Ko  
**Transesterifications with 1,8-Diazabicyclo[5.4.0]undec-7-ene/Lithium Bromide (DBU/LiBr) - Also Applicable to Cleavage of Peptides from Resins in Merrifield Syntheses**  
Helv. Chim. Acta **74**, 1102 - 1118 (1991)
- 437 Dieter Seebach, Linda Behrendt, Dorothee Felix  
**Titanat-katalysierte enantioselektive Addition von *in situ* aus Grignard-Reagentien in Ether erzeugten Alkylzinkverbindungen an Aldehyde**

Angew. Chem. **103**, 991 - 992 (1991)  
Angew. Chem. Int. Ed. Engl. **30**, 1008 - 1009 (1991)

- 438 Thomas Pietzonka, Dieter Seebach  
**Alkylations of (*R,R*)-2-*t*-Butyl-6-methyl-1,3-dioxan-4-ones which are not Possible with Lithium Amides may be Achieved with a Schwesinger P 4 Base**  
Chem. Ber. **124**, 1837 - 1843 (1991)
- 439 Dieter Seebach, Ulf Mißlitz, Peter Uhlmann  
**Reaktionen von Dienolaten des (*R*)-2-*tert*-Butyl-6-methyl-4*H*-1,3-dioxin-4-ons mit Aldehyden und Ketonen - ein chirales Acetessigester-d<sup>4</sup>-Reagens**  
Chem. Ber. **124**, 1845 - 1853 (1991)
- 440 Albert K. Beck, Bahram Bastani, Dietmar A. Plattner, Walter Petter, Dieter Seebach, Hans Braunschweiger, Peter Gysi, Luigi La Vecchia  
**Grossansätze zur Herstellung von  $\alpha,\alpha,\alpha',\alpha'$ -Tetraaryl-1,3-dioxolan-4,5-dimethanolen (TADDOLe): Nützliche Hilfsstoffe für die EPC-Synthese und ihre Struktur im Festkörper**  
Chimia **45**, 238 - 244 (1991)
- 441 Denis Blaser, Soo Y. Ko, Dieter Seebach  
**A Stereoselective Synthesis of MeBmt Employing a New Chiral Glycine Enolate Derivative**  
J. Org. Chem. **56**, 6230 - 6233 (1991)
- 442 Denis Blaser, Dieter Seebach  
**Benzyl (*R*)- and (*S*)-2-*tert*-Butyl-5-oxo-oxazolidine-3-carboxylate for Convenient Preparation of D- and L-Threonine Analogs from Aldehydes**  
Liebigs Ann. Chem. **1991**, 1067 - 1078
- 443 André Jeanguenat, Dieter Seebach  
**Stereoselective Chain Elongation at C-3 of Cysteine through 2,3-Dihydrothiazoles, without Racemization. Preparation of 2-Amino-5-hydroxy-3-mercaptop-alkanoic Acid Derivatives**  
J. Chem. Soc. Perkin Trans. 1 **1991**, 2291 - 2298

- 444 Beat Schmidt, Dieter Seebach  
**2,2-Dimethyl- $\alpha,\alpha,\alpha',\alpha'$ -tetra(naphth-2-yl)-1,3-dioxolan-4,5-dimethanol (DINOL)  
für die Titanat-vermittelte, enantioselektive Addition von Diethylzink an Aldehyde**  
Angew. Chem. **103**, 1383 - 1385 (1991)  
Angew. Chem. Int. Ed. Engl. **30**, 1321 - 1323 (1991)
- 445 Christian Gerber, Dieter Seebach  
**Dipeptide Derivatives with a Phosphonate Instead of Carboxylate Terminus by C-Alkylation of Protected (Decarboxy-dipeptidyl)phosphonates**  
Helv. Chim. Acta **74**, 1373 - 1385 (1991)
- 446 Joachim N. Kinkel, Urs Gysel, Denis Blaser, Dieter Seebach  
**Preparative Resolution of Heterocyclic Acetals Derived from Glycine, Mercapto-acetic Acid,  $\beta$ -Alanine, and Formyl- or Acetylacetic Acid by Recycling Chromatography on *Chiraspher* and Temperature Dependence of Separation Factors**  
Helv. Chim. Acta **74**, 1622 - 1635 (1991)
- 447 Dieter Seebach, Soo Y. Ko, Horst Kessler, Matthias Köck, Michael Reggelin, Peter Schmieder, Malcolm D. Walkinshaw, J. Jakob Bölslerli, Dorian Bevec  
**Thiocyclosporins: Preparation, Solution and Crystal Structure, and Immunosuppressive Activity**  
Helv. Chim. Acta **74**, 1953 - 1990 (1991)
- 448 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)
- 449 Hans-Martin Müller, Max Dobler, Peter Zbinden, Dieter Seebach  
**Bildung 12- bis 40-gliedriger Oligolide aus enantiomerenreinen 3-Hydroxybuttersäure-Derivaten - Bausteine für eine 2<sub>1</sub>- und eine 3<sub>1</sub>-Helix**  
Chimia **45**, 376 - 378 (1991)
- 450 Albert K. Beck, Andreas Brunner, Vittorio Montanari, Dieter Seebach  
**6-Chloromethylierte 2-(*tert*-Butyl)-1,3-dioxan- und -1,3-dioxin-4-one**

**aus (R)- oder (S)-4,4,4-Trichloro-3-hydroxybuttersäure**

Chimia **45**, 379 - 382 (1991)

- 451 Albert K. Beck, Dieter Seebach  
**Aldol- und Michael-Additionen fluorierter Nitroalkane an Aldehyde, Ketone und  $\alpha,\beta$ -ungesättigte Carbonylverbindungen**  
Chem. Ber. **124**, 2897 - 2911 (1991)
- 452 Elmar Pfammatter, Dieter Seebach  
**Preparation of (R)- and (S)-2-Alkyl-2-amino-3-(methylamino)propanoic and Other 2,3-Diaminoalkanoic Acid Derivatives from a Chiral Imidazoline**  
Liebigs Ann. Chem. **1991**, 1323 - 1336
- 453 Keisuke Suzuki, Dieter Seebach  
**threo-3-Alkyl- and -Arylglutamic Acid Derivatives by Michael Additions of Boc-BMI Li-Enolates to 2,6-Di-*t*-butyl-4-methoxyphenyl Alkenoates. On the Diastereoselectivity of the Coupling of Trigonal Centers Involving Heterocyclic Li-Enolates**  
Liebigs Ann. Chem. **1992**, 51 - 61
- 454 Beat Weber, Dieter Seebach  
**Enantiomerenreine tertiäre Alkohole durch TADDOL-vermittelte Additionen an Ketone - oder wie man ein Grignard-Reagens enantioselektiv macht**  
Angew. Chem. **104**, 96 - 97 (1992)  
Angew. Chem. Int. Ed. Engl. **31**, 84 - 86 (1992)
- 455 Dieter Seebach, Urs Gysel, Kurt Job, Albert K. Beck  
**Modified Preparation of (2*R*)-2-*tert*-Butyl-6-methyl-4*H*-1,3-dioxin-4-one; a Chiral Acetylacetic Acid Derivative for the Synthesis of Enantiopure Compounds**  
Synthesis **1992**, 39 - 40
- 456 Richard Breitschuh, Dieter Seebach  
**Herstellung von stereoisomeren 3-Sulfinylbuttersäuren aus (R)- und (S)-4-Methyl-2-oxetanon**  
Synthesis **1992**, 83 - 89
- 457 Christoph von dem Bussche-Hünnefeld, Albert K. Beck, Urs Lengweiler, Dieter Seebach  
 **$\alpha,\alpha,\alpha',\alpha'$ -Tetraaryl-1,3-dioxolane-4,5-dimethanols (TADDOLs) for Resolution of**

**Alcohols and as Chiral Solvating Agents in NMR Spectroscopy**

Helv. Chim. Acta **75**, 438 - 441 (1992)

- 458 Matthias Köck, Horst Kessler, Dieter Seebach, Adrian Thaler  
**Novel Backbone Conformation of Cyclosporin A: The Complex with Lithium Chloride**  
J. Am. Chem. Soc. **114**, 2676 - 2686 (1992)
- 459 Dieter Seebach, Hans-Martin Müller, H. Michael Bürger, Dietmar A. Plattner  
**Das Triolid von (*R*)-3-Hydroxybuttersäure - direkte Herstellung aus Polyhydroxybutyrat und Bildung eines Kronen-Estercarbonyl-Komplexes mit Na-Ionen**  
Angew. Chem. **104**, 443 - 444 (1992)  
Angew. Chem. Int. Ed. Engl. **31**, 434 - 435 (1992)
- 460 Werner Müller, David A. Lowe, Hans Neijt, Stephan Urwyler, Paul L. Herrling, Denis Blaser, Dieter Seebach  
**Synthesis and *N*-Methyl-D-aspartate (NMDA) Antagonist Properties of the Enantiomers of  $\alpha$ -Amino-5-(phosphonomethyl)[1,1'-biphenyl]-3-propanoic Acid. Use of a New Chiral Glycine Derivative**  
Helv. Chim. Acta **75**, 855 - 864 (1992)
- 461 Dieter Seebach, Bernd Lamatsch, René Amstutz, Albert K. Beck, Max Dobler, Martin Egli, Robert Fitzi, Markus Gautschi, Bernardo Herradon, Pirmin C. Hidber, John J. Irwin, Rita Locher, Miguel Maestro, Thomas Maetzke, Antonio Mourino, Elmar Pfammatter, Dietmar A. Plattner, Christof Schickli, W. Bernd Schweizer, Paul Seiler, Gerhard Stucky, Walter Petter, Jaime Escalante, Eusebio Juaristi, Delia Quintana, Carlos Miravitles, Elies Molins  
**Structure and Reactivity of Five- and Six-Ring N,N-, N,O-, and O,O-Acetals: A Lesson in Allylic 1,3-Strain (A<sup>1,3</sup> Strain)**  
Helv. Chim. Acta **75**, 913 - 934 (1992)
- 462 Christoph von dem Bussche-Hünnefeld, Dieter Seebach  
**Herstellung und Umsetzungen von (*R,R*)- und (*S,S*)-3-Trifluormethyloxiran-2-carbonsäure-ethylester, einem vielseitigen, leicht zugänglichen CF<sub>3</sub>-haltigen Synthesebaustein**  
Chem. Ber. **125**, 1273 - 1281 (1992)

- 463 Eusebio Juaristi, Jaime Escalante, Bernd Lamatsch, Dieter Seebach  
**Enantioselective Synthesis of  $\beta$ -Amino Acids. 2. Preparation of the like Stereoisomers of 2-Methyl- and 2-Benzyl-3-aminobutanoic Acid**  
J. Org. Chem. **57**, 2396 - 2398 (1992)
- 464 Bernd Lamatsch, Dieter Seebach, Tae-Kyu Ha  
**ab initio-Studien an N-Acyliminium-Ionen**  
Helv. Chim. Acta **75**, 1095 - 1110 (1992)
- 465 Joanna Linda von dem Bussche-Hünnefeld, Dieter Seebach  
**Enantioselective Preparation of sec. Alcohols from Aldehydes and Dialkyl Zinc Compounds, Generated *in situ* from Grignard Reagents, Using Substoichiometric Amounts of TADDOL-Titanates**  
Tetrahedron **48**, 5719 - 5730 (1992) [Tetrahedron Symposia-in-Print No. **47** on "Organotitanium Reagents in Organic Chemistry" ]
- 466 Markus Gautschi, Dieter Seebach  
**Herstellung von (R)- und (S)-2-*tert*-Butyl-6-trifluormethyl-1,3-dioxin-4-on, Umsetzungen zu 3-Hydroxy-3-trifluormethylalkanoaten und überraschende Reaktivitätsunterschiede zwischen CH<sub>3</sub>- und CF<sub>3</sub>-substituierten Verbindungen**  
Angew. Chem. **104**, 1061 - 1062 (1992)  
Angew. Chem. Int. Ed. Engl. **31**, 1083 - 1085 (1992)
- 467 Dieter Seebach, Dietmar A. Plattner, Albert K. Beck, Yan Ming Wang, Daniel Hunziker, Walter Petter  
**On the Mechanisms of Enantioselective Reactions Using  $\alpha,\alpha,\alpha',\alpha'$ -Tetraaryl-1,3-dioxolane-4,5-dimethanol(TADDOL)-Derived Titanates: Differences between C<sub>2</sub>- and C<sub>1</sub>-Symmetrical TADDOLs - Facts, Implications and Generalizations**  
Helv. Chim. Acta **75**, 2171 - 2209 (1992)
- 468 Richard Breitschuh, Dieter Seebach  
**Herstellung enantiomerenreiner Sulfoxide aus Milchsäure und 3-Hydroxybuttersäure: Isopropenyl-tolyl-sulfoxid und 2-(Phenylsulfinyl)acrylester**  
Synthesis **1992**, 1170 - 1178
- 469 Thomas Pietzonka, Dieter Seebach  
**N-Perbenzylierung von Oligopeptiden mit der P4-Phosphazenvbase; eine neue Schutzgruppentechnik zur Modifikation und Solubilisierung von Peptiden in unpolaren organischen Lösungsmitteln**

Angew. Chem. **104**, 1543 - 1545 (1992)  
Angew. Chem. Int. Ed. Engl. **31**, 1481- 1482 (1992)

- 470 Dieter Seebach, Elmar Pfammatter, Volker Gramlich, Tobias Bremi, Florian Kühnle, Stefan Portmann, Ilario Tironi  
**Diastereoselective Michael Additions of Chiral Imidazolidines to Trityl Enones**  
Liebigs Ann. Chem. **1992**, 1145 - 1151
- 471 Dieter Seebach, Albert K. Beck, Richard Breitschuh, Kurt Job  
**Direct Degradation of the Biopolymer Poly[(R)-3-Hydroxybutyric Acid] to (R)-3-Hydroxybutanoic Acid and its Methyl Ester (Butanoic acid, 3-hydroxy-, (R)-, homopolymer to Butanoic acid, 3-hydroxy-, (R)- and Butanoic acid, 3-hydroxy-, methyl ester, (R)-)**  
Organic Syntheses **71**, 39 - 47 (1992), Collective Volume **IX**, 483 - 487 (1998)
- 472 \* Dieter Seebach  
**How We Stumbled Into Peptide Chemistry**  
Aldrichimica Acta **25**, No. 3, 59 - 66 (1992)
- 473 Dieter Seebach, Harald Schäfer, Beat Schmidt, Martin Schreiber  
**C,C-Kupplung am vinylischen Kohlenstoffatom unter NO<sub>2</sub>-Alkylsubstitution bei der Umsetzung von 2-Aryl-1-nitro-1-alkenen mit Dialkylzinkverbindungen - Eine neue Reaktion**  
Angew. Chem. **104**, 1680 - 1681 (1992)  
Angew. Chem. Int. Ed. Engl. **31**, 1587 - 1588 (1992)
- 474 Christoph von dem Bussche-Hünnefeld, Claudio Cescato, Dieter Seebach  
**Ergiebige Herstellung von (R)- und (S)-3,3,3-Trifluormilchsäure und von (R)- und (S)-(Trifluormethyl)oxiran**  
Chem. Ber. **125**, 2795 - 2802 (1992)
- 475 Dieter Seebach  
**Poly-β-hydroxybutyrate in the hands of a synthetic chemist**  
FEMS Microbiology Reviews **103**, 215 (1992)
- 476 Dieter Seebach, Jean-Marc Lapierre, Wilfried Jaworek, Paul Seiler  
**A Simple Procedure for the Preparation of Chiral 'Tris(hydroxymethyl)methane'**

## **Derivatives**

Helv. Chim. Acta **76**, 459 - 475 (1993)

- 477 Scott A. Miller, Sian L. Griffiths, Dieter Seebach  
**C-Alkylation of Sarcosine Residues in Cyclic Tetrapeptides via Lithium Enolates**  
Helv. Chim. Acta **76**, 563 - 595 (1993)
- 478 Dieter Seebach, Michiya Hayakawa, Jun-ichi Sakaki, W. Bernd Schweizer  
**Derivatives of  $\alpha,\alpha,\alpha',\alpha'$ -Tetraaryl-2,2-dimethyl-1,3-dioxolan-4,5-dimethanol (TADDOL) Containing Nitrogen, Sulfur, and Phosphorus Atoms. New Ligands and Auxiliaries for Enantioselective Reactions**  
Tetrahedron **49**, 1711 - 1724 (1993) [Tetrahedron Symposia-in-Print No. **49** on "Synthesis of Optically Active Compounds - Prospects for the 21st Century"]
- 479 Frank G. Riddell, Dieter Seebach, Hans-Martin Müller  
**Solid-State CP/MAS  $^{13}\text{C}$ -NMR Spectra of Oligolides Derived from 3-Hydroxybutanoic Acid**  
Helv. Chim. Acta **76**, 915 - 923 (1993)
- 480 \* Hans-Martin Müller, Dieter Seebach  
**Poly(hydroxyfettsäureester), eine fünfte Klasse von physiologisch bedeutsamen organischen Biopolymeren?**  
Angew. Chem. **105**, 483 - 509 (1993)  
Angew. Chem. Int. Ed. Engl. **32**, 477 - 502 (1993)
- 481 Dieter Seebach  
**Poly[(*R*)-3-hydroxyalkanoates] - The Fourth Family of Biopolymers: Contributions of an Organic Chemist**  
International Bioorganic Symposium, Interlaken, April 14-16, 1993, Abstracts 38-39 and Chimia **47**, 102 - 103 (1993)
- 482 Thomas Pietzonka, Dieter Seebach  
**Die P4-Phosphazenebase als Teil eines metallfreien Initiatorsystems für die anionische Polymerisation von Methacrylsäuremethylester**  
Angew. Chem. **105**, 741 - 742 (1993)  
Angew. Chem. Int. Ed. Engl. **32**, 716-717 (1993)

- 483 Dieter Seebach, Albert K. Beck, Hans G. Bossler, Christian Gerber, Soo Y. Ko, C. William Murtiashaw, Reto Naef, Shin-ichiro Shoda, Adrian Thaler, Manfred Krieger, Roland Wenger  
**Modification of Cyclosporin A (CS): Generation of an Enolate at the Sarcosine Residue and Reactions with Electrophiles**  
Helv. Chim. Acta **76**, 1564 - 1590 (1993)
- 484 Thimo Sommerfeld, Dieter Seebach  
**Dehydroalanine-Containing Peptides by AcOH-Elimination from O-Acetylserine Residues with DBU/LiClO<sub>4</sub> in Tetrahydrofuran**  
Helv. Chim. Acta **76**, 1702 - 1714 (1993)
- 485 Dieter Seebach, Thomas Gees, Franz Schuler  
**Herstellung von  $\alpha$ -verzweigten Phenylalaninen und von 1,1-disubstituierten Ethylen diaminen über chirale Imidazolidinone und Oxazolidinone aus Glycin - präparative und mechanistische Aspekte**  
Liebigs Ann. Chem. **1993**, 785 - 799; Erratum: ibid **1994**, 529
- 486 Dietmar A. Plattner, Andreas Brunner, Max Dobler, Hans-Martin Müller, Walter Petter, Peter Zbinden, Dieter Seebach  
**Cyclische Oligomere von (R)-3-Hydroxybuttersäure: Herstellung und strukturelle Aspekte**  
Helv. Chim. Acta **76**, 2004 - 2033 (1993)
- 487 Stefan Blank, Dieter Seebach  
**Herstellung von (R,R)- oder (S,S)-2-Amino-3-hydroxycarbonsäuren (*allo*-Threonin-Analoge) durch Acylierung/Reduktion von 2-t-Butyl-3-methyl-4-oxoimidazolidin-1-carbonsäure-t-butylester (Boc-BMI)**  
Liebigs Ann. Chem. **1993**, 889 - 896
- 488 H. Michael Bürger, Hans-Martin Müller, Dieter Seebach, K. Olaf Börnsen, Martin Schär, H. Michael Widmer  
**Matrix-Assisted Laser Desorption and Ionization as a Mass Spectrometric Tool for the Analysis of Poly[(R)-3-hydroxybutanoates]. Comparison with Gel Permeation Chromatography**  
Macromolecules **26**, 4783 - 4790 (1993)

- 489 Jean-Marc Lapierre, Konstantinos Skobridis, Dieter Seebach  
**Preparation of Chiral Building Blocks for Starburst Dendrimer Synthesis**  
Helv. Chim. Acta **76**, 2419 - 2432 (1993)
- 490 H. Michael Bürger, Dieter Seebach  
**Cation Transport across Bulk Liquid Organic Membranes with Oligomers of (*R*)-3-Hydroxybutanoic Acid**  
Helv. Chim. Acta **76**, 2570 - 2580 (1993)
- 491 Dieter Seebach, H. Michael Bürger, Dietmar A. Plattner, Reinhard Nesper, Thomas Fässler  
**Complexes of the Triolide from (*R*)-3-Hydroxybutanoic Acid with Sodium, Potassium, and Barium Salts: Crystal Structures, Ester Chelates and Ester Crowns, Crystal Packing, Bonding, and Electron-Localization Functions**  
Helv. Chim. Acta **76**, 2581 - 2601 (1993)
- 492 Thomas Gees, W. Bernd Schweizer, Dieter Seebach  
**An Unusual Rearrangement of a Lithiated *N*-Acyl-tetrahydroisoquinoline to an Amino-indan Skeleton and Structural Comparison of 3-Amino-2-methylindan- and -tetrahydronaphthalene-2-carboxylic Acids as Possible Building Blocks for Peptide-Turn Mimics**  
Helv. Chim. Acta **76**, 2640 - 2653 (1993)
- 493 Jun-ichi Sakaki, W. Bernd Schweizer, Dieter Seebach  
**Catalytic Enantioselective Hydrosilylation of Aromatic Ketones Using Rhodium Complexes of TADDOL-Derived Cyclic Phosphonites and Phosphites**  
Helv. Chim. Acta **76**, 2654 - 2665 (1993)
- 494 Jean-Marc Lapierre, Markus Gautschi, Guy Greiveldinger, Dieter Seebach  
**Reaction of 6-(CF<sub>3</sub>)- and 6-(CH<sub>3</sub>)-2-(*tert*-Butyl)-1,3-dioxan-4-one Li Enolate with Two Equivalents of an Aldehyde - Unusual Reorganizations of Aldolates**  
Chem. Ber. **126**, 2739 - 2746 (1993)
- 495 Eusebio Juaristi, Peter Murer, Dieter Seebach  
**Use of *N,N'*-Dimethylpropyleneurea (DMPU) as Solvent in the Efficient Preparation of Enantiomerically Pure Secondary Amines**  
Synthesis **1993**, 1243 - 1246

- 496 \* Eusebio Juaristi, Albert K. Beck, Jesper Hansen, Thomas Matt, Triptikumar Mukhopadhyay, Małgorzata Simson, Dieter Seebach  
**Enantioselective Aldol and Michael Additions of Achiral Enolates in the Presence of Chiral Lithium Amides and Amines**  
Synthesis **1993**, 1271 - 1290
- 497 Stefan Blank, Dieter Seebach  
**(R)- und (S)-4-Alkoxy-2-*tert*-butyl-2,5-dihydroimidazol-1-carbonsäureester - neue chirale Glycinderivate für die Aminosäuresynthese**  
Angew. Chem. **105**, 1780 - 1781 (1993)  
Angew. Chem. Int. Ed. Engl. **32**, 1765 - 1766 (1993)
- 498 Dieter Seebach, Hans G. Bossler, Robert Flowers, Edward M. Arnett  
**Calorimetric Measurements of the Complexation of Cyclosporin A, Ascomycin, Fujimycin, and Rapamycin with Lithium Chloride and with an Immunophilin**  
Helv. Chim. Acta **77**, 291 - 305 (1994)
- 499 Hans G. Bossler, Pius Waldmeier, Dieter Seebach  
**Herstellung und C-Alkylierungen von Peptiden mit Aminomalonsäure-Bausteinen**  
Angew. Chem. **106**, 455 - 456 (1994)  
Angew. Chem. Int. Ed. Engl. **33**, 439 - 440 (1994)
- 500 Dieter Seebach, Jean-Marc Lapierre, Konstantinos Skobridis, Guy Greiveldinger  
**Chirale Tris(hydroxymethyl)methan-Derivate als Synthesebausteine für chirale Dendrimere**  
Angew. Chem. **106**, 457 - 458 (1994)  
Angew. Chem. Int. Ed. Engl. **33**, 440 - 442 (1994)
- 501 H. Michael Bürger, Dieter Seebach  
**Cyclosporin - ein Li- und Ca-spezifischer Ionophor!**  
Angew. Chem. **106**, 459 - 460 (1994)  
Angew. Chem. Int. Ed. Engl. **33**, 442 - 444 (1994)
- 502 Markus Gautschi, W. Bernd Schweizer, Dieter Seebach  
**In 2- und 3-Stellung verzweigte, enantiomerenreine 4,4,4-Trifluor-3-hydroxybuttersäure-Derivate aus 6-Trifluormethyl-1,3-dioxan- und -dioxin-4-onen**  
Chem. Ber. **127**, 565 - 579 (1994)

- 503 Dieter Seebach, Albert K. Beck, Beat Schmidt, Yan Ming Wang  
**Enantio- and Diastereoselective Titanium-TADDOLate Catalyzed Addition of Diethyl and bis(3-Buten-1-yl) Zinc to Aldehydes. A Full Account with Preparative Details**  
Tetrahedron **50**, 4363 - 4384 (1994) [Tetrahedron Symposia-in-Print No. **54** on "Catalytic Asymmetric Addition Reactions"].
- 504 Beat Weber, Dieter Seebach  
**Highly Enantioselective Addition of Primary Alkyl Grignard Reagents to Carbocyclic and Heterocyclic Arylketones in the Presence of Magnesium TADDOLate. Preparative and Mechanistic Aspects**  
Tetrahedron **50**, 6117 - 6128 (1994) [Tetrahedron Symposia-in-Print No. **55** on "Mechanistic Aspects of Polar Organometallic Chemistry"]
- 505 Dietmar A. Plattner, Walter Petter, Dieter Seebach  
**Kristallstrukturanalyse von lösungsmittelfreiem Lithium-benzoat. Relevanz für die Materialeigenschaften von Lithiumcarboxylaten?**  
Chimia **48**, 138 - 141 (1994)
- 506 Beat Weber, Dieter Seebach  
**Ti-TADDOLate-Catalyzed, Highly Enantioselective Addition of Alkyl- and Aryl-Titanium Derivatives to Aldehydes**  
Tetrahedron **50**, 7473 - 7484 (1994)
- 507 Dieter Seebach, H. Michael Bürger, Hans-Martin Müller, Urs D. Lengweiler, Albert K. Beck, Kathy E. Sykes, Phil A. Barker, Peter J. Barham  
**Synthesis of Linear Oligomers of (*R*)-3-Hydroxybutyrate and Solid-State Structural Investigations by Electron Microscopy and X-Ray Scattering**  
Helv. Chim. Acta **77**, 1099 - 1123 (1994)
- 508 Hans G. Bossler, Dieter Seebach  
**Peptide Enolates. C-Alkylation of Glycine Residues in Linear Tri-, Tetra-, and Pentapeptides via Dilithium Azadienediolates**  
Helv. Chim. Acta **77**, 1124 - 1165 (1994)
- 509 Dieter Seebach, Miguel A. Maestro, Michael Sefkow, Geo Adam, Samuel Hintermann, Axel Neidlein  
**Total Synthesis of Myxovirescins, 1**

**Strategy and Construction of the "Southeastern" Part [O(1)-C(14)]**

Liebigs Ann. Chem. **1994**, 701 - 717

- 510 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

- 511 Miguel A. Maestro, Michael Sefkow, Dieter Seebach

**Total Synthesis of Myxovirescins, 3**

**Coupling of the Two Key Fragments and Last Steps to Myxovirescins A<sub>1</sub> and M<sub>2</sub>**

Liebigs Ann. Chem. **1994**, 731 - 738

- 512 Dieter Seebach, Thimo L. Sommerfeld, Qiongzhong Jiang, Luigi M. Venanzi

**Preparation of Oxazolidine-Containing Peptides: Unusual Effects in Rh<sup>III</sup>-**

**Catalyzed Acetalizations of Aldehydes with Urethane-Protected Serine and**

**Threonine Esters and with Dipeptides Containing Serine or Threonine Residues at**

**the N-Terminus**

Helv. Chim. Acta **77**, 1313 - 1330 (1994)

- 513 Dieter Seebach, Andreas Brunner, H. Michael Bürger, Jakob Schneider, Rosetta N. Reusch

**Isolation and <sup>1</sup>H-NMR spectroscopic identification of poly(3-hydroxybutanoate) from prokaryotic and eukaryotic organisms.**

**Determination of the absolute configuration (*R*) of the monomeric unit**

**3-hydroxybutanoic acid from *Escherichia coli* and spinach**

Eur. J. Biochem. **224**, 317 - 328 (1994)

- 514 Dieter Seebach, Jean-Marc Lapierre, Guy Greiveldinger, Konstantinos Skobridis

**Synthesis of Chiral Starburst Dendrimers from PHB-Derived Triols as Central**

**Cores**

Helv. Chim. Acta **77**, 1673 - 1688 (1994)

- 515 Dieter Seebach, Torsten Hoffmann, Florian N. M. Kühnle, Urs. D. Lengweiler

**Preparation and Structure of Oligolides from (*R*)-3-Hydroxypentanoic Acid and Comparison with the Hydroxybutanoic-Acid Derivatives: A Small Change with**

## **Large Consequences**

Helv. Chim. Acta **77**, 2007 - 2034 (1994)

- 516 Dieter Seebach, Armido Studer, Elmar Pfammatter, Hans Widmer  
**Synthesis of Tri-, Penta-, and Heptapeptides Containing an (*R*)-2-Alkyl-2-amino-3-(methylamino)-propionic Acid Residue in the Central Position**  
Helv. Chim. Acta **77**, 2035 - 2050 (1994)
- 517 Dieter Seebach, P. Beat Rheiner, Albert K. Beck, Florian N. M. Kühnle, Bernhard Jaun  
**Preparation and Cationic Rearrangements of *ortho*- and *para*-Methoxy-TADDOLs**  
Polish J. Chem. **68**, 2397 - 2413 (1994)
- 518 Yoshio N. Ito, Xavier Ariza, Albert K. Beck, Andrej Boháć, Camille Ganter, Robert E. Gawley, Florian N. M. Kühnle, Juraj Tuleja, Yan Ming Wang, Dieter Seebach  
**Preparation and Structural Analysis of Several New  $\alpha,\alpha,\alpha',\alpha'$ -Tetraaryl-1,3-dioxolane-4,5-dimethanols (TADDOLs) and TADDOL Analogs, Their Evaluation as Titanium Ligands in the Enantioselective Addition of Methyltitanium and Diethylzinc Reagents to Benzaldehyde, and Refinement of the Mechanistic Hypothesis**  
Helv. Chim. Acta **77**, 2071 - 2110 (1994)
- 519 Peter Murer, Beat Rheiner, Eusebio Juaristi, Dieter Seebach  
**Enantioselective Synthesis of  $\beta$ -Amino Acids. 5. Stereoselective Reaction of Chiral Pyrimidinone Enolates with Aldehydes**  
Heterocycles **39**, 319 - 344 (1994)
- 520 Albert K. Beck, Stefan Blank, Kurt Job, Dieter Seebach, Thimo Sommerfeld  
**Synthesis of (*S*)-2-Methylproline: A General Method for the Preparation of  $\alpha$ -Branched Amino Acids (*L*-Proline, 2-methyl)**  
Organic Syntheses **72**, 62 - 73 (1995), Collective Volume **IX**, 626 - 632 (1998)
- 521 Armido Studer, Dieter Seebach  
**Enantioselective Synthesis of  $\alpha$ -Branched  $\alpha$ -Amino Acids with Bulky Substituents**  
Liebigs Ann. Chem. **1995**, 217 - 222
- 522 Armido Studer, Dieter Seebach  
**Preparation of Either Enantiomer of 1,2-Diaminoalkane-2-Phosphonic Acid**

## **Derivatives**

Heterocycles **40**, 357 - 378 (1995)

- 523 Harald Schäfer, Dieter Seebach  
**Enantioselective Conjugate Addition of Primary Dialkylzinc Reagents to 2-Aryl- and 2-Heteroaryl-nitroolefins Mediated by Titanium-TADDOLates. Preparation of Enantioenriched 2-Aryl-alkylamines**  
Tetrahedron **51**, 2305 - 2324 (1995)
- 524 Joachim Podlech, Dieter Seebach  
**Die Arndt-Eistert-Reaktion in der Peptidchemie: ein einfacher Zugang zu Homopeptiden**  
Angew. Chem. **107**, 507 - 509 (1995)  
Angew. Chem. Int. Ed. Engl. **34**, 471 - 472 (1995)
- 525 Thimo L. Sommerfeld, Dieter Seebach  
**Herstellung von  $\Psi[\text{SCH}_2]$ -,  $\Psi[\text{SOCH}_2]$ - und  $\Psi[\text{SO}_2\text{CH}_2]$ -Peptid-Isosteren**  
Angew. Chem. **107**, 622 - 623 (1995)  
Angew. Chem. Int. Ed. Engl. **34**, 553 - 554 (1995)
- 526 Kathy E. Sykes, Terence J. McMaster, Mervyn J. Miles, Phil A. Barker, Peter J. Barham, Dieter Seebach, Hans-Martin Müller, Urs D. Lengweiler  
**Direct imaging of the surfaces of poly( $\beta$ )hydroxybutyrate and hydroxybutyrate oligomers by atomic force microscopy**  
J. Mater. Sci. **30**, 623 - 627 (1995)
- 527 Dieter Seebach, Robert Dahinden, Roger E. Marti, Albert K. Beck, Dietmar A. Plattner, Florian N. M. Kühnle  
**On the Ti-TADDOLate-Catalyzed Diels-Alder Addition of 3-Butenoyl-1,3-oxazolidin-2-one to Cyclopentadiene. General Features of Ti-BINOLate- and Ti-TADDOLate-Mediated Reactions**  
J. Org. Chem. **60**, 1788 - 1799 (1995)  
Correction: J. Org. Chem. **60**, 5364 (1995)
- 528 \* Dieter Seebach, Albert K. Beck, Armido Studer  
**Some Effects of Lithium Salts, of Strong Bases, and of the Cosolvent DMPU in Peptide Chemistry, and Elsewhere**

Modern Synthetic Methods 1995, Vol. 7, Eds. B. Ernst, C. Leumann, VHCA Verlag  
Helvetica Chimica Acta, Basel/VCH Weinheim, 1995, 1 - 178

- 529 Roger E. Marti, Josef Heinzer, Dieter Seebach  
**Preparation and Reactions of Silyl Nitronates Derived from 2,2,2-Tri-fluoronoitroethane. Diastereoselective Synthesis of Trifluoromethyl-Substituted Aminoethanols and -propanols**  
Liebigs Ann. **1995**, 1193 - 1215
- 530 Joachim Podlech, Dieter Seebach  
**On the Preparation of  $\beta$ -Amino Acids from  $\alpha$ -Amino Acids Using the Arndt-Eistert Reaction: Scope, Limitations and Stereoselectivity. Application to Carbohydrate Peptidation. Stereoselective  $\alpha$ -Alkylations of Some  $\beta$ -Amino Acids**  
Liebigs Ann. **1995**, 1217 - 1228
- 531 Helmut Brandl, Brigitte Aeberli, Reinhard Bachofen, Ingrid Schwegler, Hans-Martin Müller, Michael H. Bürger, Torsten Hoffmann, Urs D. Lengweiler, Dieter Seebach  
**Biodegradation of cyclic and substituted linear oligomers of poly(3-hydroxybutyrate)**  
Can. J. Microbiol. **41** (Suppl. 1): 180 - 186 (1995)
- 532 Armido Studer, Tobias Hintermann, Dieter Seebach  
**Synthesis and First Applications of a New Chiral Auxiliary (*tert*-Butyl-2-(*tert*-Butyl)-5,5-dimethyl-4-oxoimidazolidine-1-carboxylate)**  
Helv. Chim. Acta **78**, 1185 - 1206 (1995)
- 533 Joachim Podlech, Dieter Seebach  
**Azetidin-3-ones from (S)- $\alpha$ -Amino Acids and Their Reactions with Nucleophiles: Preparation of Some Azetidine-Containing Amino-Alcohol and Amino-Acid Derivatives**  
Helv. Chim. Acta **78**, 1238 - 1246 (1995)
- 534 Dieter Seebach  
**Foreword**  
in K. Drauz, H. Waldmann: "Enzyme Catalysis in Organic Synthesis", Vol. **1**, VCH, Weinheim, 1995

- 535 Dieter Seebach, Torsten Hoffmann, Florian N. M. Kühnle, Joachim N. Kinkel,  
Michael Schulte  
**Preparation, Structure, and Properties of All Possible Cyclic Dimers (Diolides) of 3-Hydroxybutanoic Acid**  
Helv. Chim. Acta **78**, 1525 - 1540 (1995)
- 536 Thomas Stamm, Herman W. Kouvenhoven, Dieter Seebach, Roel Prins  
**Zeolite-Catalyzed Isomerization of Aromatic Amines to Methyl-Aza-Aromatics**  
J. Catal. **155**, 268 - 282 (1995)
- 537 \* Armido Studer, Dieter Seebach  
**1-Benzoyl-2-t-butyl-3,5-dimethyl-4-imidazolidinone**  
Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **1**,  
J. Wiley & Sons, Chichester, 1995, 306 - 308
- 538 \* Andrea R. Sting, Dieter Seebach  
**(2S,4S)-3-Benzoyl-2-t-butyl-4-methyl-1,3-oxazolidin-5-one**  
Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **1**,  
J. Wiley & Sons, Chichester, 1995, 308 - 309
- 539 \* Armido Studer, Dieter Seebach  
**t-Butyl 2-t-Butyl-3-methyl-4-oxo-1-imidazolidinecarboxylate**  
Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **2**,  
J. Wiley & Sons, Chichester, 1995, 852 - 854
- 540 \* Albert K. Beck, Dieter Seebach  
**(R)-2-t-Butyl-6-methyl-4H-1,3-dioxin-4-one**  
Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **2**,  
J. Wiley & Sons, Chichester, 1995, 929 - 931
- 541 \* Andrea Rolf Sting, Dieter Seebach  
**(R,R)-2-t-Butyl-5-methyl-1,3-dioxolan-4-one**  
Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **2**,  
J. Wiley & Sons, Chichester, 1995, 931 - 933
- 542 \* Roger E. Marti, Dieter Seebach  
**O,O-Dilithio-1-nitropropene**

Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **3**,  
J. Wiley & Sons, Chichester, 1995, 1946 - 1948

543 \* Albert K. Beck, Dieter Seebach

***N,N'*-Dimethylpropyleneurea**

Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **3**,  
J. Wiley & Sons, Chichester, 1995, 2123 - 2127

544 \* Robert Dahinden, Albert K. Beck, Dieter Seebach

**2,2-Dimethyl- $\alpha,\alpha,\alpha',\alpha'$ -tetraphenyl-1,3-dioxolane-4,5-dimethanolatotitanium  
Diisopropoxide**

Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **3**,  
J. Wiley & Sons, Chichester, 1995, 2167 - 2170

545 \* Roger E. Marti, Dieter Seebach

**Lithium- $\alpha$ -Lithiomethanenitronate**

Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **5**,  
J. Wiley & Sons, Chichester, 1995, 3138 - 3140

546 \* Albert K. Beck, Robert Dahinden, Dieter Seebach

**Mesityllithium**

Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **5**,  
J. Wiley & Sons, Chichester, 1995, 3275 - 3276

547 \* Joachim Podlech, Dieter Seebach

**(R)-Methyl 2-*t*-Butyl-3(2*H*)-oxazolecarboxylate**

Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **5**,  
J. Wiley & Sons, Chichester, 1995, 3452 - 3453

548 \* Albert K. Beck, Robert Dahinden, Dieter Seebach

**Methyl 4-Nitrobutanoate**

Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **5**,  
J. Wiley & Sons, Chichester, 1995, 3549 - 3550

549 \* Albert K. Beck, Roger E. Marti, Dieter Seebach

**Methyl 3-Nitropropanoate**

Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. **5**,  
J. Wiley & Sons, Chichester, 1995, 3551 - 3552

- 550 \* Albert K. Beck, Dieter Seebach  
**Trimethylsilyl Methanenitronate**  
Encyclopedia of Reagents for Organic Synthesis, L. Paquette (Ed.-in-Chief), Vol. 7,  
J. Wiley & Sons, Chichester, 1995, 5270 - 5273
- 551 Peter Murer, Dieter Seebach  
**Synthese und Eigenschaften von Dendrimeren erster bis dritter Generation mit zwei- und dreifach verzweigenden chiralen Bausteinen**  
Angew. Chem. **107**, 2297 - 2300 (1995)  
Angew. Chem. Int. Ed. Engl. **34**, 2116 - 2119 (1995)
- 552 Eusebio Juaristi, José Luis Anzorena, Alois Boog, Domingo Madrigal, Dieter Seebach, Efrén V. García-Barradas, Oscar García-Barradas, Bárbara Gordillo, A. Kramer, I. Steiner, S. Zürcher  
**Highly Diastereoselective Alkylation of 1-Benzoyl-2-alkyl-3-(1'-methylbenzyl)imidazolidin-4-ones**  
J. Org. Chem. **60**, 6408 - 6415 (1995)
- 553 Dieter Seebach, Edmée Devaquet, Alexander Ernst, Michiya Hayakawa, Florian N.M. Kühnle, W. Bernd Schweizer, Beat Weber  
**Preparation of the PdCl<sub>2</sub> Complex of TADDOP, the Bis(diphenylphosphinite) of TADDOL: Use in Enantioselective 1,3-Diphenylallylations of Nucleophiles and Discussion of the Mechanism**  
Helv. Chim. Acta **78**, 1636 - 1650 (1995)
- 554 Dieter Seebach, Georg Jaeschke, Yan Ming Wang  
**Hoch enantioselektive Oeffnung cyclischer meso-Anhydride zu Isopropylhalbestern mit Diisopropoxytitan-TADDOLaten**  
Angew. Chem. **107**, 2605 - 2606 (1995)  
Angew. Chem. Int. Ed. Engl. **34**, 2395 - 2396 (1995)
- 555 Gert Lubec, Olga Labudova, Dieter Seebach, Albert Beck, Harald Hoeger, Michael Hermon, Manfred Weninger  
**Alpha-Methyl-Proline Restores Normal Levels of Bone Collagen Type I Synthesis in Ovariectomized Rats**  
Life Sciences **57**, 2245 - 2252 (1995)

556 \* Dieter Seebach, Andreas Brunner, Beat M. Bachmann, Torsten Hoffmann, Florian N.M. Kühnle, Urs D. Lengweiler

**Biopolymers and -oligomers of (*R*)-3-Hydroxyalkanoic Acids - Contributions of Synthetic Organic Chemists**

Ernst Schering Research Foundation, Lecture No. **28**, 7 - 98 (1995)

557 Andrea R. Sting, Dieter Seebach

**Synthesis of (*2R*),*3S*)- or (*2S*,*3R*)-2-Amino-3-trifluoromethyl-3-hydroxyalkanoic Acid Derivatives (Threonine and *allo*-Threonine Analogs) from Enantiopure 4,4,4-Trifluoro-3-hydroxybutanoic Acid**

Tetrahedron **52**, 279 - 290 (1996) [Tetrahedron Symposia-in-Print No. **58** on "Fluoroorganic Chemistry: Synthetic Challenges and Biomedicinal Rewards"]

558 Stephan P. Götzö, Dieter Seebach

**Preparation of (*R*)- and (*S*)-3-Hydroxy-2-(trifluoromethyl)propionic Acid by Resolution with (*R*,*R*)- and (*S*,*S*)-2-Amino-1-phenylpropane-1,3-diol**

Chimia **50**, 20 - 23 (1996)

559 Beat Schmidt, Dieter Seebach

**Coupling of an Aromatic Iminium Salt by a Low-Valent Titanium Reagent**

Synthetic Methods of Organometallic and Inorganic Chemistry (Herrmann/Brauer), Vol. **1**, W.A. Herrmann, A. Salzer (Eds.): Literature, Laboratory Techniques and Common Starting Materials, G. Thieme Verlag Stuttgart, 1996, 99 - 100

560 Thimo Sommerfeld, Dieter Seebach

**Selective Transesterification of a Carboxylate in the presence of a Phosphonate<sup>1,2</sup>**

Synthetic Methods of Organometallic and Inorganic Chemistry (Herrmann/Brauer), Vol. **1**, W.A. Herrmann, A. Salzer (Eds.): Literature, Laboratory Techniques and Common Starting Materials, G. Thieme Verlag Stuttgart, 1996, 100 - 101

561 Yan Ming Wang, Dieter Seebach

**Diastereoselective Synthesis of *u*-3-Methyl-2-(2-naphthyl)-4-penten-2-ol**

Synthetic Methods of Organometallic and Inorganic Chemistry (Herrmann/Brauer), Vol. **1**, W.A. Herrmann, A. Salzer (Eds.): Literature, Laboratory Techniques and Common Starting Materials, G. Thieme Verlag Stuttgart, 1996, 101 - 103

562 Linda Behrendt, Dieter Seebach

**Enantioselective Alkylation of Aldehydes by Titanate-Catalyzed Addition of**

**Dialkylzinc Reagents: Preparation of (*S*)-4-Methyl-1-phenylpentanol**

Synthetic Methods of Organometallic and Inorganic Chemistry (Herrmann/Brauer), Vol. 1, W.A. Herrmann, A. Salzer (Eds.): Literature, Laboratory Techniques and Common Starting Materials, G. Thieme Verlag Stuttgart, 1996, 103 – 104

- 563 Andreas Brunner, Florian N.M. Kühnle, Dieter Seebach  
**Preparation, Structure, and Reactivity of Thioxo and Imino Derivatives of the Triolide (and Pentolide) from (*R*)-3-Hydroxybutanoic Acid**  
Helv. Chim. Acta **79**, 319 - 345 (1996)
- 564 Dieter Seebach, Andreas Brunner, H. Michael Bürger, Rosetta N. Reusch, Linda L. Bramble  
**Channel-Forming Activity of 3-Hydroxybutanoic-Acid Oligomers in Planar Lipid Bilayers**  
Helv. Chim. Acta **79**, 507 - 517 (1996)
- 565 Dieter Seebach, Olivier Bezençon, Bernhard Jaun, Thomas Pietzonka, Jennifer L. Matthews, Florian N. M. Kühnle, W. Bernd Schweizer  
**Further C-Alkylations of Cyclotetrapeptides via Lithium and Phosphazenum (P4) Enolates: Discovery of a New Conformation**  
Helv. Chim. Acta **79**, 588 - 608 (1996)
- 566 Urs D. Lengweiler, Monica G. Fritz, Dieter Seebach  
**Synthese monodisperser linearer und cyclischer Oligomere der (*R*)-3-Hydroxybuttersäure mit bis zu 128 Einheiten**  
Helv. Chim. Acta **79**, 670 - 701 (1996)
- 567 Diego J. Ramón, Gabriela Guillena, Dieter Seebach  
**Nonreductive Enantioselective Ring Opening of *N*-(Methylsulfonyl)dicarboximides with Diisopropoxytitanium  $\alpha,\alpha,\alpha',\alpha'$ -Tetraaryl-1,3-dioxolane-4,5-dimethanolate**  
Helv. Chim. Acta **79**, 875 - 894 (1996)
- 568 Dieter Seebach, Mark Overhand, Florian N. M. Kühnle, Bruno Martinoni, Lukas Oberer, Ulrich Hommel, Hans Widmer  
 **$\beta$ -Peptides: Synthesis by Arndt-Eistert Homologation with Concomitant Peptide Coupling.**  
**Structure Determination by NMR and CD Spectroscopy and by X-Ray Crystallography.**

**Helical Secondary Structure of a  $\beta$ -Hexapeptide in Solution and its Stability towards Pepsin**

Helv. Chim. Acta **79**, 913 - 941 (1996)

- 569 Christel Guibourdenche, Joachim Podlech, Dieter Seebach  
**Selective Acylations of Multifunctional Nucleophiles, Including Carbohydrates and Nucleosides, with Intermediates Generated by Wolff Rearrangement of Amino Acid Derived Diazo Ketones: Preparation of  $\beta$ -Amino Acid Derivatives**  
Liebigs Ann. **1996**, 1121 - 1129
- 570 Dieter Seebach, Albert K. Beck, Robert Dahinden, Matthias Hoffmann, Florian N.M. Kühnle  
**Reduction of Ketones with LiAlH<sub>4</sub> Complexes of  $\alpha,\alpha,\alpha',\alpha'$ -Tetraaryl-1,3-dioxolane-4,5-dimethanols (TADDOLs)**  
**A combination of Enantioselective Reduction and Clathrate Formation with a Discussion of LAH Reagents Bearing C<sub>2</sub>-Symmetrical Ligands**  
Croatica Chem. Acta **69**, 459 - 484 (1996)
- 571 Olivier Bezençon, Dieter Seebach  
**Alkylations of Chiral Imidazolidinones Derived from Di- and Triglycine and Attempts at Cyclisations to Give Cycloisodityrosines**  
Liebigs Ann. **1996**, 1259 - 1276
- 572 Torsten Hoffmann, Dieter Seebach  
**Preparation of 12- and 16-Membered Macrolactones (Oligolides) from (S)-Malic Acid – Low Molecular-Mass Analogs of the Biopolymer Poly[(S)-Malic Acid] (PMA)**  
Liebigs Ann. **1996**, 1277 - 1282
- 573 Dieter Seebach, Roger E. Marti, Tobias Hintermann  
**Polymer- and Dendrimer-Bound Ti-TADDOLates in Catalytic (and Stoichiometric) Enantioselective Reactions: Are Pentacoordinate Cationic Ti Complexes the Catalytically Active Species?**  
Helv. Chim. Acta **79**, 1710 - 1740 (1996)
- 574 Karsten Krohn, Birgit Knauer, Jochen Küpke, Dieter Seebach, Albert K. Beck, Michiyay Hayakawa

**Zirconium Alkoxide Catalyzed Oppenauer Oxidation Using Chloral as the Hydride Acceptor**

Synthesis **1996**, 1341 - 1344

- 575 Dieter Seebach, Paola E. Ciceri, Mark Overhand, Bernhard Jaun, Dario Rigo, Lukas Oberer, Ulrich Hommel, René Amstutz, Hans Widmer  
**Probing the Helical Secondary Structure of Short-Chain  $\beta$ -Peptides**  
Helv. Chim. Acta **79**, 2043 - 2066 (1996)
- 576 \* Dieter Seebach, Andrea R. Sting, Matthias Hoffmann  
**Die Selbstregeneration von Stereozentren (SRS) - Anwendungen, Grenzen und Preisgabe eines Syntheseprinzips**  
Angew. Chem. **108**, 2880 - 2921 (1996)  
Angew. Chem. Int. Ed. Engl. **35**, 2708 - 2748 (1996)
- 577 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)
- 578 Dieter Seebach  
**Foreword**  
in R.E. Gawley, J. Aubé: "Principles of Asymmetric Synthesis", Tetrahedron Organic Chemistry Series Volume **14**, Pergamon, Elsevier Science Ltd., Oxford, 1996
- 579 Christel Guibourdenche, Dieter Seebach, François Natt  
**Use of the Wolff Rearrangement of Diazo Ketones from Amino Acids as a Synthetic Method for the Formation of Oligonucleo-peptides: A Novel Approach to Chimeric Biomolecules**  
Helv. Chim. Acta **80**, 1 - 13 (1997)
- 580 Dieter Seebach, Jennifer L. Matthews, Anton Meden, Thomas Wessels, Christian Baerlocher, Lynne B. McCusker  
**Cyclo- $\beta$ -peptides: Structure and Tubular Stacking of Cyclic Tetramers of 3-Aminobutanoic Acid as Determined from Powder Diffraction Data**  
Helv. Chim. Acta **80**, 173 - 182 (1997)

- 581 Jennifer Louise Matthews, Christine Braun, Christel Guibourdenche, Mark Overhand, Dieter Seebach  
**Preparation of Enantiopure  $\beta$ -Amino Acids from  $\alpha$ -Amino Acids Using the Arndt-Eistert Homologation**  
in 'Enantioselective Synthesis of  $\beta$ -Amino Acids', Chapter 5, Ed. E. Juaristi, Wiley-VCH, New York, 1997, 105 - 126
- 582 Eusebio Juaristi, Dieter Seebach  
**Enantioselective Synthesis of  $\alpha$ -Substituted and  $\alpha,\beta$ -Disubstituted  $\beta$ -Amino Acids via Chiral Derivatives of 3-Aminopropionic Acid**  
in 'Enantioselective Synthesis of  $\beta$ -Amino Acids', Chapter 13, Ed. E. Juaristi, Wiley-VCH, New York, 1997, 261 - 277
- 583 Matthias Hoffmann, Dieter Seebach  
**Synthesis of Non-proteinogenic Amino-Acid Methyl Esters with Acid-Sensitive Side Chains from a Chiral Glycine Derivative**  
Chimia **51**, 90 - 92 (1997)
- 584 Tobias Hintermann, Dieter Seebach  
**The Biological Stability of  $\beta$ -Peptides: No Interactions between  $\alpha$ - and  $\beta$ -Peptidic Structures?**  
Chimia **51**, 244 - 247 (1997)
- 585 Tobias Hintermann, Dieter Seebach  
**Synthesis of a  $\beta$ -Hexapeptide from (*R*)-2-Aminomethyl-alkanoic Acids and Structural Investigations**  
Synlett **1997**, 437 - 438
- 586 Dieter Seebach, Georg Jaeschke, Konstanze Gottwald, Keiji Matsuda, Roberto Formisano, David A. Chaplin, Matthias Breuning, Gerhard Bringmann  
**Resolution of Racemic Carboxylic Acid Derivatives by Ti-TADDOLate Mediated Esterification Reactions - A General Method for the Preparation of Enantiopure Compounds**  
Tetrahedron **53**, 7539 - 7556 (1997)
- 587 \* Dieter Seebach, Albert K. Beck  
**Catalytic Enantioselective Reactions from Research to Application.**

## **Diarylmethanol-Containing Auxiliaries as a Study Case**

Spring Meeting of the New Swiss Chemical Society on the Occasion of '100 Years of Progress with *Lonza*', April 10 and 11, 1997, Visp, Switzerland  
Organized by: NSCS-Section Industrial Chemistry  
*Chimia* **51**, 293 - 297 (1997)

- 588 Gilles Guichard, Dieter Seebach  
**Solid-Phase Synthesis of  $\beta$ -Oligopeptides**  
*Chimia* **51**, 315 - 318 (1997)
- 589 Dieter Seebach, Guido F. Herrmann, Urs D. Lengweiler, Walter Amrein  
**Synthesis of Monodisperse Macromolecular Bicyclic and Dendritic Compounds from (*R*)-3-Hydroxybutanoic Acid and Benzene-1,3,5-tricarboxylic Acid and Analysis by Fragmenting MALDI-TOF Mass Spectroscopy**  
*Helv. Chim. Acta* **80**, 989 - 1026 (1997)
- 590 Dieter Seebach, Albert K. Beck, Michiya Hayakawa, Georg Jaeschke, Florian N.M. Kühnle, Ivo Nägeli, Anthony B. Pinkerton, Beat P. Rheiner, Rudolf O. Duthaler, Petra M. Rothe, Wolfgang Weigand, Ralf Wünsch, Stefan Dick, Reinhard Nesper, Michael Wörle, Volker Gramlich  
**TADDOLs on their way to late transition metal complexes - synthesis and crystal structure of N- and S-containing TADDOL-derived compounds**  
*Bull. Soc. Chim. Fr.* **134**, 315 - 331 (1997)
- 591 Jennifer L. Matthews, Mark Overhand, Florian N.M. Kühnle, Paola E. Ciceri, Dieter Seebach  
 **$\beta$ -Peptides: Oligo- $\beta$ -homoalanines – The Amide Analogues of Poly(3-hydroxybutanoate)**  
*Liebigs Ann./Recueil* **1997**, 1371 - 1379
- 592 Bernhard Jaun, Masakazu Tanaka, Paul Seiler, Florian N.M. Kühnle, Christine Braun, Dieter Seebach  
**Studies on the Conformation of Boc-Protected (*S*)-(+) Isovaline Homopeptide Methyl Esters in the Solid State and in Solution**  
*Liebigs Ann./Recueil* **1997**, 1697 - 1710
- 593 Peter K. Murer, Jean-Marc Lapierre, Guy Greiveldinger, Dieter Seebach  
**Synthesis and Properties of First and Second Generation Chiral Dendrimers with**

**Triply Branched Units: A Spectacular Case of Diastereoselectivity**

Helv. Chim. Acta **80**, 1648 - 1681 (1997)

- 594 Xavier Daura, Wilfred F. van Gunsteren, Dario Rigo, Bernhard Jaun, Dieter Seebach  
**Studying the Stability of a Helical  $\beta$ -Heptapeptide by Molecular Dynamics Simulations**  
Chem. Eur. J. **3**, 1410 - 1417 (1997)
- 595 Sudipto Das, Urs D. Lengweiler, Dieter Seebach, Rosetta N. Reusch  
**Proof for a nonproteinaceous calcium-selective channel in *Escherichia coli* by total synthesis from (*R*)-3-hydroxybutanoic acid and inorganic polyphosphate**  
Proc. Natl. Acad. Sci. USA **94**, 9075 - 9079 (August 1997)
- 596 \* Dieter Seebach, Jennifer L. Matthews  
 **$\beta$ -Peptides: a surprise at every turn**  
Chem. Commun., **1997**, 2015 - 2022
- 597 P. Beat Rheiner, Holger Sellner, Dieter Seebach  
**Dendritic Styryl TADDOLs as Novel Polymer Cross-Linkers: First Application in an Enantioselective Et<sub>2</sub>Zn Addition Mediated by a Polymer-Incorporated Titanate**  
Helv. Chim. Acta **80**, 2027 - 2032 (1997)
- 598 Dieter Seebach, Karl Gademann, Jürg V. Schreiber, Jennifer L. Matthews, Tobias Hintermann, Bernhard Jaun, Lukas Oberer, Ulrich Hommel, Hans Widmer  
**'Mixed'  $\beta$ -Peptides: A Unique Helical Secondary Structure in Solution**  
Helv. Chim. Acta **80**, 2033 - 2038 (1997)
- 599 Hans-Georg Kuball, Bernhard Weiß, Albert K. Beck, Dieter Seebach  
**TADDOLs with Unprecedented Helical Twisting Power in Liquid Crystals**  
Helv. Chim. Acta **80**, 2507 - 2514 (1997)
- 600 Dieter Seebach, Georg Jaeschke, Arkadius Pichota, Laurent Audergon  
**Enantioselective 1,4-Addition of Aliphatic Grignard Reagents to Enones Catalyzed by Readily Available Copper(I) Thiolates Derived from TADDOL**  
Helv. Chim. Acta **80**, 2515 - 2519 (1997)

- 601 P. Beat Rheiner, Dieter Seebach  
**High-Molecular-Weight and Polymer-Bound Dendritic TADDOLs for Membrane Reactors and Heterogeneous Enantioselective Lewis Acid Catalysis**  
Polym. Mater. Sci. Eng. **77**, 130 - 131 (1997)
- 602 Thomas Butz, Peter Murer, Dieter Seebach  
**Chiral Dendritically Expanded Diamines as Catalysts in Enantioselective Protonation Reactions**  
Polym. Mater. Sci. Eng. **77**, 132 - 133 (1997)
- 603 Guy Greiveldinger, Dieter Seebach  
**Fluorine Containing Chiral Dendrimers: Synthesis and  $^{19}\text{F}$  NMR Spectroscopic Investigations**  
Polym. Mater. Sci. Eng. **77**, 134 - 135 (1997)
- 604 Paul J. Comina, Albert K. Beck, Dieter Seebach  
**A Simple Batch Reactor for the Efficient Multiple Use of Polymer-Bound  $\alpha,\alpha,\alpha',\alpha'$ -Tetraaryl-1,3-dioxolane-4,5-dimethanol Titanates in the Nucleophilic Addition of Dialkylzinc Reagents to Aldehydes**  
Org. Process Res. Dev. **2**, 18 - 26 (1998)
- 605 Gilles Guichard, Stefan Abele, Dieter Seebach  
**Preparation of *N*-Fmoc-Protected  $\beta^2$ - and  $\beta^3$ -Amino Acids and Their Use as Building Blocks for the Solid-Phase Synthesis of  $\beta$ -Peptides**  
Helv. Chim. Acta **81**, 187 - 206 (1998)
- 606 Matthias Hoffmann, Stefan Blank, Dieter Seebach, Ernst Küsters, Emil Schmid  
**Separation of (*R*)-and (*S*)-*tert*-Butyl 2-*tert*-Butyl-4-Methoxy-2,5-Dihydro-1,3-Imidazole-1-Carboxylate (Building Block for Amino Acid Synthesis) by Preparative High Performance Liquid Chromatography on a Polysaccharide Stationary Phase**  
Chirality **10**, 217 - 222 (1998)
- 607 Georg Jaeschke, Dieter Seebach  
**Highly Enantioselective Ring Opening of Cyclic *Meso*-Anhydrides to Isopropyl Hemiesters with Ti-TADDOLates: An Alternative to Hydrolytic Enzymes?**  
J. Org. Chem. **63**, 1190 - 1197 (1998)

- 608 Dieter Seebach, Matthias Hoffmann, Andrea Rolf Sting, Joachim Nikolaus Kinkel, Michael Schulte, Ernst Küsters  
**Chromatographic resolution of synthetically useful chiral glycine derivatives by high-performance liquid chromatography**  
J. Chromatogr. A **796**, 299 - 307 (1998)
- 609 Dieter Seebach, Konstanze Gottwald, Georg Jaeschke, Laurent Audergon, Arkadius Pichota  
**Ti-TADDOLates and Related Complexes in Asymmetric Synthesis: Ring-Opening and Cu-Catalyzed Conjugate Additions of Grignard Reagents**  
in "Selective Reactions of Metal-Activated Molecules", Proceedings of the Third Symposium held in Würzburg, September 17-19, 1997, Eds. H. Werner und P. Schreier, Vieweg & Sohn Verlagsgesellschaft, Braunschweig/Wiesbaden, 1998, 61 - 64
- 610 Gerhard Bringmann, Matthias Breuning, Stefan Busemann, Jürgen Hinrichs, Thomas Pabst, Ralf Stowasser, Stefan Tasler, Andreas Wuzik, Wolfdieter A. Schenk, Jörg Kümmel, Dieter Seebach, Georg Jaeschke  
**Metal-Assisted Synthesis and Application of Axially Chiral Biaryl Systems**  
in "Selective Reactions of Metal-Activated Molecules", Proceedings of the Third Symposium held in Würzburg, September 17-19, 1997, Eds. H. Werner und P. Schreier, Vieweg & Sohn Verlagsgesellschaft, Braunschweig/Wiesbaden, 1998, 141 - 145
- 611 Peter Murer, Dieter Seebach  
**Synthesis and Properties of Monodisperse Chiral Dendrimers (up to Fourth Generation) with Doubly Branched Building Blocks): An Intriguing Solvent Effect**  
Helv. Chim. Acta **81**, 603 - 631 (1998)
- 612 Dieter Seebach, Stefan Abele, Karl Gademann, Gilles Guichard, Tobias Hintermann, Bernhard Jaun, Jennifer L. Matthews, Jürg V. Schreiber, Lukas Oberer, Ulrich Hommel, Hans Widmer  
 **$\beta^2$ - and  $\beta^3$ -Peptides with Proteinaceous Side Chains: Synthesis and Solution Structures of Constitutional Isomers, a Novel Helical Secondary Structure and the Influence of Solvation and Hydrophobic Interactions on Folding**  
Helv. Chim. Acta **81**, 932 - 982 (1998)
- 613 Tobias Hintermann, Karl Gademann, Bernhard Jaun, Dieter Seebach  
 **$\gamma$ -Peptides Forming More Stable Secondary Structures than  $\alpha$ -Peptides: Synthesis**

**and Helical NMR-Solution Structure of the  $\gamma$ -Hexapeptide Analog of H-(Val-Ala-Leu)<sub>2</sub>-OH**

Helv. Chim. Acta **81**, 983 - 1002 (1998)

614 Guy Greiveldinger, Dieter Seebach

**Second-Generation Trifluoromethyl-Substituted Chiral Dendrimers Containing Triply Branched Building Blocks: CF<sub>3</sub> as Sensitive NMR Probe for 'Remote' Diastereotopicity**

Helv. Chim. Acta **81**, 1003 - 1022 (1998)

615 Dieter Seebach, Matthias Hoffmann

**Preparation and Use in Amino Acid Synthesis of a New Chiral Glycine Derivative – (R)- and (S)-*tert*-Butyl 2-*tert*-Butyl-4-methoxy-2,5-dihydroimidazole-1-carboxylate (BDI)**

Eur. J. Org. Chem. **1998**, 1337 - 1351

616 Dieter Seebach, Sorana Poenaru, Gerd Folkers, Didier Rognan

**Synthesis of Oligo(3-hydroxybutanoate)(OHB)-Containing Peptides with High Binding Affinity to a Class-I-MHC Protein**

Helv. Chim. Acta **81**, 1181 - 1200 (1998)

617 \* Dieter Seebach, P. Beat Rheiner, Guy Greiveldinger, Thomas Butz, Holger Sellner  
**Chiral Dendrimers**

Topics in Current Chemistry: Dendrimers, Vol. 197, F. Vögtle (Volume-Ed.), Springer Verlag Berlin Heidelberg 1998, 125 - 164

618 Stefan Krebs, José R. Lamas, Sorana Poenaru, Gerd Folkers, José A. López de Castro, Dieter Seebach, Didier Rognan

**Substituting Nonpeptidic Spacers for the T Cell Receptor-binding Part of Class I Major Histocompatibility Complex-binding Peptides**

J. Biol. Chem. **273**, 19072 - 19079 (1998)

619 Xavier Daura, Bernhard Jaun, Dieter Seebach, Wilfred F. van Gunsteren, Alan E. Mark  
**Reversible Peptide Folding in Solution by Molecular Dynamics Simulation**

J. Mol. Biol. **280**, 925 - 932 (1998)

620 Thomas Matt, Dieter Seebach

**C-Alkylation of Peptides Containing Aminomalonate and (Amino)(cyano)acetate**

## Residues

Helv. Chim. Acta **81**, 1845 - 1895 (1998)

- 621 Jennifer L. Matthews, Karl Gademann, Bernhard Jaun, Dieter Seebach  
**Linear and cyclic  $\beta^3$ -oligopeptides with functionalised side-chains (-CH<sub>2</sub>OBn, -CO<sub>2</sub>Bn, -CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>Bn) derived from serine and from aspartic and glutamic acid**  
J. Chem. Soc., Perkin Trans. 1 **1998**, 3331 - 3340
- 622 Tobias Hintermann, Christian Mathes, Dieter Seebach  
**Polylithiated  $\beta$ -Peptides: *l*-Selectivity C-Terminal Alkylation of Boc- $\beta$ -HVal- $\beta$ -HAla- $\beta$ -HLeu-OMe**  
Eur. J. Org. Chem. **1998**, 2379 - 2387
- 623 Tobias Hintermann, Dieter Seebach  
**A Useful Modification of the Evans Auxiliary: 4-Isopropyl-5,5-diphenyloxazolidin-2-one**  
Helv. Chim. Acta **81**, 2093 - 2126 (1998)
- 624 Dieter Seebach, Stefan Abele, Jürg V. Schreiber, Bruno Martinoni, Alexander K. Nussbaum, Hansjörg Schild, Henk Schulz, Hauke Hennecke, Ralph Woessner, Francis Bitsch  
**Biological and Pharmacokinetic Studies with  $\beta$ -Peptides**  
Chimia **52**, 734 – 739 (1998)
- 625 Stefan Abele, Gilles Guichard, Dieter Seebach  
**(S)- $\beta^3$ -Homolysine- and (S)- $\beta^3$ -Homoserine-Containing  $\beta$ -Peptides: CD Spectra in Aqueous Solution**  
Helv. Chim. Acta **81**, 2141 – 2156 (1998)
- 626 Dieter Seebach, Stefan Abele, Thierry Sifferlen, Martin Hänggi, Sibylle Gruner, Paul Seiler  
**Preparation and Structure of  $\beta$ -Peptides Consisting of Geminally Disubstituted  $\beta^{22}$ - and  $\beta^{33}$ -Amino Acids: A Turn Motif for  $\beta$ -Peptides**  
Helv. Chim. Acta **81**, 2218 – 2243 (1998)
- 627 Monica G. Fritz, Dieter Seebach  
**Synthesis of Amino-Acid-, Carbohydrate-, Coumarin-, and Biotin-Labelled Oligo**

**[(R)-3-Hydroxybutanoic Acids] (OHB)**

Helv. Chim. Acta **81**, 2414 – 2429 (1998)

- 628 Beat M. Bachmann, Dieter Seebach  
**Synthesis and Structure of Linear and Cyclic Oligomers of 3-Hydroxybutanoic Acid with Specific Sequences of (R)- and (S)-Configurations**  
Helv. Chim. Acta **81**, 2430 – 2461 (1998)
- 629 Konstanze Gottwald, Dieter Seebach  
**Ring Opening with Kinetic Resolution of Azlactones by Ti-TADDOLates**  
Tetrahedron **55**, 723 – 738 (1999)
- 630 Dieter Seebach, Alois Boog, W. Bernd Schweizer  
**EPC-Synthesis of  $\beta$ -Amino Acid Derivatives through Lithiated Hydropyrimidines**  
Eur. J. Org. Chem. **1999**, 335 - 360
- 631 Xavier Daura, Karl Gademann, Bernhard Jaun, Dieter Seebach, Wilfred F. van Gunsteren, Alan E. Mark  
**Peptidfaltung: Wenn die Simulation das Experiment erreicht**  
Angew. Chem. **111**, 249 - 253 (1999)  
Angew. Chem. Int. Ed. **38**, 236 - 240 (1999)
- 632 Karl Gademann, Bernhard Jaun, Dieter Seebach, Remo Perozzo, Leonardo Scapozza, Gerd Folkers  
**Temperature-Dependent NMR and CD Spectra of  $\beta$ -Peptides: On the Thermal Stability of  $\beta$ -Peptide Helices - Is the Folding Process of  $\beta$ -Peptides Non-cooperative?**  
Helv. Chim. Acta **82**, 1 - 11 (1999)
- 633 Monica G. Fritz, Peter Walde, Dieter Seebach  
**Oligoesters of (R)-3-Hydroxybutanoic Acid: Transmembrane Transport of Ca<sup>2+</sup> across Vesicle Bilayers**  
Macromolecules **32**, 574 - 580 (1999)
- 634 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* T<sub>1</sub>**

Macromolecules **32**, 1777 - 1784 (1999)

- 635 Karl Gademann, Martin Ernst, Daniel Hoyer, Dieter Seebach  
**Synthese und biologische Evaluation eines Cyclo- $\beta$ -tetrapeptids als Somatostatin-Analogon**  
Angew. Chem. **111**, 1302 - 1304 (1999)  
Angew. Chem. Int. Ed. **38**, 1223 - 1226 (1999)
- 636 Dieter Seebach, Stefan Abele, Karl Gademann, Bernhard Jaun  
**Faltblätter und Schleifen von  $\beta$ -Peptiden mit proteinogenen Seitenketten**  
Angew. Chem. **111**, 1700 - 1703 (1999)  
Angew. Chem. Int. Ed. **38**, 1595 - 1597 (1999)
- 637 Karl Gademann, Dieter Seebach  
**Preparation and NMR Structure of the Cyclo- $\beta$ -tripeptide [ $\beta$ -HGl<sub>u</sub>]<sub>3</sub> in Aqueous Solution: A New Class of Enterobactin-Type C<sub>3</sub>-Symmetrical Ligands?**  
Helv. Chim. Acta **82**, 957 - 962 (1999)
- 638 Dieter Seebach, Arkadius Pichota, Albert K. Beck, Anthony B. Pinkerton, Thomas Litz, Jaana Karjalainen, Volker Gramlich  
**Preparation of TADDOL Derivatives for New Applications**  
Org. Lett. **1**, 55 - 58 (1999)
- 639 Albert K. Beck, Peter Gysi, Luigi La Vecchia, Dieter Seebach  
**(4R,5R)-2,2-Dimethyl- $\alpha,\alpha,\alpha',\alpha'$ -Tetra(naphth-2-yl)-1,3-Dioxolane-4,5-Dimethanol from Dimethyl Tartrate and 2-Naphthyl-Magnesium Bromide**  
Organic Syntheses **76**, 12 - 22 (1999); Coll. Vol. **10**, 349-352 (2004)
- 640 \* 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)
- 641 Stefan Abele, Ralf Wössner, Francis Bitsch, Dieter Seebach  
**New Secondary Structures of  $\beta$ -Peptides and First Animal Experiments**  
Peptides 1998: Proceedings of the Twenty-Fifth European Peptide Symposium, S. Bajusz, F. Hudecz (Eds.), Akadémiai Kiadó, Budapest, 1999, 408 - 409

- 642 Karl Gademann, Tobias Hintermann, Bernhard Jaun, Dieter Seebach  
**Folding of  $\beta$ - and  $\gamma$ -Peptides. The Influence of Substitution Patterns on the Formation of Hydrogen Bonds**  
Peptides 1998: Proceedings of the Twenty-Fifth European Peptide Symposium,  
S. Bajusz, F. Hudecz (Eds.), Akadémiai Kiadó, Budapest, 1999, 422 - 423
- 643 Dieter K. Heldmann, Dieter Seebach  
**Catalytic Enantioselective Hydrosilylation of Ketones with Rhodium-Phosphite Complexes Containing a TADDOLate and a Dihydrooxazole Unit**  
Helv. Chim. Acta **82**, 1096 - 1110 (1999)
- 644 Holger Sellner, Dieter Seebach  
**Dendritisch quervernetzende chirale Liganden - hohe Standfestigkeit eines polystyrolgebundenen Ti-TADDOLat-Katalysators unter Diffusionskontrolle**  
Angew. Chem. **111**, 2039 - 2041 (1999)  
Angew. Chem. Int. Ed. **38**, 1918 - 1920 (1999)
- 645 Sorana Poenaru, José R. Lamas, Gerd Folkers, José A. López de Castro, Dieter Seebach, Didier Rognan  
**Nonapeptide Analogues Containing (*R*)-3-Hydroxybutanoate and  $\beta$ -Homoalanine Oligomers: Synthesis and Binding Affinity to a Class I Major Histocompatibility Complex Protein**  
J. Med. Chem. **42**, 2318 - 2331 (1999)
- 646 Albrecht Jacobi, Dieter Seebach  
**How to Stabilize or Break  $\beta$ -Peptidic Helices by Disulfide Bridges: Synthesis and CD Investigation of  $\beta$ -Peptides with Cysteine and Homocysteine Side Chains**  
Helv. Chim. Acta **82**, 1150 - 1172 (1999)
- 647 Bianca A. Hermann, Urs Hubler, Peter Jess, Hans P. Lang, Hans-Joachim Güntherodt, Guy Greiveldinger, P. Beat Rheiner, Peter Murer, Thierry Sifferlen, Dieter Seebach  
**Chiral Dendrimers on a Pt(100) Surface Investigated by Scanning Tunnelling Microscopy**  
Surf. Interface Anal. **27**, 507 - 511 (1999)
- 648 Séverine Dedier, Stefan Krebs, José R. Lamas, Sorana Poenaru, Gerd Folkers, José A. Lopez de Castro, Dieter Seebach, Didier Rognan

**Structure-based design of nonnatural ligands for the HLA-B27 protein**

J. Receptor & Signal Transduction Research **19**, 645 - 657 JAN-JUL (1999)

- 649 Stephan P. Götzö, Dieter Seebach, Jean-Jacques Sanglier  
**EPC Syntheses of Trifluorocitronellol and of Hexafluoropyrenophorin – A Comparison of Their Physiological Properties with the Nonfluorinated Analogs**  
Eur. J. Org. Chem. **1999**, 2533 - 2544
- 650 Stefan Abele, Kurt Vögeli, Dieter Seebach  
**Oligomers of  $\beta^{\text{z}}$ - and of  $\beta^{\text{s}}$ -Homoproline: What are the Secondary Structures of  $\beta$ -Peptides Lacking H-Bonds?**  
Helv. Chim. Acta **82**, 1539 - 1558 (1999)
- 651 Stefan Abele, Paul Seiler, Dieter Seebach  
**Synthesis, Crystal Structures, and Modelling of  $\beta$ -Oligopeptides Consisting of 1-(Aminomethyl)cyclopropanecarboxylic Acid: Ribbon-Type Arrangement of Eight-Membered H-Bonded Rings**  
Helv. Chim. Acta **82**, 1559 - 1571 (1999)
- 652 Moritz Werder, Helmut Hauser, Stefan Abele, Dieter Seebach  
 **$\beta$ -Peptides as Inhibitors of Small-Intestinal Cholesterol and Fat Absorption**  
Helv. Chim. Acta **82**, 1774 - 1783 (1999)
- 653 P. Beat Rheiner, Dieter Seebach  
**Dendritic TADDOLs: Synthesis, Characterization and Use in the Catalytic Enantioselective Addition of Et<sub>2</sub>Zn to Benzaldehyde**  
Chem. Eur. J. **5**, 3221 - 3236 (1999)
- 654 Dieter Seebach, Ilya M. Lyapkalo, Robert Dahinden  
**Dichloro[TADDOLato(2–)-O,O']titanium/Dichlorobis[1-methylethoxy]titanium-Mediated, Highly Diastereo- and Enantioselective Additions of Silyl Enol Ethers to Nitro Olefins and [3+2] Cycloadditions of Primary Adducts to Acetylenes**  
Helv. Chim. Acta **82**, 1829 - 1842 (1999)
- 655 Jürg V. Schreiber, Manfredo Quadroni, Dieter Seebach  
**Sequencing of  $\beta$ -Peptides by Mass Spectrometry**  
Chimia **53**, 621 - 626 (1999)

- 656 Thierry Sifferlen, Magnus Rueping, Karl Gademann, Bernhard Jaun, Dieter Seebach  
 **$\beta$ -Thiopeptides: Synthesis, NMR Solution Structure, CD Spectra, and Photochemistry**  
Helv. Chim. Acta **82**, 2067 - 2093 (1999)
- 657 Meinrad Brenner, Dieter Seebach  
**Enantioselective Preparation of  $\gamma$ -Amino Acids and  $\gamma$ -Lactams from Nitro Olefins and Carboxylic Acids, with the Valine-Derived 4-Isopropyl-5,5-diphenyl-1,3-oxazolidin-2-one as an Auxiliary**  
Helv. Chim. Acta **82**, 2365 - 2379 (1999)
- 658 Stefan Abele, Ralf Woessner, Francis Bitsch, Dieter Seebach  
**New Secondary Structures of  $\beta$ -Peptides and First Animal Experiments**  
Peptides 1998: Proceedings of the Twenty-Fifth European Peptide Symposium, Budapest – Hungary, S. Bajusz, F. Hudecz (Eds.) Akadémiai Kiadó, Budapest, 1999, 408 - 409
- 659 Karl Gademann, Tobias Hintermann, Bernhard Jaun, Dieter Seebach  
**Folding of  $\beta$ -and  $\gamma$ -Peptides. The Influence of Substitution Patterns on the Formation of Hydrogen Bonds**  
Peptides 1998: Proceedings of the Twenty-Fifth European Peptide Symposium, Budapest – Hungary, S. Bajusz, F. Hudecz (Eds.) Akadémiai Kiadó, Budapest, 1999, 422 - 423
- 660 Arkadius Pichota, Paul S. Pregosin, Massimiliano Valentini, Michael Wörle, Dieter Seebach  
**Röntgenstrukturanalyse, Diffusionsmessungen und NOESY NMR-Untersuchungen chiraler, vierkerniger Cu<sup>I</sup>-Katalysatoren aus einzähnigen Thiol-Derivaten von TADDOL**  
Angew. Chem. **112**, 157 - 160 (2000)  
Angew. Chem. Int. Ed. **39**, 153 - 156 (2000)
- 661 Alexander Heckel, Dieter Seebach  
**Verankerung von TADDOL auf porösem Kieselgel mit hoher Beladung und erste Anwendungen in der enantioselektiven Katalyse**  
Angew. Chem. **112**, 165 - 167 (2000)  
Angew. Chem. Int. Ed. **39**, 163 - 165 (2000)

- 662 \* Stefan Abele, Dieter Seebach  
**Preparation of Achiral and of Enantiopure Geminally Disubstituted  $\beta$ -Amino Acids for  $\beta$ -Peptide Synthesis**  
Eur. J. Org. Chem. **2000**, 1 - 15
- 663 Karl Gademann, Martin Ernst, Dieter Seebach, Daniel Hoyer  
**The Cyclo- $\beta$ -Tetrapeptide ( $\beta$ -HPhe- $\beta$ -HThr- $\beta$ -HLys- $\beta$ -HTrp): Synthesis, NMR Structure in Methanol Solution, and Affinity for Human Somatostatin Receptors**  
Helv. Chim. Acta **83**, 16 - 33 (2000)
- 664 Dieter Seebach, Jürg V. Schreiber, Stefan Abele, Xavier Daura, Wilfred F. van Gunsteren  
**Structure and Conformation of  $\beta$ -Oligopeptide Derivatives with Simple Proteinogenic Side Chains: Circular Dichroism and Molecular Dynamics Investigations**  
Helv. Chim. Acta **83**, 34 - 57 (2000)
- 665 \* Dieter Seebach  
**TADDOLs – from Enantioselective Catalysis to Dendritic Cross Linkers to Cholesteric Liquid Crystals**  
Chimia **54**, 60 - 62 (2000)
- 666 Christoph M. Krell, Dieter Seebach  
**Preparation of Free and of Specifically Protected Oligo[ $\beta$ -Malic Acids] for Enzymatic Degradation Studies**  
Eur. J. Org. Chem. **2000**, 1207 - 1218
- 667 Christoph Gaul, Dieter Seebach  
**A Valine-Derived Lithiated 3-Methylthiomethyl-1,3-oxazolidin-2-one for Enantioselective Nucleophilic Hydroxymethylation, Formylation, and Alkoxy carbonylation of Aldehydes**  
Org. Lett. **2**, 1501 - 1504 (2000)
- 668 Dieter Seebach, Albrecht Jacobi, Magnus Rueping, Karl Gademann, Martin Ernst, Bernhard Jaun  
**Synthesis of  $\beta$ -Hexa- and  $\beta$ -Heptapeptides Containing Novel  $\beta^{2,3}$ -Amino Acids with Two Serine or Two Cysteine Side Chains – CD- and NMR-Spectroscopic Evidence for  $3_{\alpha}$ -Helical Secondary Structures in Water**  
Helv. Chim. Acta **83**, 2115 - 2140 (2000) and in

„Hominatio – An International Tribute to Albert Eschenmoser“, M.V. Kisakürek (Ed.), Wiley-VCH, Weinheim, 2001

- 669 Bernd Gasslmaier, Christoph M. Krell, Dieter Seebach, Eggehard Holler  
**Synthetic substrates and inhibitors of  $\beta$ -poly(L-malate)-hydrolase (polymalatase)**  
Eur. J. Biochem. **267**, 5101 - 5105 (2000)
- 670 Holger Sellner, Claude Faber, P. Beat Rheiner, Dieter Seebach  
**Immobilization of BINOL by Cross-Linking Copolymerization of Styryl Derivatives with Styrene, and Applications in Enantioselective Ti and Al Lewis Acid Mediated Additions of Et<sub>2</sub>Zn and Me<sub>2</sub>SiCN to Aldehydes and of Diphenyl Nitrone to Enol Ethers**  
Chem. Eur. J. **6**, 3692 - 3705 (2000)
- 671 Magnus Rueping, Bernhard Jaun, Dieter Seebach  
**NMR Structure in methanol of a  $\beta$ -hexapeptide with a disulfide clamp**  
Chem. Commun. **2000**, 2267 - 2268
- 672 Dieter Seebach, Thierry Sifferlen, Pascal A. Mathieu, Andreas M. Häne, Christoph M. Krell, Daniel J. Bierbaum, Stefan Abele  
**CD Spectra in Methanol of  $\beta$ -Oligopeptides Consisting of  $\beta$ -Amino Acids with Functionalized Side Chains, with Alternating Configuration, and with Geminal Backbone Substituents – Fingerprints of New Secondary Structures?**  
Helv. Chim. Acta **83**, 2849 - 2864 (2000)
- 673 \* Dieter Seebach  
**Forschung – eine Fahrt ins Blaue**  
Chimia **54**, 751 - 758 (2000)
- 674 Jürg V. Schreiber, Dieter Seebach  
**Solid-Phase Synthesis of a  $\beta$ -Dodecapeptide with Seven Functionalized Side Chains and CD-Spectroscopic Evidence for a Dramatic Structural Switch When Going from Water to Methanol Solution**  
Helv. Chim. Acta **83**, 3139 - 3152 (2000)
- 675 Ana Cuenca, Mercedes Medio-Simón, Gregorio Asensio Aguilar, Daniel Weibel, Albert K. Beck, Dieter Seebach  
**Highly Enantioselective Protonation of the 3,4-Dihydro-2-methylnaphthalen-1(2H)-**

**one Li-Enolate by TADDOLs**

Helv. Chim. Acta **83**, 3153 - 3162 (2000)

676 Andreas Böhm, Dieter Seebach

**Determination of Enantiomer Purity of  $\beta$ - and  $\gamma$ -Amino Acids by NMR Analysis of Diastereoisomeric Palladium Complexes**

Helv. Chim. Acta **83**, 3262 - 3278 (2000)

677 \* Dieter Seebach

**From Peroxides to Synthetic Methodology and Stereoselectivity to  $\beta$ - and  $\gamma$ -Peptide Helices**

Articles in Medicine and Science I, The 1999 and 2000 King Faisal International Prize, King Faisal Centre for Research and Islamic Studies, Riyad, Saudi Arabia, **2000**, 53 - 72

678 \* Dieter Seebach, Albert K. Beck, Alexander Heckel

**TADDOLe, ihre Derivate und Analoga – vielseitige chirale Hilfsstoffe**

Angew. Chem. **113**, 96 - 142 (2001)

Angew. Chem. Int. Ed. **40**, 92 - 138 (2001)

679 Dieter Seebach, Meinrad Brenner, Magnus Rueping, Bernd Schweizer, Bernhard Jaun

**Preparation and determination of X-ray-crystal and NMR-solution structures of  $\gamma^{3,4}$ -peptides**

Chem. Commun. **2001**, 207 - 208

680 Hongbiao C. Le, Tobias Hintermann, Thomas Wessels, Zhehong Gan, Dieter Seebach, Richard R. Ernst

**Determination of the Amide Plane Orientations in a Cyclo- $\beta$ -Peptide by Magic-Angle-Spinning Deuterium Correlation Spectroscopy, and Comparison with the Powder x-Ray Structure**

Helv. Chim. Acta **84**, 208 – 221 (2001)

681 Masao Aoki, Dieter Seebach,

**Preparation of TADOOH, a Hydroperoxide from TADDOL, and Use in Highly Enantioface- and Enantiomer-differentiating Oxidations**

Helv. Chim. Acta **84**, 187 – 207 (2001)

682 Dieter Seebach, Jürg V. Schreiber, Per I. Arvidsson, Jens Frackenpohl

**The Miraculous CD Spectra (and Secondary Structures ?) of  $\beta$ -Peptides as They**

## **Grow Longer**

Helv. Chim. Acta **84**, 271 – 279 (2001)

- 683 \* Dieter Seebach, Albert Beck, Magnus Rueping, Jürg V. Schreiber, Holger Sellner  
**Excursion of Synthetic Organic Chemists to the World of Oligomers and Polymers**  
Chimia **55**, 98 - 103 (2001)
- 684 Xavier Daura, Karl Gademann, Heiko Schäfer, Bernhard Jaun, Dieter Seebach, Wilfred F. van Gunsteren  
**The  $\beta$ -Peptide Hairpin in Solution: Conformational Study of a  $\beta$ -Hexapeptide in Methanol by NMR Spectroscopy and MD Simulation**  
J. Am. Chem. Soc. **123**, 2393 - 2404 (2001)
- 685 Per I. Arvidsson, Magnus Rueping, Dieter Seebach  
**Design, machine synthesis, and NMR-solution structure of a  $\beta$ -heptapeptide forming a salt-bridge stabilised 3<sub>u</sub>-helix in methanol and in water**  
Chem. Commun. **2001**, 649 - 650
- 686 \* Dieter Seebach, Matthias Albert, Per I. Arvidsson, Magnus Rueping, Jürg V. Schreiber  
**From the Biopolymer PHB to Biological Investigations of Unnatural  $\beta$ - and  $\gamma$ -Peptides**  
Chimia **55**, 345 - 353 (2001)
- 687 Christoph Gaul, Kaspar Schärer, Dieter Seebach  
**Lithiated 4-Isopropyl-3-(methylthiomethyl)-5,5-diphenyloxazolidin-2-one: A Chiral Formyl Anion Equivalent for Enantioselective Preparations of 1,2-Diols, 2-Amino Alcohols, 2-Hydroxy Ester, and 4-Hydroxy-2-alkenoates**  
J. Org. Chem. **66**, 3059 - 3073 (2001)
- 688 Meinrad Brenner, Magnus Rueping, Dieter Seebach  
**Synthesis and Structural Characterization of  $\gamma$ -Peptides**  
Peptides 2000: Proceedings of the Twenty-Sixth European Peptide Symposium, Montpellier – France, J. Martinez, J.-A. Fehrentz (Eds.) EDK, Paris, 2001, 455 - 456
- 689 Pascal A. Mathieu, Thierry Sifferlen, Andreas Häne, Dieter Seebach  
**Unexpected Circular Dichroism of Some  $\beta$ -Oligopeptides Consisting of Residues with Geminal Backbone Substitution**

Peptides 2000: Proceedings of the Twenty-Sixth European Peptide Symposium,  
Montpellier – France, J. Martinez, J.-A. Fehrentz (Eds.) EDK, Paris, 2001, 507 - 508

- 690 Jürg V. Schreiber, Per I. Arvidsson, Dieter Seebach  
**Structures and Conformations of  $\beta$ -Dipeptides with Simple Proteinogenic Side Chains: Circular Dichroism and Computational Investigations**  
Peptides 2000: Proceedings of the Twenty-Sixth European Peptide Symposium,  
Montpellier – France, J. Martinez, J.-A. Fehrentz (Eds.) EDK, Paris, 2001, 1003 - 1004
- 691 Meinrad Brenner, Dieter Seebach  
**Synthesis and CD Spectra in MeCN, MeOH, and H<sub>2</sub>O of  $\gamma$ -Oligopeptides with Hydroxy Groups on the Backbone**  
Helv. Chim. Acta **84**, 1181 - 1189 (2001)
- 692 Jens Frackenpohl, Per I. Arvidsson, Jürg V. Schreiber, Dieter Seebach  
**The Outstanding Biological Stability of  $\beta$ - and  $\gamma$ -Peptides toward Proteolytic Enzymes: An in Vitro Investigation with Fifteen Peptidases**  
ChemBioChem 2001, **2**, 445 - 455
- 693 Holger Sellner, Jaana K. Karjalainen, Dieter Seebach  
**Preparation of Dendritic and Non-Dendritic Styryl-Substituted Salens for Cross-Linking Suspension Copolymerization with Syrene and Multiple Use of the Corresponding Mn and Cr Complexes in Enantioselective Epoxidations and Hetero-Diels – Alder Reactions**  
Chem. Eur. J. **7**, 2873 - 2887 (2001)
- 694 Karl Gademann, Thierry Kimmerlin, Daniel Hoyer, Dieter Seebach  
**Peptide Folding Induces High and Selective Affinity of a Linear and Small  $\beta$ -Peptide to the Human Somatostatin Receptor 4**  
J. Med. Chem. **44**, 2460 - 2468 (2001)
- 695 Peter Waser, Magnus Rueping, Dieter Seebach, Elke Duchardt, Harald Schwalbe  
**On the Solution Structure of PHB: Preparation and NMR Analysis of Isotopically Labeled Oligo[(R)-3-hydroxy-butanoic Acids] (OHBs)**  
Helv. Chim. Acta **84**, 1821 - 1845 (2001)
- 696 \* Dieter Seebach, Albert K. Beck, Alexander Heckel  
**TADDOL and Its Derivatives – Our dream of Universal Chiral Auxiliaries**

Essays in Contemporary Chemistry: From Molecular Structure towards Biology – G. Quinkert, M.V. Kisakürek (Eds.) VHCA Zürich, Wiley-VCH Weinheim, 2001, 283 - 306

- 697 \* Dieter Seebach, Magnus Rueping  
**Neuartige Peptide und Proteine: Neue Molekül-Welten mit  $\beta$ -Peptiden**  
Bulletin ETH Zürich, **282**, September 2001, 18 - 21
- 698 Meinrad Brenner, Dieter Seebach  
**Design, Synthesis, NMR-Solution and X-Ray Crystal Structure of *N*-Acyl- $\gamma$ -dipeptide Amides That Form a  $\beta$ II'-Type Turn**  
Helv. Chim. Acta **84**, 2155 - 2166 (2001)
- 699 Magnus Rueping, Anja Dietrich, Volker Buschmann, Monica G. Fritz, Markus Sauer, Dieter Seebach  
**On the Structure of Poly(3-hydroxybutanoic acid) in Solution and Phospholipid Bilayers. Circular Dichroism and Fluorescence Spectroscopy with Oligo(3-hydroxybutanoic acid) Derivatives**  
Macromolecules **34**, 7042 - 7048 (2001)
- 700 Per I. Arvidsson, Jens Frackenpohl, Neil S. Ryder, Brigitte Liechty, Frank Petersen, Heidrun Zimmermann, Gian P. Camenisch, Ralph Woessner, Dieter Seebach  
**On the Antimicrobial and Hemolytic Activities of Amphiphilic  $\beta$ -Peptides**  
ChemBioChem **2**, 771 – 773 (2001)
- 701 Christoph Gaul, Per I. Arvidsson, Walter Bauer, Robert E. Gawley, Dieter Seebach  
**Computational, ReactIR-, and NMR-Spectroscopic Investigations on the Chiral Formyl Anion Equivalent *N*-( $\alpha$ -Lithiomethylthiomethyl)-4-isopropyl-5,5-diphenyloxazolidin-2-one and Related Compounds**  
Chem. Eur. J. **7**, 4117 – 4125 (2001)
- 702 \* Dieter Seebach, Albert K. Beck, Meinrad Brenner, Christoph Gaul, Alexander Heckel  
**From Synthetic Methods to  $\gamma$ -Peptides – From Chemistry to Biology**  
Chimia **55**, 831 - 838 (2001)
- 703 Karl Gademann, Dieter Seebach  
**Synthesis of Cyclo- $\beta$ -tripeptides and Their Biological *in vitro* Evaluation as**

**Antiproliferatives against the Growth of Human Cancer Cell Lines**

Helv. Chim. Acta **84**, 2924 - 2937 (2001)

- 704 Dieter Seebach, Magnus Rueping, Per I. Arvidsson, Thierry Kimmerlin, Peter Micuch, Christian Noti, Daniel Langenegger, Daniel Hoyer  
**Linear, Peptidase-Resistant  $\beta/\beta^3$ -Di-and  $\alpha/\beta$ -Tetrapeptide Derivatives with Nanomolar Affinities to a Human Somatostatin Receptor**  
Helv. Chim. Acta **84**, 3503 - 3510 (2001)
- 705 Magnus Rueping, Bernhard Jaun, Dieter Seebach  
**Folding of  $\beta$ - and  $\gamma$ -Peptides – the Influence of Substitution Patterns on the Formation of Secondary Structures**  
Peptides: The Wave of the Future, Michal Lebl, Richard A. Houghten (Editors)  
American Peptide Society 2001, 383 - 384
- 706 Touray Etezady-Esfarjani, Christian Hilty, Kurt Wüthrich, Magnus Rueping, Dieter Seebach  
**NMR Structural Investigation of a  $\beta^3$ -Dodecapeptide with Proteinogenic Side Chains in MeOH and Water**  
Peptides: The Wave of the Future, Michal Lebl, Richard A. Houghten (Editors)  
American Peptide Society 2001, 312 - 313
- 707 Dieter Seebach  
**Homologs of Amino Acids and Explorations into the Worlds of  $\beta$ - and  $\gamma$ -Peptides**  
Peptides: The Wave of the Future, Michal Lebl, Richard A. Houghten (Editors)  
American Peptide Society 2001, 569 - 571
- 708 Jens Frackenpohl, Jürg V. Schreiber, Per I. Arvidsson, Dieter Seebach  
**Recent Advances in the Solid-Phase Synthesis of Long-Chain  $\beta$ -Peptides**  
Peptides: The Wave of the Future, Michal Lebl, Richard A. Houghten (Editors)  
American Peptide Society 2001, 275 - 276
- 709 Thierry Kimmerlin, Daniel Hoyer, Dieter Seebach  
**Synthesis and Biological Evaluation of Mixed  $\beta^2/\beta^3$  - Dipeptides as Somatostatin Analogs**  
Peptides: The Wave of the Future, Michal Lebl, Richard A. Houghten (Editors)  
American Peptide Society 2001, 622 - 623

- 710 Peter Micuch, Dieter Seebach  
**Enantioselective Synthesis of  $\beta^2$ -Homotryptophan for a Somatostatin Mimetic Peptides: The Wave of the Future**, Michal Lebl, Richard A. Houghten (Editors)  
American Peptide Society 2001, 32 - 33
- 711 Gérald Lelais, Dieter Seebach  
**Synthesis and CD-Spectra of  $\beta^2$ -(3-Aza-peptides)**  
Peptides: The Wave of the Future, Michal Lebl, Richard A. Houghten (Editors)  
American Peptide Society 2001, 581 - 582
- 712 Holger Sellner, P. Beat Rheiner, Dieter Seebach  
**Preparation of Polystyrene Beads with Dendritically Embedded TADDOL and Use in Enantioselective Lewis Acid Catalysis**  
Helv. Chim. Acta **85**, 352 - 387 (2002)
- 713 Alexander Heckel, Dieter Seebach  
**Preparation and Characterization of TADDOLs Immobilized on Hydrophobic Controlled-Pore-Glass Silica Gel and Their Use in Enantioselective Heterogeneous Catalysis**  
Chem. Eur. J. **8**, 559 – 572 (2002)
- 714 Dieter Seebach, Meinrad Brenner, Magnus Rueping, Bernhard Jaun  
 **$\gamma$ -,  $\gamma$ -, and  $\gamma^{2,4}$ -Amino Acids, Coupling to  $\gamma$ -Hexapeptides: CD Spectra, NMR Solution and X-ray Crystal Structures of  $\gamma$ -Peptides**  
Chem. Eur. J. **8**, 573 - 584 (2002)
- 715 Magnus Rueping, Yogesh Mahajan, Markus Sauer, Dieter Seebach  
**Cellular Uptake Studies with  $\beta$ -Peptides**  
ChemBioChem **3**, 257 - 259 (2002)
- 716 Peter J. Gee, Fred A. Hamprecht, Lukas D. Schuler, Wilfred F. van Gunsteren, Elke Duchardt, Harald Schwalbe, Matthias Albert, Dieter Seebach  
**A Molecular Dynamics Simulation Study of the Conformational Preferences of Oligo-(3-hydroxyalkonoic acids) in Chloroform Solution**  
Helv. Chim. Acta **85**, 618 - 632 (2002)
- 717 Matthias Albert, Dieter Seebach, Elke Duchardt, Harald Schwalbe  
**Synthesis and NMR Analysis in Solution of Oligo-(3-hydroxyalkonoic acid)**

**Derivatives with the Side Chains of Alanine, Valine, and Leucine ( $\beta$ -Depsides) – Coming Full Circle from PHB to  $\beta$ -Peptides to PHB**

Helv. Chim. Acta **85**, 633 - 658 (2002)

718 Christoph Gaul, Dieter Seebach

**Conjugate Addition of Lithiated (S)-4-Isopropyl-3-[(methylthio)methyl]-5,5-diphenyloxazolidin-2-one to Cinnamoyl Derivatives: Preparation of Enantiomerically Pure 1,4-Diols**

Helv. Chim. Acta **85**, 772 - 787 (2002)

719 Alexander Heckel, Dieter Seebach

**Enantioselective Heterogeneous Epoxidation and Hetero-Diels-Alder Reaction with Mn- and Cr-salen Complexes Immobilized on Silica Gel by Radical Grafting**

Helv. Chim. Acta **85**, 913 - 926 (2002)

720 Sudipto Das, Dieter Seebach, Rosetta N. Reusch

**Differential Effects of Temperature on E. coli and Synthetic Polyhydroxybutyrate/Polyphosphate Channels**

Biochemistry, **41**, 5307-5312 (2002)

721 Jürg V. Schreiber, Jens Frackenpohl, Frank Moser, Thomas Fleischmann, Hans-Peter Kohler, Dieter Seebach

**On the Biodegradation of  $\beta$ -Peptides**

ChemBioChem **3**, 424 - 432 (2002)

722 Christoph Gaul, Dieter Seebach

**Metallations and Reactions with Electrophiles of 4-Isopropyl-5,5-diphenyloxazolidin-2-one (DIOZ) with N-Allyl and N-Propargyl Substituents: Chiral Homoenolate Reagents**

Helv. Chim. Acta **85**, 963 - 978 (2002)

723 Touraj Etezady-Esfarjani, Christian Hilty, Kurt Wüthrich, Magnus Rueping, Jürg Schreiber, Dieter Seebach

**NMR-Structural Investigations of a  $\beta$ -Dodecapeptide with Proteinogenic Side Chains in Methanol and in Aqueous Solutions**

Helv. Chim. Acta **85**, 1197 - 1209 (2002)

- 724 Christoph Gaul, Bernd W. Schweizer, Paul Seiler, Dieter Seebach  
**Crystal Structures – A Manifesto for the Superiority of the Valine-Derived 5,5-Diphenyloxazolidinone as an Auxiliary in Enantioselective Organic Synthesis**  
Helv. Chim. Acta **85**, 1546 - 1566 (2002)
- 725 Peter Micuch, Dieter Seebach  
**Preparation of  $\beta$ -Homotryptophan Derivatives for  $\beta$ -Peptide Synthesis**  
Helv. Chim. Acta **85**, 1567 - 1577 (2002)
- 726 Thierry Kimmerlin, Dieter Seebach, Donald Hilvert  
**Synthesis of  $\beta$ -Peptides and Mixed  $\alpha/\beta$ -Peptides by Thioligation**  
Helv. Chim. Acta **85**, 1812 - 1826 (2002)
- 727 Dieter Seebach, Yogesh R. Mahajan, Ramanathan Senthilkumar, Magnus Rueping, Bernhard Jaun  
 **$\beta$ -Depsipeptides – the effect of a missing and a weakened hydrogen bond on the stability of the  $\beta$ -peptidic  $3_{\text{u}}$ -helix**  
Chem. Commun. **2002**, 1598 – 1599
- 728 Waldemar Adam, Konrad J. Roschmann, Chantu R. Saha-Möller, Dieter Seebach  
**cis-Stilbene and (1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ )-(2-Ethenyl-3-methoxycyclopropyl)benzene as Mechanistic Probes in the Mn<sup>III</sup>(salen)-Catalyzed Epoxidation: Influence of the Oxygen Source and the Counterion on the Diastereoselectivity of the Competitive Concerted and Radical-Type Oxygen Transfer**  
J. Am. Chem. Soc. **124**, 5068 - 5073 (2002)
- 729 Eusebio Juaristi, Marcos Hernández-Rodríguez, Heraclio López-Ruiz, Judit Avina, Omar Muñoz-Muñiz, Michiya Hayakawa, Dieter Seebach  
**Synthesis of New Chiral Derivatives of N,N'-Dimethylpropyleneurea (DMPU) and Examination of Their Influence on the Regio- and Enantioselectivity of Addition of 2-(2,3-Dithianyl)lithium to Cyclohex-2-en-1-one**  
Helv. Chim. Acta **85**, 1999 - 2008 (2002)
- 730 Magnus Rueping, Jürg V. Schreiber, Gérald Lelais, Bernhard Jaun, Dieter Seebach  
**Mixed  $\beta/\beta$ -Hexapeptides and  $\beta/\beta$ -Nonapeptides Folding to (*P*)-Helices with Alternating Twelve- and Ten-Membered hydrogen-Bonded Rings**  
Helv. Chim. Acta **85**, 2577 - 2593 (2002)

- 731 Dieter Seebach, Thierry Sifferlen, Daniel J. Bierbaum, Magnus Rueping, Bernhard Jaun, Bernd Schweizer, Jacob Schaefer, Anil K. Mehta, Robert D. O'Connor, Beat H. Meier, Matthias Ernst, Alice Glättli  
**Isotopically Labelled and Unlabelled  $\beta$ -Peptides with Geminal Dimethyl Substitution in 2-Position of Each Residue: Synthesis and NMR Investigation in Solution and in the Solid State**  
Helv. Chim. Acta **85**, 2877 - 2917 (2002)
- 732 Hansjörg Wiegand, Bernard Wirz, Alain Schweitzer, Gian P. Camenisch, Maria I. Rodriguez Perez, Gerhard Gross, Ralph Woessner, Rolf Voges, Per I. Arvidsson, Jens Frackenpohl, Dieter Seebach  
**The Outstanding Metabolic Stability of a  $^{14}\text{C}$ -Labeled  $\beta$ -Nonapeptide in Rats – *in vitro* and *in vivo* Pharmacokinetic Studies**  
Biopharm. Drug Dispos. **23**, 251 - 262 (2002)
- 733 Alice Glättli, Xavier Daura, Dieter Seebach, Wilfred F. van Gunsteren  
**Can One Derive the Conformational Preference of a  $\beta$ -Peptide from Its CD Spectrum?**  
J. Am. Chem. Soc. **124**, 12972 - 12978 (2002)
- 734 L. Merz, J. Hitz, U. Hubler, P. Weyermann, F. Diederich, P. Murer, D. Seebach, I. Widmer, M. Stöhr, H.-J. Güntherodt, B.A. Hermann  
**STM Investigation on Single, Physisorbed Dendrimers**  
Single Mol. **3**, 295 - 299 (2002)
- 735 Thierry Kimmerlin, Dieter Seebach  
**Synthesis of  $\beta$ -peptides by chemical ligation**  
EPTIDES 2002. Ettore Benedetti, Carlo Pedone (Eds.), Edizioni Ziino, Napoli, Italy, 2002, 162-163
- 736 Yogesh R. Mahajan, Magnus Rueping, Dieter Seebach  
 **$\beta$ -Homoarginine-containing  $\beta$ -peptides – structure and cell-penetrating ability**  
PEPTIDES 2002. Ettore Benedetti, Carlo Pedone (Eds.), Edizioni Ziino, Napoli, Italy, 2002, 210-211
- 737 Laurent Schaeffer, Daniel Hoyer, Dieter Seebach  
**Investigation of *N*-acyl- $\gamma$ -dipeptide amides as somatostatin analogs: synthesis and receptor-affinity measurement**

PEPTIDES 2002. Ettore Benedetti, Carlo Pedone (Eds.), Edizioni Ziino, Napoli, Italy, 2002, 278-279

- 738 Yogesh R. Mahajan, Ramanathan Senthilkumar, Magnus Rueping, Dieter Seebach  
**β-Depsipeptides: synthesis and structural studies**  
PEPTIDES 2002. Ettore Benedetti, Carlo Pedone (Eds.), Edizioni Ziino, Napoli, Italy, 2002, 798-799
- 739 Dieter Seebach  
**Homologs of Amino Acids and Explorations into the Worlds of β-and γ-Peptides**  
Chemistry of Crop Protection, Progress and Prospects in Science and Regulation, G. Voss, G. Ramos (Editors) Wiley VCH 2003, 17-29
- 740 Dieter Seebach, Laurent Schaeffer, Meinrad Brenner, Daniel Hoyer  
**Design and Synthesis of γ-Dipeptide Derivatives with Submicromolar Affinities for Human Somatostatin Receptors**  
Angew. Chem. Int. Ed. **42**, 776 - 778 (2003)  
Angew. Chem. **115**, 800-802 (2003)
- 741 Caroline Nunn, Magnus Rueping, Daniel Langenegger, Edi Schuepbach, Thierry Kimmerlin, Peter Micuch, Konstanze Hurth, Dieter Seebach, Daniel Hoyer  
**β<sup>2</sup>/β<sup>3</sup>-Di- and α/β<sup>3</sup>-Tetrapeptide Derivatives as Potent Agonists at Somatostatin sst<sub>4</sub> Receptors**  
Naunyn-Schmiedeberg's Arch Pharmacol **367**, 95-103, (2003)
- 742 Karl Gademann, Andreas Häne, Magnus Rueping, Bernhard Jaun, Dieter Seebach  
**The Fourth Helical Secondary Structure of β-Peptides: The (P)-2<sub>s</sub>-Helix of a β-Hexapeptide Consisting of (2R, 3S)-3-Amino-2-hydroxy Acid Residues**  
Angew. Chem. **115**, 1573-1575 (2003)  
Angew. Chem. Int. Ed. **42**, 1534-1537 (2003)
- 743 Holger Sellner, Kathrin Hametner, Detlef Günther, Dieter Seebach  
**Manganese Distribution in polystyrene beads prepared by copolymerization with cross-linking dendritic salens using laser ablation inductively coupled plasma mass spectrometry**  
J. Catalysis **215**, 87-93 (2003)

- 744 Per I. Arvidsson, Jens Frackenpohl, Dieter Seebach  
**Syntheses and CD-Spectroscopic Investigations of Longer-Chain  $\beta$ -Peptides:  
Preparation by solid-phase couplings of single amino acids, dipeptides and  
tripeptides**  
Helv. Chim. Acta **86**, 1522-1553 (2003)
- 745 Waldemar Adam, Paul L. Alsters, Ronny Neumann, Chantu R. Saha Möller, Dieter Seebach, Rui Zhang  
**Highly Efficient Catalytic Asymmetric Epoxidation of Allylic Alcohols by an  
Oxovanadium-Substituted Polyoxometalate with a Regenerative TADDOL-Derived  
Hydroperoxide**  
Org. Lett. **5**, 725 - 728 (2003)
- 746 Waldemar Adam, Albert K. Beck, Arkadius Pichota, Chantu R. Saha-Möller, Dieter Seebach, Nadine Vogl, Rui Zhang  
**Control of enantioselectivity through a hydrogen-bonded template in the  
vanadium(V)-catalyzed epoxidation of allylic alcohols by optically active  
hydroperoxydes**  
Tetrahedron: Asymmetry **14**, 1355 - 1361 (2003)
- 747 Dieter Seebach, Laurent Schaeffer, François Gessier, Pascal Bindschädler, Corinna Jäger, Delphine Josien, Sacha Kopp, Gérald Lelais, Yogesh Mahajan, Peter Micuch, Radovan Sebesta, Bernd W. Schweizer  
**Enantioselective Preparation of (S)-2-Aminomethyl-Carboxylic Acid Derivatives:  
Solving the  $\beta$ -Amino Acid-Problem with the Chiral Auxiliary 4-Isopropyl-5,5-diphenyloxazolidin-2-one (DIOZ).**  
Helv. Chim. Acta **86**, 1852 - 1861 (2003)
- 748 François Gessier, Christian Noti, Magnus Rueping, Dieter Seebach  
**Synthesis and CD-Spectra of Fluoro- and Hydroxy-Substituted  $\beta$ -Peptides**  
Helv. Chim. Acta **86**, 1862 - 1870 (2003)
- 749 Thierry Kimmerlin, Dieter Seebach  
**Solid-Phase Synthesis of a  $\beta$ -Eicosapeptide Containing the Homologs of the Twenty  
Common Proteinaceous Amino Acids**  
Helv. Chim. Acta **86**, 2098 - 2103 (2003)

- 750 Thierry Kimmerlin, Kenji Namoto, Dieter Seebach  
**Evidence from Circular Dichroism and from Melting Behavior for Helix Inducing Complexation of a Designed  $\beta$ -Pentadecapeptide with DNA-Duplexes.**  
Helv. Chim. Acta **86**, 2104 - 2109 (2003)
- 751 Francesco Rossi, Gérald Lelais, Dieter Seebach  
**Zn<sup>2+</sup>-Complexation by a  $\beta$ -Peptidic Helix and Hairpin Containing  $\beta^3$ hCys and  $\beta^3$ hHis Building Blocks - Evidence from CD Measurements**  
Helv. Chim. Acta **86**, 2653 - 2661 (2003)
- 752 Per I. Arvidsson, Neil S. Ryder, H. Markus Weiss, Gerhard Gross, Olivier Kretz, Ralph Woessner, Dieter Seebach  
**Antibiotic and Hemolytic Activity of a  $\beta/\beta^3$ -Peptide Capable of Folding to a 12/10-Helical Secondary Structure**  
ChemBioChem. **4**, 1345-1347 (2003)
- 753 Radovan Sebesta, Dieter Seebach  
**Preparation of (S,S)-Fmoc- $\beta$ -hIle-OH, (S)-Fmoc- $\beta$ -hMet-OH, and (S)-Fmoc- $\beta$ -hTyr(tBu)-OH for Solid-Phase Syntheses of  $\beta$ - and  $\beta/\beta$ -Peptides**  
Helv. Chim. Acta **86**, 4061 - 4072 (2003)
- 754 Gérald Lelais, Dieter Seebach  
**Synthesis, CD Spectra and Enzymatic Stability of  $\beta$ -Oligoazapeptides Prepared from (S)-2-Hydrazino Carboxylic Acids Carrying the Side Chains of Val, Ala, Leu**  
Helv. Chim. Acta **86**, 4152 - 4168 (2003)
- 755 C. Peter, M. Rueping, H.J. Wörner, B. Jaun, D. Seebach, W.F. van Gunsteren  
**Molecular Dynamics Simulations of Small Peptides: Can One Derive Conformational Preferences from ROESY Spectra?**  
Chem. Eur. J. **9**, 5838 - 5849 (2003)
- 756 M. Brenner, L. La Vecchia, T. Leutert, D. Seebach  
**(4S)-4-(1-Methylethyl)-5,5-Diphenyl-2-Oxazolidinone**  
Organic Syntheses **80**, 57 - 65 (2003); Collective Volume **XI**, 896-902 (2009)
- 757 Waldemar Adam, Paul L. Alsters, Ronny Neumann, Chantu R. Saha-Möller, Dieter Seebach, Albert K. Beck, Rui Zhang  
**Chiral Hydroperoxides as Oxygen Source in the Catalytic Stereoselective**

**Epoxidation of Allylic Alcohols by Sandwich-Type Polyoxometalates: Control of Enantioselectivity through a Metal-Coordinated Template**

J. Org. Chem. **68**, 8222 - 8231 (2003)

- 758 Xavier Daura, Dirk Bakowies, Dieter Seebach, Jörg Fleischhauer, Wilfred F. van Gunsteren, Peter Krüger  
**Circular dichroism spectra of  $\beta$ -peptides: sensitivity to molecular structure and effects of motional averaging**  
Eur. Biophys J. **32**, 661 - 670 (2003)
- 759 Yuri N. Belokon, Syuzanna Harutynyan, Evgeni V. Vorontsov, Alexander S. Peregudov, Viktor N. Chrustalev, Konstantin A. Kochetkov, Dmitry Pripadchev, Ashot S. Sagyan, Albert K. Beck, Dieter Seebach  
**Nucleophilic addition to an achiral dehydroalanine Schiff Base Ni(II) complex as a route to amino acids. A case of stereodetermining asymmetric protonation in the presence of TADDOL**  
ARKIVOC **2004** (iii), 132-150  
(<http://www.arkat-usa.org/ark/journal/2004/Makosza/MM-853G/853G.htm>  
<http://www.arkat-usa.org/ark/journal/2004/Makosza/MM-853G/853G.pdf>)
- 760 Dieter Seebach, Kenji Namoto, Yogesh R. Mahajan, Pascal Bindschädler, Rainer Sustmann, Michael Kirsch, Neil S. Ryder, Markus Weiss, Markus Sauer, Christian Roth, Sabine Werner, Hans-Dietmar Beer, Christine Munding, Peter Walde, Matthias Voser  
**Chemical and Biological Investigations of  $\beta$ -Oligoarginines**  
Chem. Biodiv. **1**, 65 – 97 (2004)
- 761 Magnus Rueping, Yogesh R. Mahajan, Bernhard Jaun, Dieter Seebach  
**Design, Synthesis and Structural Investigations of a  $\beta$ -Peptide Forming a  $3_{\text{u}}$ -Helix Stabilized by Electrostatic Interactions**  
Chem. Eur. J. **10**, 1607 – 1615 (2004)
- 762 David.F. Hook, François Gessier, Christian Noti, Peter Kast, Dieter Seebach  
**Probing the Proteolytic Stability of  $\beta$ -Peptides Containing  $\alpha$ -Fluoro- and  $\alpha$ -Hydroxy- $\beta$ -Amino Acids**  
ChemBioChem **5**, 691 – 706 (2004)
- 763 \* Gérald Lelais, Dieter Seebach  
 **$\beta^{\text{z}}$ -Amino Acids – Syntheses, Occurrence in Natural Products, and Components of  $\beta$ -**

## **Peptides**

Biopolymers (Peptide Science) **76**, 206 – 243 (2004)

- 764 Gérald Lelais, Marino A.Campo, Sascha Kopp, Dieter Seebach  
**Enantioselective Preparation of  $\beta^2$ -Amino Acids with Aspartate, Glutamate, Asparagine, and Glutamine Side Chains**  
Helv. Chim. Acta **87**, 1545 – 1560 (2004)
- 765 Daniel J. Bierbaum and Dieter Seebach  
**Synthesis and Spectroscopic Characterization of  $\beta$ -Di-,  $\beta$ -Tri-, and  $\beta$ -Hexapeptides Built with (S)-2-Methylene-3-aminoalkanoic Acids Derived from Alanine, Valine, and Leucine**  
Austr. J. Chem. **57**, 859 – 863 (2004)
- 766 \* Dieter Seebach, Albert K. Beck, Daniel J. Bierbaum  
**Die Welt der  $\beta$ - und  $\gamma$ -Peptide aus homologisierten proteinogenen Aminosäuren und anderen Bausteinen**  
Chem. Biodiv. (Deutscher Originaltext des in Englischer Uebersetzung erschienen Artikels #767), 1 – 133 (2004)
- 767 \* Dieter Seebach, Albert.K. Beck, Daniel.J. Bierbaum  
**The World of  $\beta$ - and  $\gamma$ -Peptides Comprised of Homologated Proteinogenic Amino Acids and Other Components**  
Chem. Biodiv. **1**, 1111 – 1239 (2004)
- 768 \* Thierry Kimmerlin, Radovan Sebesta, Marino A. Campo, Albert K. Beck, Dieter Seebach  
**How we drifted into peptide chemistry and where we have arrived at**  
Tetrahedron **60**, 7455 – 7506 (2004)
- 769 Rob Lind, Daren Greenhow, Simon Perry, Thierry Kimmerlin, Dieter Seebach  
**Comparative Metabolism of  $\alpha$ - and  $\beta$ -Peptides in the Insect *Heliothis virescens* and in Plant Cells of Black Mexican Sweet Maize**  
Chem. Biodiv. **1**, 1391 – 1400 (2004)
- 770 Magnus Rueping, Matthias Albert, Dieter Seebach  
**On the Structure of PHB (=Poly[(R)-3-hydroxybutanoic Acid]) in Phospholipid Bilayers: Preparation of Trifluoromethyl-Labeled Oligo[(R)-3-hydroxybutanoic**

## **Acid] Derivatives**

Helv. Chim. Acta **87**, 2473 – 2486 (2004)

- 771 Alice Glättli, Dieter Seebach, Wilfred F. van Gunsteren  
**Do Valine Side Chains Have an Influence on the Folding Behavior of  $\beta$ -Substituted  $\beta$ -Peptides?**  
Helv. Chim. Acta **87**, 2487 – 2506 (2004)
- 772 Hansjörg Wiegand, Bernard Wirz, Alain Schweitzer, Gerhard Gross, Maria I. Rodriguez Perez, Hendrik Andres, Thierry Kimmerlin, Magnus Rueping, Dieter Seebach  
**Pharmacokinetic Investigation of a  $^{14}\text{C}$ -Labelled  $\beta\text{-}/\alpha$  Tetrapeptide in Rats**  
Chem. Biodiv. **1**, 1812 – 1828 (2004)
- 773 Gerald Lelais, Peter Micuch, Delphine Josien-Lefebvre, Francesco Rossi, Dieter Seebach  
**Preparation of Protected  $\beta\text{-}$  and  $\beta\text{-Homocysteine, } \beta\text{- and } \beta\text{-Homohistidine and } \beta\text{-Homoserine for Solid-Phase Syntheses}$**   
Helv. Chim. Acta **87**, 3131 – 3159 (2004)
- 774 J. Li, S. J. Organ, J. K. Hobbs, A. E. Terry, P. J. Barham, D. Seebach  
**Crystallization of hydroxybutyrate oligomers: 1. morphology and folding**  
Polymer **45**, 8913 – 8923 (2004)
- 775 \* Thierry Kimmerlin, Dieter Seebach  
**„100 years of peptide synthesis“: ligation methods for peptide and protein synthesis with applications to  $\beta$ -peptide assemblies**  
J. Peptide Res. **65**, 229 - 260 (2005)
- 776 Raveendra I. Mathad, François Gessier, Dieter Seebach, Bernhard Jaun  
**The Effect of Backbone-Heteroatom Substitution on the Folding of Peptides – A Single Fluorine Substituent Prevents a  $\beta$ -Heptapeptide from Folding into a  $\text{3}_{\text{i}}$ -Helix (NMR Analysis)**  
Helv. Chim. Acta **88**, 266 - 280 (2005)
- 777 Birgit Geueke, Kenji Namoto, Irina Agarkova, Jean-Claude Perriard, Hans-Peter Kohler, Dieter Seebach  
**Bacterial Cell Penetration by  $\beta$ -Oligohomoarginins: Indication for Passive Transfer**

**through the Lipid Bilayer**

ChemBioChem **6**, 982 – 985 (2005)

- 778 Per I. Arvidsson, Neil S. Ryder, H. Markus Weiss, David F. Hook, Jaime Escalante, Dieter Seebach  
**Exploring the Antibacterial and Hemolytic Activity of Shorter- and Longer-Chain  $\beta$ -,  $\alpha$ , $\beta$ - and  $\gamma$ -Peptides and of  $\beta$ -Peptides from  $\beta^2$ -3-Aza- and  $\beta^3$ -2-Methylidene-amino Acids Bearing Proteinogenic Side Chains – A Survey**  
Chem. Biodiv. **2**, 401 – 420 (2005)
- 779 David F. Hook, Pascal Bindschädler, Yogesh R. Mahajan, Radovan Sebesta, Peter Kast, Dieter Seebach  
**The Proteolytic Stability of ‘Designed’  $\beta$ -Peptides Containing  $\alpha$ -Peptide-Bond Mimics and of Mixed  $\alpha$ , $\beta$ -Peptides: Application of the Construction of MHC-Binding Peptides**  
Chem. Biodiv. **2**, 591 – 632 (2005)
- 780 Dieter Seebach, Raveendra I. Mathad, Thierry Kimmerlin, Yogesh R. Mahajan, Pascal Bindschädler, Magnus Rueping, Bernhard Jaun, Christian Hilty, Touraj Etezady-Esfarjani  
**NMR-Solution Structures in Methanol of an  $\alpha$ -Heptapeptide, of a  $\beta/\beta$ -Nonapeptide and of an *all*- $\beta$ -Icosapeptide Carrying the 20 Proteinogenic Side Chains**  
Helv. Chim. Acta **88**, 1969 – 1982 (2005)
- 781 Francois Gessier, Laurent Schaeffer, Thierry Kimmerlin, Oliver Flögel, Dieter Seebach  
**Preparation of  $\beta$ -Amino Acid Derivatives ( $\beta$ hThr,  $\beta$ hTrp,  $\beta$ hMet,  $\beta$ hPro,  $\beta$ hLys, Pyrrolidine-3-carboxylic Acid) by Using DIOZ as Chiral Auxiliary**  
Helv. Chim. Acta **88**, 2235 – 2249 (2005)
- 782 Birgit Geueke, Kenji Namoto, Dieter Seebach, Hans-Peter Kohler  
**A Novel  $\beta$ -Peptidyl Aminopeptidase (BapA) from Strain 3-2W4 Cleaves Peptide Bonds of Synthetic  $\beta$ -Tri- and  $\beta$ -Dipeptides**  
J. Bacteriology **187**, 5910 – 5917 (2005)

- 783 Dieter Seebach  
**ETH Zürich und die Basler Chemie – eine grosse Tradition**  
Chimia **59**, 698 – 707 (2005)
- 784 Alice Glättli, Xavier Daura, Pascal Bindschädler, Bernhard Jaun, Yogesh R. Mahajan, Raveendra I. Mathad, Magnus Rueping, Dieter Seebach, Wilfred F. van Gunsteren  
**On the Influence of Charged Side Chains on the Folding-Unfolding Equilibrium of  $\beta$ -Peptides: A Molecular Dynamics Simulation Study**  
Chem. Eur. J. **11**, 7276 – 7293 (2005)
- 785 Matthew D. Disney, David F. Hook, Kenji Namoto, Peter H. Seeberger, Dieter Seebach  
**N-Linked Glycosylated  $\beta$ -Peptides Are Resistant to Degradation by Glycoamidase A**  
Chem. Biodiv. **2**, 1624 – 1634 (2005)
- 786 Yu. N. Belokon, S. Ch. Gagieva, T. A. Sukhova, A. B. Dmitriev, K. A. Lyssenko, N. M. Bravaya, B. M. Bulychev, D. Seebach  
**Titanium(IV)chloride complexes with chiral tetraaryl-1,3-dioxolane-4,5-dimethanol ligands as a new typ of catalysts of ethylene polymerization**  
Russ. Chem. Bull., Int. Ed. **54**, 2348 – 2353 (2005)
- 787 Dieter Seebach, David F. Hook, Alice Glättli  
**Helices and Other Secondary Structures of  $\beta$ - and  $\gamma$ -Peptides**  
Biopolymer (Peptide Science) **84**, 23 – 37 (2006)
- 788 Gérald Lelais, Dieter Seebach, Bernhard Jaun, Raveendra I. Mathad, Oliver Flögel, Francesco Rossi, Marino Campo, Arno Wortmann  
 **$\beta$ -Peptidic Secondary Structures Fortified and Enforced by  $Zn^{2+}$  Complexation – On the Way to  $\beta$ -Peptidic Zinc Fingers?**  
Helv. Chim. Acta **89**, 361 - 403 (2006)

- 789 Sander J. Wezenberg, Gerald A. Metselaar, Alan E. Rowan, Jeroen J. L. M. Cornelissen, Dieter Seebach, Roeland J. M. Nolte  
**Synthesis, Characterization, and Folding Behavior of  $\beta$ -Amino Acid Derived Polyisocyanides**  
Chem. Eur. J. **12**, 2778 – 2786 (2006)
- 790 Thomas Hitz, Rico Iten, James Gardiner, Kenji Namoto, Peter Walde, Dieter Seebach  
**Interaction of  $\alpha$ - and  $\beta$ -Oligoarginine-Acids and Amides with Anionic Lipid Vesicles: A Mechanistic and Termodynamic Study**  
Biochemistry **45**, 5817 – 5829 (2006)
- 791 Michael Limbach, Markus Löweneck, Jürg V. Schreiber, Jens Frackenpohl, Dieter Seebach, Andreas Billich  
**Synthesis of  $\beta$ -Homophenylalanine-Derived Amino Acids and Peptides by Suzuki Coupling in Solution and on Solid Support**  
Helv. Chim. Acta **89**, 1427 – 1441 (2006)
- 792\* Dieter Seebach, Albert K. Beck  
**The *gem*-Diaryl Effect in Enantioselective Synthesis**  
The TAKASAGO times, No. 157, 34 – 40 (2006)
- 793 Dieter Seebach, Bernhard Jaun, Radovan Sebesta, Raveendra I. Mathad, Oliver Flögel, Michael Limbach, Holger Sellner, Sylvain Cottens  
**Synthesis, and Helix- or Hair-Pin-Turn Secondary Structures of “Mixed”  $\alpha/\beta$ -Peptides Consisting of Residues with Proteinogenic Side Chains and of 2-Amino-2-methyl-propanoic Acid (Aib)**  
Helv. Chim. Acta **89**, 1801 – 1825 (2006)
- 794 Birgit Geueke, Tobias Heck, Michael Limbach, Victor Nesatyy, Dieter Seebach, Hans-Peter E. Kohler  
**Bacterial  $\beta$ -peptidyl aminopeptidase with unique substrate specificities for  $\beta$ -oligopeptides and mixed  $\beta,\alpha$ -oligopeptides**  
FEBS Journal **273**, 5261 – 5272 (2006)

- 795 Oliver Flögel, Jeroen D. C. Codée, Dieter Seebach, Peter H. Seeberger  
**Microreactor Synthesis of  $\beta$ -Peptides**  
Angew. Chem. **118**, 7157–7160 (2006)  
Angew. Chem. Int. Ed. **45**, 7000–7003 (2006)
- 796 James Gardiner, Anita V. Thomae, Raveendra I. Mathad, Dieter Seebach, Stefanie D. Krämer  
**Comparison of Permeation through Phosphatidylcholine Bilayers of N-Dipicolinyl- $\alpha$ - and - $\beta$ -Oligopeptides**  
Chem. Biodiv. **3**, 1181 – 1201 (2006)
- 797 Tobias Heck, Michael Limbach, Birgit Geueke, Martin Zachariasc, James Gardiner, Hans-Peter E. Kohler, Dieter Seebach  
**Enzymatic Degradation of  $\beta$  - and Mixed  $\alpha$ ,  $\beta$ -Oligopeptides**  
Chem. Biodiv. **3**, 1325 – 1348 (2006)
- 798 Kenji Namoto, James Gardiner, Thierry Kimmerlin, Dieter Seebach  
**Investigation of the Interactions of  $\beta$ -Peptides with DNA Duplexes by Circular Dichroism Spectroscopy**  
Helv. Chim. Acta **89**, 3087 – 3103 (2006)
- 799 Dieter Seebach  
**Forword**  
Mathias Christmann, Stefan Bräse (Eds.), *Asymmetric Synthesis – The Essentials*  
Wiley-VCH, Weinheim 2007, pp. v-vii
- 800 Dieter Seebach  
**Albert Karl Beck wurde 60 – Fast nichts lief ohne ihn für 40 Jahre in der Arbeitsgruppe Seebach**  
Chimia **61**, 51 – 58 (2007)

- 801 Dieter Seebach, Albert K. Beck, D. Michael Badine, Michael Limbach,  
Albert Eschenmoser, Adi M. Treasurywala, Reinhard Hobi Walter Prikoszovich,  
Bernard Linder  
**Are Oxazolidinones Really Unproductive, Parasitic Species in Proline  
Catalysis? – Thoughts and Experiments Pointing to an Alternative View**  
Helv. Chim. Acta **90**, 425 – 471 (2007)
- 802 H. Markus Weiss, Bernhard Wirz, Alain Schweitzer, René Amstutz, Maria I. Rodriguez  
Perez, Hendrik Andres, Yves Metz, James Gardiner, Dieter Seebach  
**ADME Investigations of Unnatural Peptides: Distribution of a  $^{14}\text{C}$ -Labeled  $\beta^3$ -  
Octaarginine in Rats**  
Chem. Biodiv. **4**, 1413 – 1437 (2007)
- 803 Tobias Heck, Hans-Peter E. Kohler, Michael Limbach, Oliver Flögel, Dieter Seebach,  
Birgit Geueke  
**Enzyme-Catalyzed Formation of  $\beta$ -Peptides:  $\beta$ -Peptidyl Aminopeptidases BapA  
and DmpA Acting as  $\beta$ -Peptide-Synthesizing Enzymes**  
Chem. Biodiv. **4**, 2016 – 2030 (2007)
- 804 Oliver Flögel, Giulio Casi, Donald Hilvert, Dieter Seebach  
**Preparation of the  $\beta^3$ -Homoselenocysteine Derivatives Fmoc- $\beta^3\text{hSec(PMB)}$ -OH and  
Boc- $\beta^3\text{hSec(PMB)}$ -OH for Solution and Solid-Phase-Peptide Synthesis and  
Selenoligation**  
Helv. Chim. Acta **90**, 1651 – 1666 (2007)
- 805 Ina Hubatsch, Per I. Arvidsson, Dieter Seebach, Kristina Luthman, Per Artursson  
 **$\beta$ - and  $\gamma$ -Di- and Tripeptides as Potential Substrates for the Oligopeptide  
Transporter hPepT1**  
J. Med. Chem. **50**, 5238 – 5242 (2007)
- 806 Markus Stoeckli, Dieter Staab, Alain Schweitzer, James Gardiner, Dieter Seebach  
**Imaging of a  $\beta$ -Peptide Distribution in Whole-Body Mice Sections by MALDI Mass**

## Spectrometry

J. Am. Soc. Mass. Spectrom. **18**, 1921 – 1924 (2007)

- 807 Toshinori Shimanouchi, Peter Walde, James Gardiner, Yogesh R. Mahajan, Dieter Seebach, Anita Thomae, Stefanie D. Krämer, Matthias Voser, Ryoichi Kuboi  
**Permeation of a  $\beta$ -heptapeptide derivative across phospholipid bilayers**  
Biochimica Biophysica Acta **1768**, 2726 – 2736 (2007)
- 808 Raveendra I. Mathad, Bernhard Jaun, Oliver Flögel, James Gardiner, Markus Löweneck, Jeroen D. C. Codée, Peter H. Seeberger, Dieter Seebach, Michael K. Edmonds, Florian H. M. Graichen, Andrew D. Abell  
**NMR-Solution Structures of Fluoro-Substituted  $\beta$ -Peptides: A  $3_{\text{u}}$ -Helix and a Hairpin Turn. The First Case of a 90° O=C-C-F Dihedral Angle in an  $\alpha$ -Fluoro Amide Group**  
Helv. Chim. Acta **90**, 2251 – 2273 (2007)
- 809 Stefania Capone, Peter Walde, Dieter Seebach, Takashi Ishikawa, Romualdo Caputo  
**pH-Sensitive Vesicles Containing a Lipidic  $\beta$ -Amino Acid with Two Hydrophobic Chains**  
Chem. Biodiv. **5**, 16 – 30 (2008)
- 810 James Gardiner, Daniel Langenegger, Daniel Hoyer, Albert K. Beck, Raveendra I. Mathad, Dieter Seebach  
**The Enantiomer of Octreotide Binds to All Five Somatostatin Receptors with Almost Equal Micromolar Affinity – A Comparison with SANDOSTATIN®**  
Chem. Biodiv. **5**, 1213 – 1224 (2008)
- 811 Josef Kapitán, Fujiang Zhu, Lutz Hecht, James Gardiner, Dieter Seebach, Laurence D.Barron  
**Solution Structures of  $\beta$  Peptides from Raman Optical Activity**  
Angew. Chem. **120**, 6492 – 6494 (2008)  
Angew. Chem. Int. Ed. **47**, 6392 – 6394 (2008)

- 812 Dieter Seebach, Estelle Dubost, Raveendra I. Mathad, Bernhard Jaun, Michael Limbach, Markus Löweneck, Oliver Flögel, James Gardiner, Stefania Capone, Albert K. Beck, Hans Widmer, Daniel Langenegger, Dominique Monna, Daniel Hoyer  
**New Open-Chain and Cyclic Tetrapeptides, Consisting of  $\alpha$ -,  $\beta$ -, and  $\beta$ -Amino-Acid Residues, as Somatostatin Mimics – A Survey**  
Helv. Chim. Acta **91**, 1736 – 1786 (2008)
- 813 Hartmut Meyer, Albert K. Beck, Radovan Sebesta, Dieter Seebach  
**Benzyl Isopropoxymethyl Carbamate – An Aminomethylating Reagent for Mannich Reactions of Titanium Enolates**  
Organic Syntheses **85**, 287 – 294 (2008)
- 814 J. Constanze Müller-Hartwig, Luigi LaVecchia, Hartmut Meyer, Albert K. Beck, Dieter Seebach  
**(R)-2-(Benzylloxycarbonylamino-Methyl)-3-Phenylpropionic Acid (Z- $\beta$ -hPhe-OH): Preparation of a  $\beta$ -Amino acid with the Auxiliary DIOZ**  
Organic Syntheses **85**, 295 – 306 (2008)
- 815 Dieter Seebach, James Gardiner  
 **$\beta$ -Peptidic Peptidomimetics**  
Acc. Chem. Res. **41**, 1366 – 1375 (2008)
- 816 Ralf David, Robert Günther, Lars Baumann, Tessa Lühmann, Dieter Seebach, Hans-Jörg Hofmann, Annette G. Beck-Sickinger  
**Artificial Chemokines: Combining Chemistry and Molecular Biology for the Elucidation of Interleukin-8 Functionality**  
J. Am. Chem Soc. **130**, 15311 – 15317 (2008)
- 817 Dieter Seebach, Uroš Grošelj, D. Michael Badine, W. Bernd Schweizer, Albert K. Beck  
**Isolation and X-Ray Structures of Reactive Intermediates of Organocatalysis with Diphenylprolinol Ethers and with Imidazolidinones – A Survey and Comparison with Computed Structures and with 1-Acyl-imidazolidinones –**

**The 1,5-Repulsion and the Geminal-Diaryl Effect at Work**

Helv. Chim. Acta **91**, 1999 - 2034 (2008)

- 818 Stefania Capone, Iris Kieltsch, Oliver Flögel, Gerald Lelais, Antonio Togni,  
Dieter Seebach  
**Electrophilic S-Trifluoromethylation of Cysteine Side Chains in  $\alpha$ - and  $\beta$ -Peptides**  
**Isolation of Trifluoromethylated Sandostatin® (Octreotide) Derivatives**  
Helv. Chim. Acta **91**, 2035 - 2056 (2008)
- 819 Dieter Seebach, Albert K. Beck, Stefania Capone, Gildas Deniau, Uroš Grošelj,  
Engelbert Zass  
**Enantioselective Preparation of  $\beta$ -Amino-Acid Derivatives for  $\beta$ -Peptide Synthesis**  
Synthesis **2009**, 1 - 32
- 820 Uroš Grošelj, W. Bernd Schweizer, Marc-Olivier Ebert, Dieter Seebach  
**5-Benzyl-3-methylimidazolidin-4-one-Derived Reactive Intermediates of**  
**Organocatalysis – A Comforting Resemblance of X-Ray, NMR, and DFT Solid-**  
**Phase, Liquid-Phase, and Gas-Phase Structures**  
Helv. Chim. Acta **92**, 1 - 13 (2009)
- 821 Dieter Seebach  
**Endorsement**  
Stefan Berger, Dieter Sicker „Classics in Spectroscopy – Isolation and Structure  
Elucidation of Natural Products“ Wiley-VCH, Weinheim, 2009
- 822 Tobias Heck, Dieter Seebach, Steffen Osswald, Matthijs K. J. ter Wiel, Hans-Peter E.  
Kohler, Birgit Geueke  
**Kinetic Resolution of Aliphatic  $\beta$ -Amino Acid Amides by  $\beta$ -Aminopeptidases**  
ChemBioChem **10**, 1558 – 1561 (2009)
- 823 Uroš Grošelj, Dieter Seebach, D. Michael Badine, W. Bernd Schweizer, Albert K. Beck,  
Ingo Krossing, Petra Klose, Yujiro Hayashi, Tadafumi Uchimaru  
**Structures of the Reactive Intermediates in Organocatalysis with Diarylprolinol**  
**Ethers**

824 Toshinori Shimanouchi, Peter Walde, James Gardiner, Stefania Capone, Dieter Seebach, Ryoichi Kuboi

**Inversion of the Configuration of a Single Stereocenter in a  $\beta$ -Heptapeptide Leads to Drastic Changes in its Interaction with Phospholipid Bilayers**

ChemBioChem **10**, 1978 – 1981 (2009)

825 Gildas Deniau, Dieter Seebach

**Preparation of N-Fmoc-Protected (S)-5-Amino-4,4-difluoro-7-methyloctanoic Acid, a Possible Dipeptide Isostere**

Helv. Chim. Acta **92**, 1720 - 1728 (2009)

826 Dieter Seebach, Hans Widmer, Stefania Capone, Richard Ernst, Tobias Bremi, Iris Kieltsch, Antonio Togni, Dominique Monna, Daniel Langenegger, Daniel Hoyer

**NMR-Solution Structures and Affinities for the Human Somatostatin G-Protein-Coupled Receptors hsst<sub>1,5</sub> of CF<sub>3</sub> Derivatives of Sandostatin® (Octreotide)**

Helv. Chim. Acta **92**, 2577 - 2586 (2009)

827 Marc-Olivier Ebert, James Gardiner, Steven Ballet, Andrew D. Abell, Dieter Seebach

**Synthesis and High-Resolution NMR Structure of a  $\beta$ -Octapeptide with and without a Tether Introduced by Olefin Metathesis**

Helv. Chim. Acta **92**, 2643 - 2658 (2009)

828 James Gardiner, Raveendra I. Mathad, Berhard Jaun, Jürg V. Schreiber, Oliver Flögel  
Dieter Seebach

**$\beta$ -Peptide Conjugates: Syntheses and CD and NMR Investigations of  $\beta/\alpha$ -Chimeric Peptides, of a DPA- $\beta$ -Decapeptide, and of a PEGylated- $\beta$ -Heptapeptide**

Helv. Chim. Acta **92**, 2698 - 2721 (2009)

829 Dieter Seebach, Engelbert Zass, W. Bernd Schweizer, Amber J. Thompson, Alister French, Benjamin G. Davis, Gwenda Kyd, Ian J. Bruno

**Polymer-Rückgrat-Konformation – eine schwierige Aufgabe für Datenbank-**

## **Suchaktionen**

Angew. Chem. **121**, 9774 – 9776 (2009)

Angew. Chem. Int. Ed. **48**, 9596 – 9598 (2009)

- 830 Dieter Seebach, Uroš Grošelj, W. Bernd Schweizer, Stefan Grimme, Christian Mück-Lichtenfeld

**Experimental and Theoretical Conformational Analysis of 5-Benzylimidazolidin-4-one Derivatives – a ‘Playground’ for Studying Dispersion Interactions and a ‘Windshield-Wiper’ Effect in Organocatalysis**

Helv. Chim. Acta **93**, 1 - 16 (2010)

- 831 Hanspeter Sprecher, Stefan Pletscher, Manuel Möri, Roger Marti, Christoph Gaul, Krystyna Patora-Komisarska, Ekatarina Otchertianova, Albert K. Beck, Dieter Seebach  
**Applications of the Chiral Auxiliaries DIOZ and TRIOZ for Conjugate Additions and Comparison with Other Auxiliaries**

Helv. Chim. Acta **93**, 90 - 110 (2010)

- 832 Ulf-Peter Apfel, Manfred Rudolph, Christina Apfel, Christian Robl, Daniel Langenegger, Daniel Hoyer, Bernhard Jaun, Marc-Oliver Ebert, Theodor Alpermann, Dieter Seebach, Wolfgang Weigand

**Reaction of Fe<sub>3</sub>(CO)<sub>12</sub> with octreotide—chemical, electrochemical and biological investigations**

Dalton Trans. **39**, 3065-3071 (2010)

- 833 Tobias Heck, Venkata S. Makam, Jochen Lutz, Lars M. Blank, Andreas Schmid, Dieter Seebach, Hans-Peter E. Kohler, Birgit Geueke

**Kinetic Analysis of L-Carnosine Formation by β-Aminopeptidases**

Adv. Synth. Catal. **352**, 407 – 415 (2010)

- 834 Dieter Seebach, Ryan Gilmour, Uroš Grošelj, Gildas Deniau, Christof Sparr, Marc-Oliver Ebert, Albert K. Beck, Lynne B. McCusker, Dubravka Šišak, Tadafumi Uchimaru  
**Stereochemical Models for Discussing Additions to α,β-Unsaturated Aldehydes Organocatalyzed by Diarylprolinol or Imidazolidinone Derivatives – Is There an**

**‘(E)/(Z)-Dilemma’?**

Helv. Chim. Acta **93**, 603 - 634 (2010)

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

**$\beta$ -Aminopeptidase-Catalyzed Biotransformations of  $\beta$ -Dipeptides: Kinetic Resolution and Enzymatic Coupling**

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

836 Dieter Seebach

**Erzeugung sekundärer, tertiärer und quartärer Zentren durch geminale Disubstitution von Carbonyl-Sauerstoffatomen**

Angew. Chem. **123**, 99 – 105 (2011)

Angew. Chem. Int. Ed. **50**, 96 – 101 (2011)

837 Krystyna Patora-Komisarska, Dominika Jadwiga Podwysocka, Dieter Seebach

**Preparation of the  $\beta$ -Homoselenocysteine Derivatives Fmoc-(S)- $\beta$ :hSec(PMB)-OH and Boc-(S)- $\beta$ :hSec(PMB)-OH for Solution and Solid-Phase Peptide Synthesis**

Helv. Chim. Acta **94**, 1 - 17 (2011)

838 Faustin Kamena, Bopanna Monnanda, Danielle Makou, Stefania Capone, Krystyna Patora-Komisarska, Dieter Seebach

**On the Mechanism of Eukaryotic Cell Penetration by  $\alpha$ - and  $\beta$ -Oligoarginines – Targeting Infected Erythrocytes**

Chem. Biodiversity **8**, 1 - 12 (2011)

839 Bernhard Jaun, Dieter Seebach, Raveendra I. Mathad

**Note: Helix or No Helix of  $\beta$ -Peptides Containing  $\beta$ :hAla( $\alpha$ F) Residues?**

Helv. Chim. Acta **94**, 355 - 361 (2011)

840 Krystyna Patora-Komisarska, Meryem Benohoud, Hayato Ishikawa, Dieter Seebach, Yujiro Hayashi

**Organocatalyzed Michael Addition of Aldehydes to Nitro Alkenes – Generally**

**Accepted Mechanism Revisited and Revised**

Helv. Chim. Acta **94**, 719 - 745 (2011)

- 841 Dieter Seebach, Aneta Lukaszuk, Krystyna Patora-Komisarska, Dominika Podwysocka, James Gardiner, Marc-Olivier Ebert, Jean Claude Reubi, Renzo Cescato, Beatrice Waser, Peter Gmeiner, Harald Hübner, Catherine Rougeot

**On the Terminal Homologation of Physiologically Active Peptides as a Means of Increasing Stability in Human Serum – Neurotensin, Opiorphin, B27-KK10 Epitope, NPY**

Chem. Biodiversity **8**, 711 - 739 (2011)

- 842 Louise K. Charkoudian, Corey W. Liu, Stefania Capone, Shiven Kapur, David E. Cane, Antonio Togni, Dieter Seebach, Chaitan Khosla

**Probing the interactions of an acyl carrier protein domain from the 6-deoxyerythronolide B synthase**

Protein Science **20**, 1244 - 1255 (2011)

- 843 Julien Chapelat, Frédéric Berst, Andreas L. Marzinzik, Henrik Moebitz, Peter Druckes, Doriano Fabbro, Joerg Trappe, Dieter Seebach

**Substrate profiling of IGF-1R and InsR: Identification of a potent pentamer substrate**

Bioorg. Med. Chem. Lett. **21**, 7030 – 7033 (2011)

- 844 Tomohiro Yoshinari, François Gessier, Christian Noti, Albert K. Beck, Dieter Seebach
- Stereoselective Preparation of 3-Amino-2-fluoro Carboxylic Acid Derivatives, and Their Incorporation in Tetrahydropyrimidin-4(1H)-ones, and in Open-Chain and Cyclic  $\beta$ -Peptides**

Helv. Chim. Acta **94**, 1908 - 1942 (2011)

- 845 Damaris A. Niggli, Marc-Olivier Ebert, Zhixiong Lin, Dieter Seebach, Wilfred F. van Gunsteren

**Helical Content of a  $\beta$ -Octapeptide in Methanol: Molecular Dynamics Simulations Explain a Seeming Discrepancy between Conclusions Derived from CD and NMR**

**Data**Chem. Eur. J. **18**, 586 – 593 (2012)

846 Dieter Seebach

**Foreword**

in A. Hassner, I. Namboothiri: "Organic Syntheses Based on Name Reactions – A practical guide to 750 transformations", 3rd Edition, Elsevier, Amsterdam, 2012

847 Dieter Seebach

**Foreword**

in R. E. Gawley, J. Aubé: "Principles of Asymmetric Synthesis", 2nd Edition, Elsevier Science, Kidlington, 2012

848 Dieter Seebach, Xiaoyu Sun, Christof Sparr, Marc-Olivier Ebert, W. Bernd Schweizer, Albert K. Beck

**1,2-Oxazine N-Oxides as Catalyst Resting States in Michael Additions of Aldehydes to Nitro Olefins Organocatalyzed by  $\alpha,\alpha$ -Diphenylprolinol Trimethylsilyl Ether**Helv. Chim. Acta **95**, 1064 - 1078 (2012)

849 Arkadius Pichota, Volker Gramlich, Albert K. Beck, Dieter Seebach

**Preparation and Characterization of New C<sub>2</sub>- and C<sub>1</sub>-Symmetric Nitrogen, Oxygen, Phosphorous and Sulfur Derivatives and Analogs of TADDOL. - Part I: Compounds Containing One or Two Sulfur-Containing Substituents and Use in Cu-Catalyzed Enantioselective Conjugate Additions to Cyclic Enones.**Helv. Chim. Acta **95**, 1239 - 1272 (2012)

850 Arkadius Pichota, Volker Gramlich, Hans-Ulrich Bichsel, Thomas Styner, Thomas Knöpfel, Ralf Wünsch, Tobias Hintermann, W. Bernd Schweizer, Albert K. Beck, Dieter Seebach

**Preparation and Characterization of New C<sub>2</sub>- and C<sub>1</sub>-Symmetric Nitrogen, Oxygen, Phosphorous, and Sulfur Derivatives and Analogs of TADDOL. - Part II: TADDAMIN-Derived and Phosphorous-Containing Compounds**Helv. Chim. Acta **95**, 1273 - 1302 (2012)

- 851 Dieter Seebach, Albert K. Beck, Hans-Ulrich Bichsel, Arkadius Pichota, Christof Sparr, Ralf Wünsch, W. Bernd Schweizer  
**Preparation and Characterization of New C2- and C1-Symmetric Nitrogen, Oxygen, Phosphorous, and Sulfur Derivatives and Analogs of TADDOL. - Part III: Some New Chiral Brønsted Acids for Organocatalysis and pKa Values in MeO-(CH<sub>2</sub>)<sub>2</sub>-OH/H<sub>2</sub>O – A Survey**  
Helv. Chim. Acta **95**, 1303 - 1324 (2012)
- 852 Tobias Heck, Tobias Merz, Arthur Reimer, Dieter Seebach, Daniel Rentsch, Christophe Briand, Markus G. Grütter, Hans-Peter E. Kohler, Birgit Geueke  
**Crystal Structures of BapA Complexes with β-Lactam-Derived Inhibitors Illustrate Substrate Specificity and Enantioselectivity of β-Aminopeptidases**  
ChemBioChem **13**, 2137 - 2145 (2012)
- 853 Tobias Merz, Tobias Heck, Birgit Geueke, Peer R. E. Mittl, Christophe Briand, Dieter Seebach, Hans-Peter E. Kohler, Markus G. Grütter  
**Autoproteolytic and Catalytic Mechanisms for the β-Aminopeptidase BapA—A Member of the Ntn Hydrolase Family**  
Structure **20**, 1850 - 1860 (2012)
- 854 Julien Chapelat, Frédéric Berst, Andreas L. Marzinzik, Henrik Moebitz, Peter Druckes, Joerg Trappe, Doriano Fabbro, Dieter Seebach  
**The Substrate-Activity-Screening methodology applied to receptor tyrosine kinases: A proof-of-concept study**  
Eur. J. Med. Chem. **57**, 1 - 9 (2012)
- 855 Beata Kolesinska, Dominika J. Podwysocka, Magnus A. Rueping, Dieter Seebach, Faustin Kamena, Peter Walde, Markus Sauer, Barbara Windschieg, Mira Meyer-Ács, Marc Vor der Brüggen, Sebastian Giehring  
**Permeation through Phospholipid Bilayers, Skin-Cell Penetration, Plasma Stability, and CD-Spectra of α- and β-Oligoproline Derivatives**  
Chem. Biodiversity **10**, 1 - 38 (2013)

- 856 Dieter Seebach, Xiaoyu Sun, Marc-Olivier Ebert, W. Bernd Schweizer, Nirupam Purkayastha, Albert K. Beck, Jörg Duschmalé, Helma Wennemers, Takasuke Mukaiyama, Meryem Benohoud, Yujiro Hayashi, Markus Reiher  
**Stoichiometric Reactions of Enamines Derived from Diphenylprolinol Silyl Ethers with Nitro Olefins and Lessons for the Corresponding Organocatalytic Conversions – a Survey**  
Helv. Chim. Acta **96**, 799 - 852 (2013)
- 857 Nirupam Purkayastha, Klaus Eyer, Tom Robinson, Petra S. Dittrich, Albert K. Beck, Dieter Seebach, Beata Kolesinska, Riccardo Cadalbert  
**Enantiomeric and Diastereoisomeric (Mixed) L/D-Octaarginine Derivatives – A Simple Way of Modulating the Properties of Cell-Penetrating Peptides**  
Chem. Biodiversity **10**, 1165 - 1184 (2013)
- 858 Christof Sparr, Nirupam Purkayastha, Beata Kolesinska, Martin Gengenbacher, Borko Amulic, Kai Matuschewski, Dieter Seebach, Faustin Kamena  
**Improved Efficacy of Fosmidomycin against Plasmodium and Mycobacterium Species by Combination with the Cell-Penetrating Peptide Octaarginine**  
Antimicrob. Agents Chemother. **57**, 4689 – 4698 (2013)
- 859 Uroš Grošelj, Črtomir Podlipnik, Jure Bezenšek, Jurij Svetec, Branko Stanovnik, Dieter Seebach  
**Reversal of the Stereochemical Course of 1-Methyl-1*H*-indole Addition to Cinnamaldehyde with *cis*-5-Benzyl-(2-fluoromethyl)-2,3-dimethylimidazolidin-4-ones as Catalysts – a Puzzling 'Fluorine Effect'**  
Helv. Chim. Acta **96**, 1815 - 1821 (2013)
- 860 Christof Sparr, Nirupam Purkayastha, Tomohiro Yoshinari, Dieter Seebach, Simone Maschauer, Olaf Prante, Harald Hübner, Peter Gmeiner, Beata Kolesinska, Renzo Cescato, Beatrice Waser, Jean Claude Reubi  
**Syntheses, Receptor Bindings, *in vitro*, *in vivo* Stabilities and Biodistributions of DOTA-Neurotensin (8-13) Derivatives Containing  $\beta$ -Amino-acid Residues – A Lesson about the Importance of Animal Experiments**

- 861 Dieter Seebach  
**A Journey from the Pool of Chiral Synthetic Building Blocks to Cell-Penetrating Peptides, to a Novel Type of Enzyme – and Back**  
Chimia **67**, 844 – 850 (2013)
- 862 Dieter Seebach  
**Foreword**  
Bernard Testa, John Caldwell, M. Volkan Kisakürek (Eds.), *Organic Stereochemistry – Guiding Principles and Biomedical Relevance*  
VHCA, Zürich, 2014, pp. vii-ix
- 863 Dieter Seebach  
**Joy and Illustration with Organofluorine Compounds – A Fluorous Autobiography**  
Chimia **68**, 348 – 355 (2014)
- 864 Uroš Grošelj, Albert K. Beck, W. Bernd Schweizer, Dieter Seebach  
**Preparation and Structures of 2-Substituted-5-benzyl-3-methyl-1,3-imidazolidin-4-one-Derived Iminium Salts, Reactive Intermediates in Organocatalytic Transformations Involving  $\alpha,\beta$ -Unsaturated Aldehydes**  
Helv. Chim. Acta **97**, 751 - 796 (2014)
- 865 Dubravka Šišák Jung, Christian Baerlocher, Lynne B. McCusker, Tomohiro Yoshinari, Dieter Seebach  
**Solving the structures of light-atom compounds with powder charge flipping**  
J. Appl. Cryst. **47**, 1569 - 1576 (2014)
- 866 Dieter Seebach, Tomohiro Yoshinari, Albert K. Beck, Marc-Olivier Ebert, Alejandro Castro-Alvarez, Jaume Vilarrasa, Markus Reiher  
**How Small Amounts of Impurities Are Sufficient to Catalyze the Interconversion of Carbonyl Compounds and Iminium Ions, or Is There a Metathesis through 1,3-Qxazetidinium Ions? Experiments, Speculations, and Calculations**

867 Carolin Schaab, Ralf Christian Kling, Jürgen Einsiedel, Harald Hübner, Tim Clark,  
Dieter Seebach, Peter Gmeiner

**Structure-Based Evolution of Subtype-Selective Neurtensin Receptor Ligands**

ChemistryOpen **3**, 206 - 218 (2014)

868 Yujiro Hayashi, Daichi Okamura, Tatsuya Yamazaki, Yasuto Ameda, Hiroaki Gotoh,  
Seiji Tsuzuki, Tadafumi Uchimaru, Dieter Seebach

**A Theoretical and Experimental Study of the Effects of Silyl Substituents in  
Enantioselective Reactions Catalyzed by Diphenylprolinol Silyl Ether**

Chem. Eur. J. **20**, 17077-17088 (2014)

869 Nirupam Purkayastha, Stefania Capone, Albert K. Beck Dieter Seebach, Jennifer Leeds,  
Katherine Thompson, Heinz E. Moser

**Antibacterial Activity of Enrofloxacin and Ciprofloxacin Derivatives of  $\beta$ -  
Octaarginine**

Chem. Biodiversity **12**, 179 - 193 (2015)

870 Beata Kolesinska, Klaus Eyer, Tom Robinson, Petra S. Dittrich, Albert K. Beck, Dieter  
Seebach, Peter Walde

**Interaction of  $\beta/\beta^2$ -Peptides, consisting of Val-Ala-Leu Segments, with POPC Giant  
Unilamellar Vesicles (GUVs) and White Blood Cancer Cells (U937) – A New Type  
of Cell-Penetrating Peptides, and a Surprising Chain-Length Dependence of Their  
Vesicle- and Cell-Lysing Activity**

Chem. Biodiversity **12**, 697 - 732 (2015)

871 Daniel Meyer, Roger Marti, Dieter Seebach

**Scalable Enantioselective Synthesis of Fmoc- $\beta^2$ -Serine and Fmoc- $\beta^2$ -Threonine by  
an Organocatalytic Mannich**

Eur. J. Org. Chem. **2015**, 4883 - 4891

- 872 Monika Świontek, Zbigniew J. Kamiński, Beata Kolesińska, Dieter Seebach  
**Visible-Light Microscopic Discovery of up to 150 µm Long Helical Amyloid Fibrils Built of the Dodecapeptide H-(Val-Ala-Leu)<sub>4</sub>-OH and of Decapeptides Derived from Insulin**  
Chem. Biodiversity **13**, 1111 - 1117 (2016)
- 873 Dieter Seebach  
**Preface – Special Issue Dedicated to Professor Dieter Enders**  
Synthesis, **49**, I - IV (2017)
- 874 Dieter Seebach  
**What I Have Learned from Jack Dunitz**  
Isr. J. Chem., **57**, 55 - 65 (2017)
- 875 Tamara Husch, Dieter Seebach, Albert K. Beck, Markus Reiher  
**Rigorous Conformational Analysis of Pyrrolidine Enamines with Relevance to Organocatalysis**  
Helv. Chim. Acta **100**, e1700182 (2017) (1of17)
- 876 Beata Kolesinska, Joanna Wasko, Zbigniew Kaminski, Birgit Geuek, Hans-Peter E. Kohler, Dieter Seebach  
**Labeling and Protecting N-Terminal Protein Positions by β-Peptidyl Aminopeptidase-Catalyzed-Attachment of β-Amino-Acid Residues – insulin as a first example**  
Helv. Chim. Acta **101**, e1700259 (2018) (1of10)
- 877 Marcel Grogg, Donald Hilvert, Marc-Olivier Ebert, Albert K. Beck, Dieter Seebach, Felix Kurth, Petra S. Dittrich, Christof Sparr, Sergio Wittlin, Matthias Rottmann, Pascal Mäser  
**Cell Penetration, Herbicidal Activity, and in-vivo-Toxicity of Oligo-Arginine Derivatives and of Novel Guanidinium-Rich Compounds Derived from the Biopolymer Cyanophycin**  
Helv. Chim. Acta **101**, e1800112 (2018) (1of14)

- 878 Felix Kurth, Petra S. Dittrich, Peter Walde, Dieter Seebach  
**Influence of the Membrane Dye R18 and of DMSO on Cell Penetration of Guanidinium-Rich Peptides**  
Chem Biodiversity, **15**, e1800302 (2018) (1of9)
- 879 Marcel Grogg, Donald Hilvert, Albert K. Beck, Dieter Seebach  
**Syntheses of Cyanophycin Segments for Investigations of Cell-Penetration Synthesis**, **51**, 31 - 39 (2019)
- 880 Dieter Seebach  
**Nachruf: Teruaki Mukaiyama (1927-2018)**  
Angew. Chem. **131**, 5859 - 5860 (2019)  
Angew. Chem. Int. Ed. **58**, 5803 - 5804 (2019)
- 881 Dieter Seebach  
**Preparation of Enantiomerically Pure Compounds Employing Anodic Oxidations of Carboxylic Acids – A Late Review of Research Done in the 1980ies**  
Helv. Chim. Acta **102**, e1900072 (2019) (1of8)
- 882 Tran Nguyen-Ho-Bao, Maxi Berberich, Wanpeng Zheng, Dieter Seebach, Arwid Daugschies, Faustin Kamena  
**A simple and efficient transfection protocol for *Cryptosporidium parvum* using Polyethylenimine (PEI) and Octaarginine**  
Parasitology 2020 (1of 6) <https://doi.org/10.1017/S0031182020000724>
- 883 Itai Sharon, Asfarul S. Haque, Marcel Grogg, Indrajit Lahiri, Dieter Seebach, Andres E. Leschziner, Donald Hilvert, T. Martin Schmeing  
**Structures and function of the amino acid polymerase cyanophycin synthetase**  
Nature Chemical Biology 2021 (1 of 24) <https://doi.org/10.1038/s41589-021-00854-y>