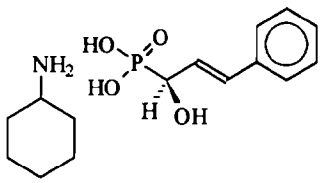
V.J. Blazis, K.J. Koeller, C.D. Spilling

Tetrahedron: Asymmetry **1994,** *5,* 499



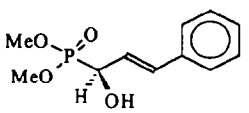
$C_{15}H_{24}O_4NP$

(1S) (1-hydroxy-3-phenyl-2*E*-propenyl) phosphonic acid, cyclohexylammonium salt

E.e.= >99% [by conversion to di-OMe ester and HPLC]
$[\alpha]_D$= −3.0 (c 0.68, H_2O)
mp= 230-231 °C (decomp) (MeOH, Et_2O)
Source of chirality: (1R,2R) cyclohexane-1,2-diamine
Absolute configuration: S
(assigned by X-ray of the precusor)

V J Blazis, K.J. Koeller, C.D. Spilling

Tetrahedron: Asymmetry **1994,** *5,* 499



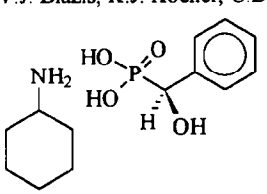
$C_{11}H_{15}O_4P$

(1S) Di-O-methyl (1-hydroxy-3-phenyl-2*E*-propenyl) phosphonate

E.e.= >99% [by HPLC, ChiralPak AS)
$[\alpha]_D$= −23.6 (c 2.74, $CHCl_3$)
mp= 99-99.5 °C (EtOAc, hexanes)
Source of chirality: (1R,2R) cyclohexane-1,2-diamine
Absolute configuration. S
(assigned by X-ray of precursor)

V.J. Blazis, K.J. Koeller, C.D. Spilling

Tetrahedron: Asymmetry **1994,** *5,* 499



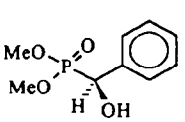
$C_{16}H_{28.5}O_4N_{1.5}P$

(1S) (phenylhydroxymethyl) phosphonic acid, cyclohexylammonium salt

E.e.= 86% [by conversion to di-OMe ester and HPLC]
$[\alpha]_D$= −13.8 (c 0 78, H_2O)
mp= 226-228 °C (decomp) (MeOH, Et_2O)
Source of chirality: (1R,2R) cyclohexane-1,2-diamine
Absolute configuration: S

V.J. Blazis, K J. Koeller, C.D. Spilling

Tetrahedron: Asymmetry **1994,** *5,* 499



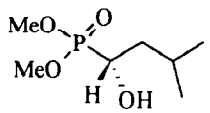
$C_9H_{13}O_4P$

(1S) Di-O-methyl (phenylhydroxymethyl) phosphonate

E.e.= 86% [by HPLC, ChiralPak AS]
$[\alpha]_D$= −38.5 (c 0.8, $CHCl_3$)
mp= 96.5-98.5 °C (EtOAc, hexanes)
Source of chirality: (1R,2R) cyclohexane-1,2-diamine
Absolute configuration: S

V J. Blazis, K J. Koeller, C D Spilling

Tetrahedron: Asymmetry **1994,** *5,* 499



$C_7H_{17}O_4P$

(1R) Di-O-methyl (1-hydroxy-3-methyl-butyl) phosphonate

E.e.= >99%

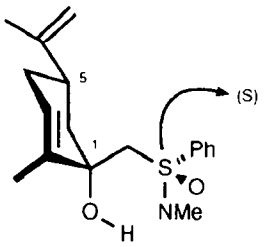
$[\alpha]_D$= −25.0 (c 0.92, $CHCl_3$)

Source of chirality: (1R,2R) cyclohexane-1,2-diamine

Absolute configuration. R

Marcelo D. Preite, Manuel González-Sierra, Juan Zinczuk and Edmundo A. Rúveda.

Tetrahedron: Asymmetry **1994,** *5,* 503



$C_{18}H_{25}O_2NS$

E. e.= 100% (by NMR).

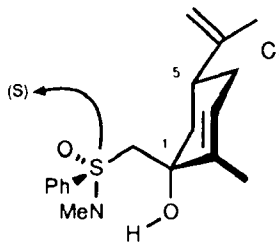
mp= 55° (dec.) from ether.

Source of chirality: natural, asymmetric synthesis (addition) and resolution.

Absolute configuration: 1S, 5S, *SS* (based in the known configuration of starting materials).

Marcelo D. Preite, Manuel González-Sierra, Juan Zinczuk and Edmundo A. Rúveda.

Tetrahedron: Asymmetry **1994,** *5,* 503



$C_{18}H_{25}O_2NS$

E. e.= 100% (by NMR).

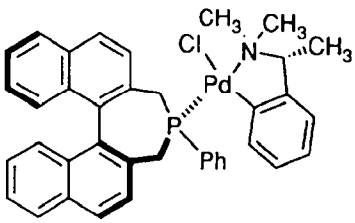
mp= 105° from ether.

Source of chirality: natural, asymmetric synthesis (addition) and resolution.

Absolute configuration: 1R, 5R, *SS* (based in the known configuration of starting materials).

S. Gladiali, A. Dore, D. Fabbri, O. De Lucchi and M. Manassero

Tetrahedron: Asymmetry **1994,** *5,* 511



$C_{38}H_{36}ClNPdP$

E.e.= 100% (by NMR)

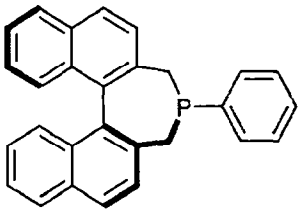
$[\alpha]_D^{25}$= -208.7 (c= 1.0, CH_2Cl_2)

Source of chirality: Di-μ-bis[(R)-dimethyl(α-methylbenzyl)aminato-2C,N]-dipalladium(II)

Absolute configuration: S,R (assigned by X-ray analysis)

S. Gladiali, A. Dore, D. Fabbri, O. De Lucchi and M. Manassero

Tetrahedron: Asymmetry **1994**, *5*, 511



E.e.= 100% (by NMR of (R)-N,N-dimethyl-α-methylbenzylamine Pd complex and by HPLC on 0.25 m Chiracel OD column)

$[\alpha]_D^{25}$ = -90.2 (c= 0.79, $CHCl_3$)

Source of chirality: resolution using Pd complex of (R)-N,N-dimethyl-α-methylbenzylamine

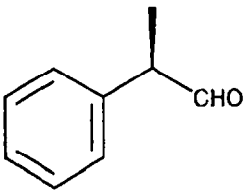
Absolute configuration: S (assigned by X-ray analysis of (R)-N,N-dimethyl-α-methylbenzylamine Pd complex)

$C_{28}H_{21}P$

4-Phenyl-4,5-Dihydro-3H-dinaphto[2,1-c; 1', 2'-e]phosphepine

S. Gladiali, A. Dore, D. Fabbri, O. De Lucchi and M. Manassero

Tetrahedron: Asymmetry **1994**, *5*, 511



E.e.= 20% (determined by G.L.C.)

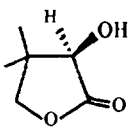
Source of chirality: enantioselective hydroformylation of styrene by Rh/(S)-4-Phenyl-4,5-dihydro[2,1-c; 1', 2'-e]phosphepine catalyst

$C_9H_{10}O$

(R)-(-)-2-phenylpropanal

Frédéric Hapiot, Francine Agbossou and André Mortreux

Tetrahedron: Asymmetry **1994**, *5*, 515



E. e. = 42% (by chiral GC analysis)

$[\alpha]_D^{25}$ -22.1 (*c* 2.05, H_2O)

Absolute configuration : 2R

$C_6H_{10}O_3$

(R)-3,3-dimethyl-2-hydroxy-γ-butyrolactone

Source of chirality : asymmetric hydrogenation in presence of ruthenium-[(5S)-(+)-N-diphenylphosphino)-5-(diphenylphosphinoxy methyl)-2-pyrrolidine] catalyst

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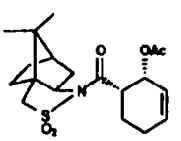
Scott C. Mayer, Amy J. Pfizenmayer, Richard Cordova, Wen-Ren Li and Madeleine M. Joullié*

Tetrahedron: Asymmetry **1994**, *5*, 519



E. e. = > 99%

$[\alpha]_D^{22}$ -223 (c 0.770, $CHCl_3$)

Source of Chirality: Diels-Alder incorporating D-2,10-camphorsultam

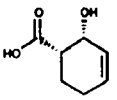
Absolute configuration: 1S, 2R, 7'S

$C_{19}H_{27}NO_5S$ (8)

4'-(1S,2R-2-acetoxy-3-cyclohexene-1-carbonyl)-(7S')-10',10'-dimethyl-5'-thia-4'-aza-tricyclo[5.2.1.$0^{1,7}$]decane-5'5'-dioxide

Scott C. Mayer, Amy J. Pfizenmayer, Richard Cordova, Wen-Ren Li and Madeleine M. Joullié*

Tetrahedron: Asymmetry **1994**, *5*, 519

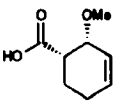


$C_7H_{10}O_3$ **(9)**
(1S,2R)-2-Hydroxy-3-cyclohexene-1-carboxylic acid

E. e. = > 99%
$[\alpha]_D^{22}$ -167 (c 2.65, $CHCl_3$)
Source of Chirality: D-2,10-camphorsultam
Absolute configuration: 1S, 2R

Scott C. Mayer, Amy J. Pfizenmayer, Richard Cordova, Wen-Ren Li and Madeleine M. Joullié*

Tetrahedron: Asymmetry **1994**, *5*, 519

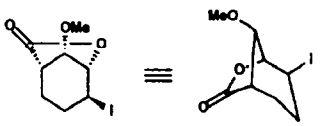


$C_8H_{12}O_3$ **(10)**
(1S,2R)-2 Methoxy 3 cyclohexene-1-carboxylic acid

E. e. = > 99%
$[\alpha]_D^{22}$ -201 (c 2.16, $CHCl_3$)
Source of Chirality: D-2,10-camphorsultam
Absolute configuration: 1S, 2R

Scott C. Mayer, Amy J. Pfizenmayer, Richard Cordova, Wen-Ren Li and Madeleine M. Joullié*

Tetrahedron: Asymmetry **1994**, *5*, 519

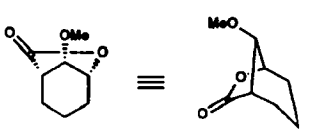


$C_8H_{11}IO_3$ **(11)**
(1S,2S,5S,8S) 2-Iodo-6-oxo-8-methoxybicyclo[3 2.1]-ζ-caprolactone

E. e. = > 99%
$[\alpha]_D^{22}$ -57.2 (c 2.18, $CHCl_3$)
Source of Chirality: D-2,10-camphorsultam
Absolute configuration: 1S, 2S, 5S, 8S

Scott C. Mayer, Amy J. Pfizenmayer, Richard Cordova, Wen-Ren Li and Madeleine M. Joullié*

Tetrahedron: Asymmetry **1994**, *5*, 519

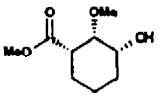


$C_8H_{12}O_3$ **(12)**
(1R,5S,8S) 6-oxo-8-methoxybicyclo[3.2.1]-ζ-caprolactone

E. e. = > 99%
$[\alpha]_D^{22}$ -20.5 (c 1.05, $CHCl_3$)
Source of Chirality: D-2,10-camphorsultam
Absolute configuration: 1R, 5S, 8S

Scott C. Mayer, Amy J. Pfizenmayer, Richard Cordova, Wen-Ren Li and Madeleine M. Joullié*

Tetrahedron: Asymmetry **1994,** *5,* 519



E. e. = > 99%
$[\alpha]_D^{22}$ +6.52 (c 1.04, $CHCl_3$)
Source of Chirality: D-2,10-camphorsultam
Absolute configuration: 1S, 2S, 3R

$C_9H_{16}O_4$ (13)
(1S,2S,3R) Methyl 3-hydroxy-2-methoxycyclohexane-1-carboxylate

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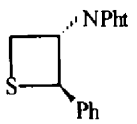
F. Kaźmierczak, K. Gawrońska, U. Rychlewska and J. Gawroński*

Tetrahedron: Asymmetry **1994,** *5,* 527

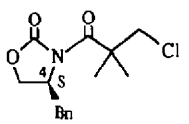


m.p. 122.5-124°
$[\alpha]_D^{20}$ 213.3 (c=1, acetone)
Absolute configuration: 2R,3S
Source of chirality (1S,2S)-2-amino-1-phenyl-1,3-propanediol

$C_{17}H_{13}NO_2S$
(2R,3S)-2-phenyl-3-phthalimidothietane

A. Fadel

Tetrahedron: Asymmetry **1994,** *5,* 531



E.e.> 98% [by ^1H nmr, in the presence of chiral shift reagent]
$[\alpha]_D$ = +34.1 (c 1, $CHCl_3$)
mp 84.6 °C
Source of chirality : (S)-phenylalanine
Absolute configuration : S

$C_{15}H_{18}ClNO_3$

(4S)-3-[3'-Chloro-2',2'-dimethylpropanoyl]-4-benzyloxazolidin-2-one

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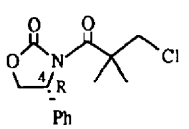
A. Fadel

Tetrahedron: Asymmetry **1994,** *5,* 531



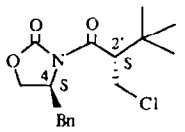
E.e.> 98% [by ^1H nmr, in the presence of chiral shift reagent]
$[\alpha]_D$ = - 93 (c 1, $CHCl_3$)
mp 93.9 °C
Source of chirality : (R)-phenylglycine
Absolute configuration : R

$C_{14}H_{16}NO_3$

(4R)-3-[3'-Chloro-2',2'-dimethylpropanoyl]-4-phenyloxazolidin-2-one

A. Fadel

Tetrahedron: Asymmetry **1994,** *5,* 531



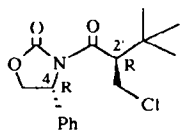
$C_{17}\ H_{22}\ Cl\ N\ O_3$

E.c.> 98% [by ^1H nmr, in the presence of chiral shift reagent]
$[\alpha]_D$ = +29.3 (c 1, $CHCl_3$)
mp 144.1 °C
Source of chirality : (S)-phenylalanine
Absolute configuration : 4S, 2'S
(assigned by analogy to the known *trans* alkylation)

(4S,2'S)-3-[2'-Chloromethyl-3',3'-dimethylbutanoyl]-4-benzyloxazolidin-2-one

A. Fadel

Tetrahedron: Asymmetry **1994,** *5,* 531



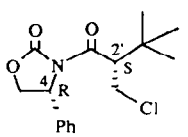
$C_{16}\ H_{20}\ Cl\ N\ O_3$

E.e.> 98% [by ^1H nmr, in the presence of chiral shift reagent]
$[\alpha]_D$ = -101 (c 1, $CHCl_3$)
mp 162.8 °C
Source of chirality : (R)-phenylglycine
Absolute configuration : 4R, 2'R
(assigned by analogy to the known *trans* alkylation)

(4R,2'R)-3-[2'-Chloromethyl-3',3'-dimethylbutanoyl]-4-phenyloxazolidin-2-one

A. Fadel

Tetrahedron: Asymmetry **1994,** *5,* 531



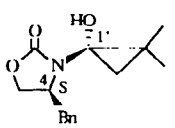
$C_{16}\ H_{20}\ Cl\ N\ O_3$

E.e.> 98% [by ^1H nmr, in the presence of chiral shift reagent]
$[\alpha]_D$ = - 94 (c 1, $CHCl_3$)
Viscous oil
Source of chirality : (R)-phenylglycine
Absolute configuration : 4R, 2'S
(assigned relatively to its diastereomer)

(4R,2'S)-3-[2'-Chloromethyl-3',3'-dimethylbutanoyl]-4-phenyloxazolidin-2-one

A. Fadel

Tetrahedron: Asymmetry **1994,** *5,* 531



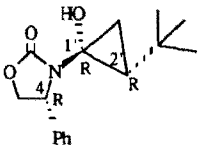
$C_{15}\ H_{19}\ N\ O_3$

D.e.> 98% [by ^1H nmr, in the presence of chiral shift reagent]
$[\alpha]_D$ = +38 (c 0.35, $CHCl_3$)
mp 120.5 °C
Source of chirality : (S)-phenylalanine
Absolute configuration : 4S,1'S
(assigned by analogy to the *trans* cyclization)

(4S,1'S)-3-[2',2'-Dimethyl-1'-hydroxycyclopropyl]-4-benzyloxazolidin-2-one

A. Fadel

Tetrahedron: Asymmetry **1994,** *5,* 531



$C_{16}H_{21}NO_3$

D.e.> 98% [by ^{1}H nmr, in the presence of chiral shift reagent]

$[\alpha]_D$ = - 68.6 (c 1, $CHCl_3$)

mp 139.6 °C

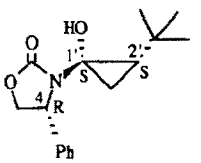
Source of chirality : (R)-phenylglycine

Absolute configuration : 4R,2'R, abs. conf. at 1' not confirmed

(4R,1'R,2'R)-3-[2'-*tert*-Butyl-1'-hydroxycyclopropyl]-4-phenyloxazolidin-2-one

A. Fadel

Tetrahedron: Asymmetry **1994,** *5,* 531



$C_{16}H_{21}NO_3$

D.e.> 98% [by ^{1}H nmr, in the presence of chiral shift reagent]

$[\alpha]_D$ = - 133.3 (c 0.7, $CHCl_3$)

mp 122.2 °C

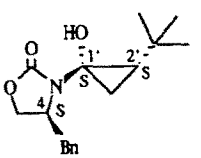
Source of chirality : (R)-phenylglycine

Absolute configuration : 4R,2'S, abs. conf. at 1' not confirmed

(4R,1'S,2'S)-3-[2'-*tert*-Butyl-1'-hydroxycyclopropyl]-4-phenyloxazolidin-2-one

A. Fadel

Tetrahedron: Asymmetry **1994,** *5,* 531



$C_{17}H_{23}NO_3$

E.e.> 98% [by ^{1}H nmr, in the presence of chiral shift reagent]

$[\alpha]_D$ = +27 (c 1, $CHCl_3$)

mp 138.6 °C

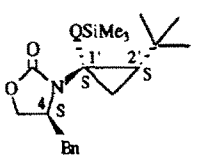
Source of chirality : (S)-phenylalanine

Absolute configuration : 4S,2'S, abs. conf. at 1' not confirmed

(4S,1'S,2'S)-3-[2'-*tert*-Butyl-1'-hydroxycyclopropyl]-4-benzyloxazolidin-2-one

A. Fadel

Tetrahedron: Asymmetry **1994,** *5,* 531



$C_{20}H_{31}NO_3Si$

E.e.> 98% [by ^{1}H nmr, in the presence of chiral shift reagent]

$[\alpha]_D$ = +27.5 (c 1, $CHCl_3$)

mp 158.4 °C

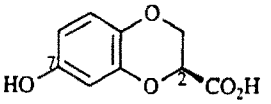
Source of chirality : (S)-phenylalanine

Absolute configuration : 4S,2'S, abs. conf. at 1' not confirmed

(4S,1'S,2'S)-3-[2'-*tert*-Butyl-1'-(trimethylsiloxy)-cyclopropyl]-4-benzyloxazolidin-2-one

Mostafa Khouili, Saïd Lazar, Gérald Guillaumet and Gérard Coudert

Tetrahedron: Asymmetry **1994,** *5,* 535

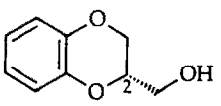


E.e. > 99% (by HPLC on Hypercarb and ^{1}H-NMR of (*R*)-MPTA ester)
$[\alpha]_D$ -55 (*c* 1, CH_3OH)
Source of chirality: *R*-(-)-Pantolactone
Absolute configuration: *2S*

$C_9H_8O_5$
S-(-)-7-hydroxy-2-carboxy-2,3-dihydro-1,4-benzodioxin

Mostafa Khouili, Saïd Lazar, Gérald Guillaumet and Gérard Coudert

Tetrahedron: Asymmetry **1994,** *5,* 535

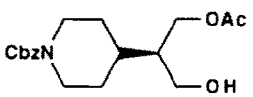


E.e. > 99% (by HPLC on Hypercarb and ^{1}H-NMR of (*R*)-MPTA ester)
$[\alpha]_D$ -33 (*c* 1, $CHCl_3$)
Source of chirality: *R*-(-)-Pantolactone
Absolute configuration: *2S*

$C_9H_{10}O_3$
S-(-)-2-hydroxymethyl-2,3-dihydro-1,4-benzodioxin

Giuseppe Guanti, Luca Banfi, Stefano Brusco, Enrica Narisano

Tetrahedron: Asymmetry **1994,** *5,* 537

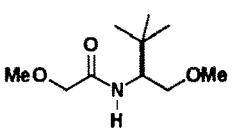


E.e. > 98% (by ^{1}HNMR of MTPA ester)
$[\alpha]_D$ +9.1 (c 1.1 $CHCl_3$)
Source of chirality: Porcine Pancreatic Lipase
Absolute configuration: R (assigned by chemical correlation)

$C_{18}H_{25}NO_5$
3-Acetoxy-2-(N-carbobenzyloxypiperid-4-yl)-1-propanol

Y. Landais, P. Ogay

Tetrahedron: Asymmetry **1994,** *5,* 541



E e. > 99 %

$[\alpha]_D^{25}$ = - 11 2 (c 1 0, $CHCl_3$)

Source of chirality : amino-acid (L-tert-leucine)

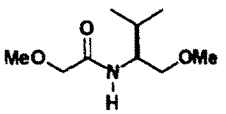
Absolute configuration S

$C_{10}H_{21}O_3N$

(S)-(-)-N-(1-tertbutyl-2-methoxyethyl)-2-methoxyacetamide

Y. Landais, P. Ogay

Tetrahedron: Asymmetry **1994**, *5*, 541



$C_9H_{19}O_3N$

(S)-(-)-N-(1-isopropyl-2-methoxyethyl)-2-methoxyacetamide

E.e. > 99.5 %

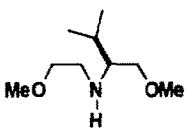
$[\alpha]_D^{25}$ = - 39.9 (c 1.06, $CHCl_3$)

Source of chirality : natural (L-valine)

Absolute configuration : S

Y. Landais, P. Ogay

Tetrahedron: Asymmetry **1994**, *5*, 541



$C_9H_{21}O_2N$

(S)-(+)-(1-isopropyl-2-methoxyethyl)(2-methoxy-ethyl)amine

E.e. > 99.5 %

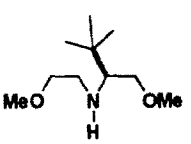
$[\alpha]_D^{25}$ = + 1.26 (c 1.03, $CHCl_3$)

Source of chirality : natural (L-valine)

Absolute configuration : S

Y. Landais, P. Ogay

Tetrahedron: Asymmetry **1994**, *5*, 541



$C_{10}H_{23}O_2N$

(S)-(-)-(1-tertbutyl-2-methoxyethyl)(2-methoxy-ethyl)amine

E.e. > 99 %

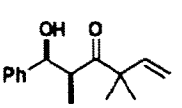
$[\alpha]_D^{25}$ = - 16.8 (c 1.02, $CHCl_3$)

Source of chirality : natural (L-tert-leucine)

Absolute configuration : S

Y. Landais, P. Ogay

Tetrahedron: Asymmetry **1994**, *5*, 541



$C_{15}H_{20}O_2$

(1S,2S)-(+)-1-Hydroxy-2,4,4-trimethyl-1-phenylhex-5-en-3-one

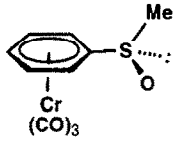
E.e. = 56 % (^{1}H NMR of MTPA ester)

Source of chirality : asymm. synth. (aldol)

Absolute configuration . 1S,2S
(deduced from the correlation with a known synthetic intermediate)

S.L. Griffiths, S. Perrio and S.E. Thomas*

Tetrahedron: Asymmetry **1994,** *5,* 545



E.e. = ≥95%

$[\alpha]_D^{25}$ = -208 (c 0.01, acetone)

Source of chirality: asymmetric oxidation [diethyl L-(+)-tartrate]

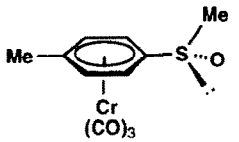
Absolute configuration: *R*

$C_{10}H_8CrO_4S$

tricarbonyl[η^6-(methylsulfinyl)benzene]chromium(0)

S.L. Griffiths, S. Perrio and S.E. Thomas*

Tetrahedron: Asymmetry **1994,** *5,* 545



E.e. = ≥95%

$[\alpha]_D^{25}$ = +179 (c 0.01, acetone)

Source of chirality: asymmetric oxidation [diethyl D-(-)-tartrate]

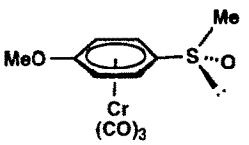
Absolute configuration: *S*

$C_{11}H_{10}CrO_4S$

tricarbonyl[η^6-4-methyl-1-(methylsulfinyl)benzene]chromium(0)

S.L. Griffiths, S. Perrio and S.E. Thomas*

Tetrahedron: Asymmetry **1994,** *5,* 545



E.e. = ≥95%

$[\alpha]_D^{25}$ = +147 (c 0.01, acetone)

Source of chirality: asymmetric oxidation [diethyl D-(-)-tartrate]

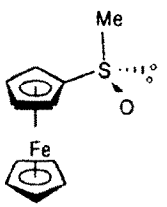
Absolute configuration: *S*

$C_{11}H_{10}CrO_5S$

tricarbonyl[η^6-4-methoxy-1-(methylsulfinyl)benzene]chromium(0)

Patrick Diter, Odile Samuel, Stefan Taudien and Henri B. Kagan*

Tetrahedron: Asymmetry **1994,** *5,* 549



(R)-Ferrocenyl methyl sulfoxide

ee > 99 % (by HPLC on Chiralcel OD)

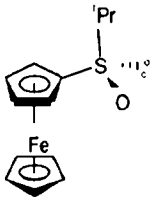
$[\alpha]_D^{20}$ -184 (c 0.5, $CHCl_3$)

Source of chirality: asymmetric oxidation of the sulfide in the presence of a (R,R)-diethyl tartrate complex

Absolute configuration: R

Patrick Diter, Odile Samuel, Stefan Taudien and Henri B. Kagan*

Tetrahedron: Asymmetry **1994,** *5,* 549



(R)-Ferrocenyl isopropyl sulfoxide

ee > 99 % (by HPLC on Chiralcel OD)

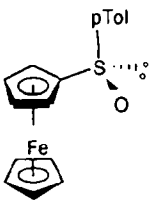
$[\alpha]_D^{20}$ -362 (c 0.5, $CHCl_3$)

Source of chirality: asymmetric oxidation of the sulfide in the presence of a (R,R)-diethyl tartrate complex

Absolute configuration: R

Patrick Diter, Odile Samuel, Stefan Taudien and Henri B. Kagan*

Tetrahedron: Asymmetry **1994,** *5,* 549



(R)-Ferrocenyl p-tolyl sulfoxide

ee > 99 % (by HPLC on Chiralcel OD)

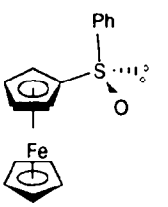
$[\alpha]_D^{20}$ -305 (c 0.5, $CHCl_3$)

Source of chirality: asymmetric oxidation of the sulfide in the presence of a (R,R)-diethyl tartrate complex

Absolute configuration: R

Patrick Diter, Odile Samuel, Stefan Taudien and Henri B. Kagan*

Tetrahedron: Asymmetry **1994,** *5,* 549



(R)-Ferrocenyl phenyl sulfoxide

ee > 99 % (by HPLC on Chiralcel OD)

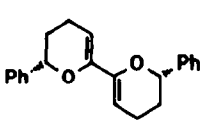
$[\alpha]_D^{20}$ -182 (c 0.5, $CHCl_3$)

Source of chirality: asymmetric oxidation of the sulfide in the presence of a (R,R)-diethyl tartrate complex

Absolute configuration: R

P.J. Edwards, D.A. Entwistle, S.V. Ley, D.R. Owen and E.J. Perry

Tetrahedron: Asymmetry **1994,** *5,* 553



$C_{22}H_{22}O_2$

(2*S*,2'*S*) 2,2'-Diphenyl-3,3',4,4'-tetrahydro-6,6'-bi-2*H*-pyran

E.e.>98% (by chiral HPLC)

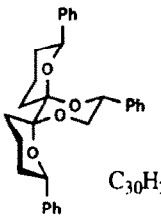
$[\alpha]^{25}_D$ = -107.4 (c = 0.95, $CHCl_3$)

Source of chirality: enantioselective reduction of δ-ketoester

Absolute configuration: 2S, 2'S

P.J. Edwards, D.A. Entwistle, S.V. Ley, D.R. Owen and E.J. Perry

Tetrahedron: Asymmetry **1994**, *5*, 553



$C_{30}H_{32}O_4$

E.e.=93% (by chiral HPLC)

$[\alpha]^{25}_D$ = -44.3 (c = 1.00, $CHCl_3$)

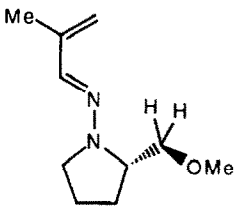
Source of chirality: (2*S*,2'*S*) 2,2'-Diphenyl-3,3',4,4'-tetrahydro-6,6'-bi-2*H*-pyran

Absolute configuration: 2S, 6S, 7R, 9S, 14R

(2S,6S,7R,9S,14R) 2,9,14-Triphenyl-1,8,13,16-tetraoxa[5.0.5.4]hexadecane

Renaud Beaudegnies and Léon Ghosez*

Tetrahedron: Asymmetry **1994**, *5*, 557



$[\alpha]_D^{20}$: -171.7 (c 1.95, $CHCl_3$)

source of chirality : L-Proline

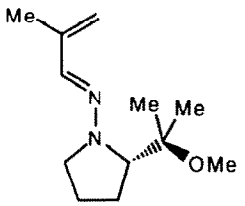
absolute configuration : S (based on starting material)

$C_{10}H_{18}N_2O$

(2'S)-1-aza-1-[2'-(methoxymethyl)pyrrolidino]-3-methyl-1,3-butadiene

Renaud Beaudegnies and Léon Ghosez*

Tetrahedron: Asymmetry **1994**, *5*, 557



$[\alpha]_D^{20}$: -39.4 (c 1.37, $CHCl_3$)

source of chirality : L-Proline

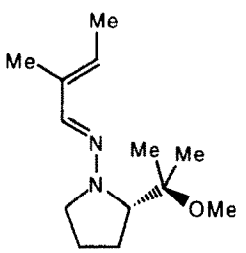
absolute configuration : S (based on starting material)

$C_{12}H_{22}N_2O$

(2'S)-1-aza-1-[2'-(1-methoxy-1-methylethyl)pyrrolidino]-3-methyl-1,3-butadiene

Renaud Beaudegnies and Léon Ghosez*

Tetrahedron: Asymmetry **1994**, *5*, 557



$[\alpha]_D^{20}$: -30.5 (c 1.45, $CHCl_3$)

source of chirality : L-Proline

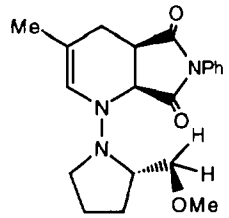
absolute configuration : S (based on starting material)

$C_{13}H_{24}N_2O$

(2'S)-1-aza-1-[2'-(1-methoxy-1-methylethyl)pyrrolidino]-3,4-dimethyl-1,3-butadiene

Renaud Beaudegnies and Léon Ghosez*

Tetrahedron: Asymmetry **1994**, *5*, 557



d.e. ≥ 98% (based on ^{1}H NMR, 500 MHz)

$[\alpha]_D^{20}$: -249.7 (c 1.03, $CHCl_3$)

source of chirality : L-Proline

absolute configuration : 2'S, 5R, 6S

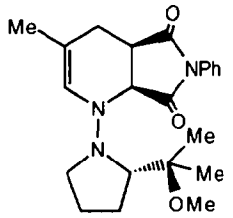
(assigned by mechanistic considerations)

$C_{20}H_{25}N_3O_3$

(2'S,5R,6S)-1-[2'-(methoxymethyl)pyrrolidino]-3-methyl-N-phenyl-1,4,5,6-tetrahydropyridine-5,6-dicarboximide

Renaud Beaudegnies and Léon Ghosez*

Tetrahedron: Asymmetry **1994**, *5*, 557



d.e. ≥ 98% (based on ^{1}H NMR, 500 MHz)

$[\alpha]_D^{20}$: -208.1 (c 1.01, $CHCl_3$)

source of chirality : L-Proline

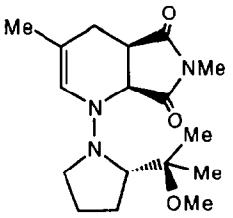
absolute configuration : 2'S, 5R, 6S

(assigned by mechanistic considerations)

$C_{22}H_{29}N_3O_3$; (2'S,5R,6S)-1-[2'-(1-methoxy-1-methylethyl)pyrrolidino]-3-methyl-N-phenyl-1,4,5,6-tetrahydropyridine-5.6-dicarboximide

Renaud Beaudegnies and Léon Ghosez*

Tetrahedron: Asymmetry **1994**, *5*, 557



d.e. ≥ 98% (based on ^{1}H NMR, 500 MHz)

$[\alpha]_D^{20}$: -153.8 (c 1.0, $CHCl_3$)

source of chirality : L-Proline

absolute configuration : 2'S, 5R, 6S

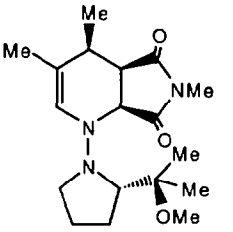
(assigned by mechanistic considerations)

$C_{17}H_{27}N_3O_3$

(2'S,5R,6S)-1-[2'-(1-methoxy-1-methylethyl)pyrrolidino]-N, 3-dimethyl-1,4,5,6-tetrahydropyridine-5,6-dicarboximide

Renaud Beaudegnies and Léon Ghosez*

Tetrahedron: Asymmetry **1994**, *5*, 557



d.e. ≥ 98% (based on ^{1}H NMR, 500 MHz)

$[\alpha]_D^{20}$: -291.2 (c 1.03, $CHCl_3$)

source of chirality : L-Proline

absolute configuration : 2'S, 4S, 5R, 6S

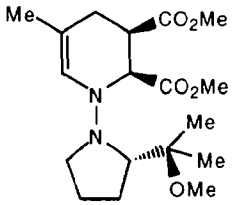
(assigned by mechanistic considerations)

$C_{18}H_{29}N_3O_3$

(2'S,4S,5R,6S)-1-[2'-(1-methoxy-1-methylethyl)pyrrolidino]-N,3,4-trimethyl-1,4,5,6-tetrahydropyridine-5,6-dicarboximide

Renaud Beaudegnies and Léon Ghosez*

Tetrahedron: Asymmetry **1994,** *5,* 557



d.e. ≥ 98% (based on ^{1}H NMR, 500 MHz)

$[\alpha]_D^{20}$: -190.7 (c 1.33, $CHCl_3$)

source of chirality : L-Proline

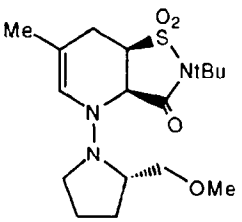
absolute configuration : 2'S, 5R, 6S

(assigned by mechanistic considerations)

$C_{18}H_{30}N_2O_5$; (2'S,5R,6S)-1-[2'-(1-methoxy-1-methylethyl)pyrrolidino]-3-methyl-5,6-bis(methoxycarbonyl)-1,4,5,6-tetrahydropyridine

Renaud Beaudegnies and Léon Ghosez*

Tetrahedron: Asymmetry **1994,** *5,* 557



d.e. ≥ 98% (based on ^{1}H NMR, 500 MHz)

$[\alpha]_D^{20}$: -324.1 (c 0.4, $CHCl_3$)

source of chirality : L-Proline

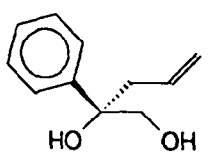
absolute configuration : 2'S, 5R, 6R

(assigned by X-Ray)

$C_{17}H_{29}N_3O_4S$; (2'S,5R,6R)-2-(tert-butyl)-3a,4,7,7a-tetrahydro-4-[2'-(methoxymethyl)pyrrolidino]-6-methylisothiazolo[4,5-b]pyridine-3(2H)-one 1,1-dioxide

Robert P. Hof, Richard M. Kellogg

Tetrahedron: Asymmetry **1994,** *5,* 565



$C_{11}H_{14}O_2$

2-phenyl-4-pentene-1,2-diol

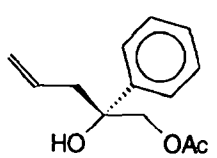
e.e.=76% (chiral HPLC)

Source of chirality: enzymatic resolution

Absolute configuration: S (by optical rotation)

Robert P. Hof, Richard M. Kellogg

Tetrahedron: Asymmetry **1994,** *5,* 565



$C_{13}H_{16}O_3$

1-acetoxy-2-phenyl-4-pentene-2-ol

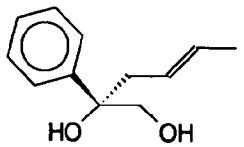
e.e.=78% (chiral HPLC)

Source of chirality: enzymatic resolution

Absolute configuration: R (by optical rotation)

Robert P. Hof, Richard M. Kellogg

Tetrahedron: Asymmetry **1994**, *5*, 565



$C_{12}H_{16}O_2$

2-phenyl-4-hexene-1,2-diol

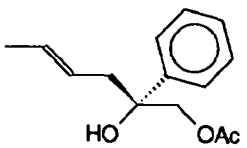
e.e.=94% (chiral GC)

Source of chirality: enzymatic resolution

Absolute configuration: unknown

Robert P. Hof, Richard M. Kellogg

Tetrahedron: Asymmetry **1994**, *5*, 565



$C_{14}H_{18}O_3$

1-acetoxy-2-phenyl-4-hexene-2-ol

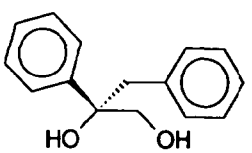
e.e.=65% (chiral GC)

Source of chirality: enzymatic resolution

Absolute configuration: unknown

Robert P. Hof, Richard M. Kellogg

Tetrahedron: Asymmetry **1994**, *5*, 565



$C_{13}H_{16}O_2$

2,3-diphenyl-propane-1,2-diol

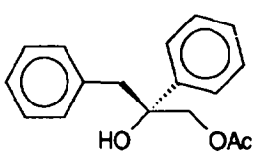
e.e.=>97% (chiral HPLC)

Source of chirality: enzymatic resolution

Absolute configuration: unknown

Robert P. Hof, Richard M. Kellogg

Tetrahedron: Asymmetry **1994**, *5*, 565



$C_{17}H_{18}O_3$

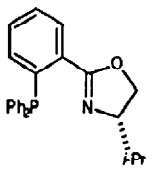
1-acetoxy-2,3-diphenyl-propane-2-ol

e.e.=>97% (chiral HPLC)

Source of chirality: enzymatic resolution

Absolute configuration: unknown

P. von Matt, O. Loiseleur, G. Koch, A. Pfaltz, C. Lefeber, T. Feucht, and G. Helmchen | *Tetrahedron: Asymmetry* **1994**, *5*, 573



$C_{24}H_{24}NOP$

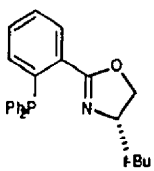
(-)-(*S*)-2[2-(diphenylphosphino)phenyl]-4-isopropyl-4,5-dihydrooxazole

$[\alpha]_D = -44.9$ (c 1.4, $CHCl_3$, 23°C)

Source of chirality: (*S*)-(+)-valine

Absolute configuration *S*
(based on configuration of (*S*)-(+)-valine)

P. von Matt, O. Loiseleur, G. Koch, A. Pfaltz, C. Lefeber, T. Feucht, and G. Helmchen | *Tetrahedron: Asymmetry* **1994**, *5*, 573



$C_{25}H_{26}NOP$

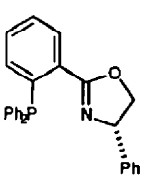
(-)-(*S*)-2[2-(diphenylphosphino)phenyl]-4-*tert*-butyl-4,5-dihydrooxazole

$[\alpha]_D = -58.2$ (c 1.2, $CHCl_3$, 23°C)

Source of chirality: (*S*)-(+)-*tert*-leucine

Absolute configuration *S*
(based on configuration of (*S*)-(+)-*tert*-leucine)

P. von Matt, O. Loiseleur, G. Koch, A. Pfaltz, C. Lefeber, T. Feucht, and G. Helmchen | *Tetrahedron: Asymmetry* **1994**, *5*, 573



$C_{27}H_{22}NOP$

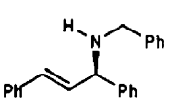
(+)-(*S*)-2[2-(diphenylphosphino)phenyl]-4-phenyl-4,5-dihydrooxazole

$[\alpha]_D = +30.8$ (c 1.0, $CHCl_3$, 23°C)

Source of chirality: (*S*)-(+)-2-phenylglycine

Absolute configuration *S*
(based on configuration of (*S*)-(+)-2-phenylglycine)

P. von Matt, O. Loiseleur, G. Koch, A. Pfaltz, C. Lefeber, T. Feucht, and G. Helmchen | *Tetrahedron: Asymmetry* **1994**, *5*, 573



$C_{22}H_{21}N$

(-)-(*R*,*E*)-benzyl-(1,3-diphenyl-2-propen-1-yl)-amine

E.e. = 89 % (by HPLC)

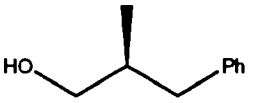
$[\alpha]_D = -21.6$ (c 1.2, $CHCl_3$, 23°C)

Source of chirality: asymmetric synthesis

Absolute configuration *R*
(assigned by optical rotation according to the literature)

S.G. Davies, G.B. Evans and A.A. Mortlock

Tetrahedron: Asymmetry **1994**, *5*, 585



$C_{10}H_{14}O$

3-Phenyl-2-methylpropan-1-ol

E.e. = 93%

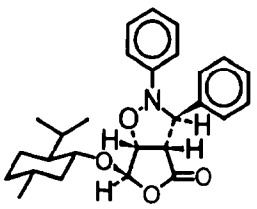
$[\alpha]^{D}_{24}$ = -10.2 (c 1.1, benzene)

Source of chirality: asymm. synth.

Absolute Configuration: 2S

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994**, *5*, 607



$C_{27}H_{33}NO_4$

3-phenyl-6-menthyloxy-2-phenyl-3,3a,6,6a-tetrahydro-4H-furo[3,4-d]isoxazol-4-one

E.e. = >98 %

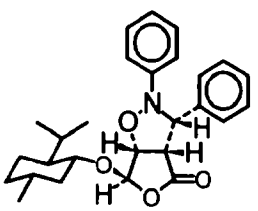
$[\alpha]^{20}_{D}$ =-62.2 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

Absolute configuration 3R,3aS,6R,6aR

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994**, *5*, 607



$C_{27}H_{33}NO_4$

3-phenyl-6-menthyloxy-2-phenyl-3,3a,6,6a-tetrahydro-4H-furo[3,4-d]isoxazol-4-one

E.e. = >98 %

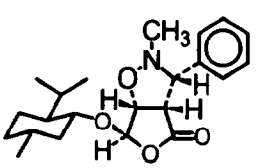
$[\alpha]^{293}_{D}$ =-232.4 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

Absolute configuration 3S,3aS,6R,6aR

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994**, *5*, 607



$C_{22}H_{31}NO_4$

3-phenyl-6-menthyloxy-2-methyl-3,3a,6,6a-tetrahydro-4H-furo[3,4-d]isoxazol-4-one

E.e. = >98 %

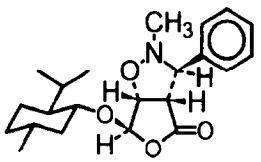
$[\alpha]^{20}_{D}$ =-139.0 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

Absolute configuration 3S,3aS,6R,6aR

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994**, *5*, 607



E.e. = >98 %

$[\alpha]_D^{20}$ =-290.0 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

Absolute configuration 3R,3aS,6R,6aR

$C_{22}H_{31}NO_4$

3-phenyl-6-menthyloxy-2-methyl-3,3a,6,6a-tetrahydro-4H-furo[3,4-d]isoxazol-4-one

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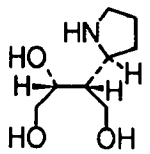
Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994**, *5*, 607



E.e. = >98 %

$[\alpha]_D^{20}$ =-81.6 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

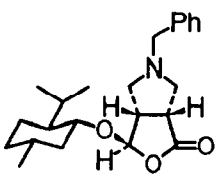
Absolute configuration 2R,2'S,3R

$C_8H_{17}NO_3$

3-pyrrolidin-2'-yl-butane-1,2,4-triol

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994**, *5*, 607



E.e. = >98 %

$[\alpha]_{436}^{20}$ =-241.7 (c = 1.0, CH_2Cl_2)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

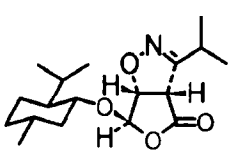
Absolute configuration 2aR,5aS,6R

$C_{23}H_{33}NO_3$

4-aza-4-benzyl-6-menthyloxy-1-oxa-2-oxo-bicyclo[3.3.0]octane

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994**, *5*, 607



E.e. = >98 %

$[\alpha]_D^{20}$ =-98.3 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

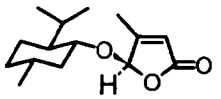
Absolute configuration 3aS,6R,6aR

$C_{18}H_{29}NO_4$

6-menthyloxy-3-(1-methylethyl)-3a,4,6,6a-tetrahydro-furo[3,4d]isoxazol-4-one

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994,** *5,* 607



$C_{15}H_{24}O_3$
4-methyl-5-menthyloxy-2(5H)-furanone

E.e. = >98 %

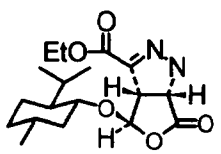
$[\alpha]_D^{20}$ =-130.0 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

Absolute configuration 5R

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994,** *5,* 607



$C_{18}H_{28}N_2O_5$
3,4-diaza-5-ethoxycarbonyl-6-menthyloxy-2(5H)-furanone

E.e. = >98 %

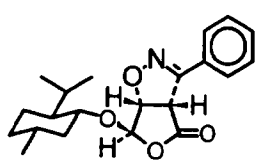
$[\alpha]_D^{20}$ = +87.3 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

Absolute configuration 2aS,5aS,6R

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994,** *5,* 607



$C_{21}H_{27}NO_4$
3-phenyl-6-menthyloxy-3a,4,6,6a-tetrahydro-furo[3,4d]isoxazol-4-one

E.e. = >98 %

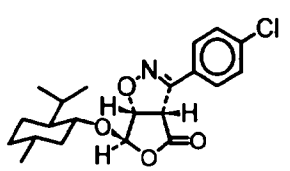
$[\alpha]_D^{20}$ =-218.3 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

Absolute configuration 3aS,6R,6aR

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994,** *5,* 607



$C_{21}H_{26}NO_4Cl$
3-(4-chlorophenyl)-6-menthyloxy-3a,4,6,6a-tetrahydro-furo[3,4d]isoxazol-4-one

E.e. = >98 %

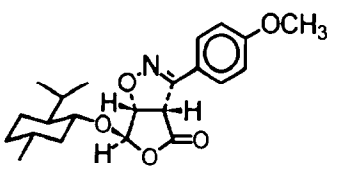
$[\alpha]_D^{20}$ =-208.1 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

Absolute configuration 3aS,6R,6aR

Rispens, Minze, T.; Keller, Erik; de Lange, Ben; Zijlstra, Robert W.J.; Feringa Ben L.*

Tetrahedron: Asymmetry **1994**, *5*, 607



E.e. = >98 %

$[\alpha]_D^{20}$ =-299.0 (c = 1.0, $CHCl_3$)

Source of chirality: natural, asymm. synth. (1,3-dipolar cycloaddition)

Absolute configuration 3aS,6R,6aR

$C_{22}H_{29}NO_5$

3-(4-methoxyphenyl)-6-menthyloxy-3a,4,6,6a-tetrahydro-furo[3,4d]isoxazol-4-one

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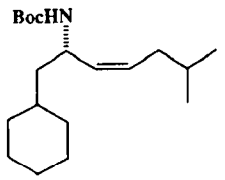
Damian J. Krysan, Todd W. Rockway, and Anthony R. Haight

Tetrahedron: Asymmetry **1994**, *5*, 625



(2*S*)-*N*-(*tert*-Butyloxycarbonyl)-2-amino-1-cyclohexyl-6-methyl-3(*Z*)-heptene

E.e.= >95 % [by chiral HPLC of α-methoxy-α-trifluoromethyl-phenylacetamide].

$[\alpha]_D^{25}$ = +48.0 (c = 1, CH_3OH)

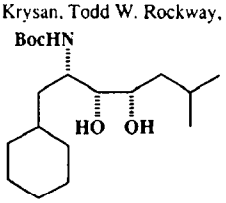
Source of chirality: (*S*)-phenylalanine

Absolute Configuration: *S*

(assigned by HPLC comparsion to (*R*) isomer)

Damian J. Krysan, Todd W. Rockway, and Anthony R. Haight

Tetrahedron: Asymmetry **1994**, *5*, 625



(2*S*, 3*R*, 4*S*)-*N*-(*tert*-Butyloxycarbonyl)-2-amino-1-cyclohexyl-3,4-dihydroxy-6-methyl-heptane

E.e.= >95 % [by chiral HPLC of α-methoxy-α-trifluoromethyl-phenylacetamide].

$[\alpha]_D^{25}$ = –55.0 (c = 1, CH_3OH)

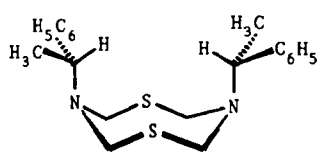
Source of chirality: (*S*)-phenylalanine

Absolute Configuration: 2*S*, 2*R*, 4*S*

(assigned by HPLC comparsion to (*R*, *S*, *R*) isomer)

G.Cadenas-Pliego, M.-J.Rosales-Hoz, R.Contreras A.Flores-Parra*.

Tetrahedron: Asymmetry **1994**, *5*, 633



$[\alpha]_D$= +134.7 (c 0.02, CH_2Cl_2)

Source of chirality: Synthesis from (R)-(+)-1-methylbenzylamine.

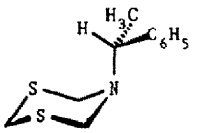
Absolute configuration: (R),(R)

$C_{20}H_{26}N_2S_2$

5-[(R)-(+)-1'-methylbenzyl]-3,7-diaza-1,5-dithiacyclooctane

G.Cadenas-Pliego, M.-J.Rosales-Hoz, R.Contreras
A.Flores-Parra*.

Tetrahedron: Asymmetry **1994**, *5*, 633



$C_{11}H_{15}NS_2$

5-[(R)-(+)-1'-methylbenzyl]-
1,3,5-dithiazine

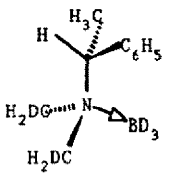
$[\alpha]_D$= +72.2 (c 0.01, CH_2Cl_2)

Source of chirality: Synthesis from 3,7-di-[(R)-(+)-1'-methylbenzyl]-3,7-diaza-1,5-dithiacyclooctane.

Absolute configuration: (R)

G.Cadenas-Pliego, M.-J.Rosales-Hoz, R.Contreras
A.Flores-Parra*.

Tetrahedron: Asymmetry **1994**, *5*, 633



$C_{10}D_5H_{13}BN$

1-borane-1-[(R)-(+)-1'-methylbenzyl]-1,1-
di[*mono*-deuterated]methylamine.

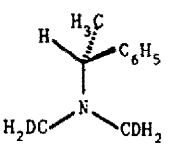
$[\alpha]_D$= +52.8 (c 0.2, CH_2Cl_2)

Source of chirality: Synthesis from 5-[(R)-(+)-1'-methylbenzyl]-1,3,5-dithiazine and BD_3-THF.

Absolute configuration: (R)

G.Cadenas-Pliego, M.-J.Rosales-Hoz, R.Contreras
A.Flores-Parra*.

Tetrahedron: Asymmetry **1994**, *5*, 633



$C_{10}D_2H_{13}N$

1-[(R)-(+)-1'-methylbenzyl]-1,1-di(*mono*-
deuterated)methylamine.

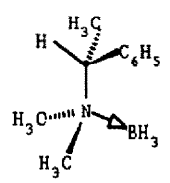
$[\alpha]_D$= +50.8 (c 0.01, CH_2Cl_2)

Source of chirality: Synthesis from 5-[(R)-(+)-1'-methylbenzyl]-1,3,5-dithiazine and BD_3-THF.

Absolute configuration: (R)

G.Cadenas-Pliego, M.-J.Rosales-Hoz, R.Contreras
A.Flores-Parra*.

Tetrahedron: Asymmetry **1994**, *5*, 633



$C_{10}H_{18}BN$

1-borane-1-[(R)-(+)-1'-methylbenzyl]-1,1-
dimethylamine.

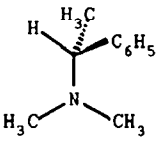
$[\alpha]_D$= +53.9 (c 0.003, CH_2Cl_2)

Source of chirality: Synthesis from 5-[(R)-(+)-1'-methylbenzyl]-1,3,5-dithiazine and BH_3-THF.

Absolute configuration: (R)

G. Cadenas-Pliego, M.-J. Rosales-Hoz, R. Contreras
A. Flores-Parra*.

Tetrahedron: Asymmetry **1994**, *5*, 633



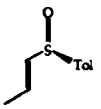
$C_{10}H_{15}N$

[(R)-(+)-1'-methylbenzyl]-1,1-dimethylamine.

$[\alpha]_D$= +51.4 (c 0.003, CH_2Cl_2)
Source of chirality: Synthesis from 5-[(R)-(+) 1'-methylbenzyl]-1,3,5-dithiazine and BH_3-THF.
Absolute configuration: (R)

J. Tercio B. Ferreira*, Jacqueline A. Marques and J. P. Marino*

Tetrahedron: Asymmetry **1994**, *5*, 641

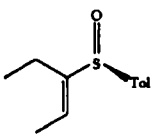


$C_{10}H_{12}SO$
(*R*)-(*E*)-1-propenyl *p*-tolylsulfoxide

$[\alpha]_D$= +143 (c=2.0; $CHCl_3$)
Source of chirality: (–)-menthyl (*S*)-*p*-toluenesulfinate
Absolute configuration: *R*

J. Tercio B. Ferreira*, Jacqueline A. Marques and J. P. Marino*

Tetrahedron: Asymmetry **1994**, *5*, 641

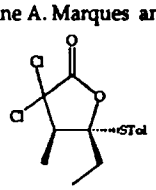


$C_{12}H_{16}SO$
(*R*)-(*E*)-1-ethyl-1-(*p*-tolylsulfinyl)-1-propene

$[\alpha]_D$= +43.3 (c=2.0; $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: *R*

J. Tercio B. Ferreira*, Jacqueline A. Marques and J. P. Marino*

Tetrahedron: Asymmetry **1994**, *5*, 641

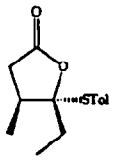


$C_{14}H_{16}SO_2Cl_2$
(3*R*,4*R*)-2,2-dichloro-4-ethyl-3-methyl-*p*-tolylthio γ-butyrolactone

$[\alpha]_D$= +2.96 (c=3.0; $CHCl_3$)
m.p.= 108-110°C
Source of chirality: asymmetric synthesis
Absolute configuration: *R*,*R*

J. Tercio B. Ferreira*, Jacqueline A. Marques and J. P. Marino*

Tetrahedron: Asymmetry **1994**, *5*, 641



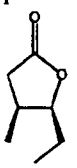
$C_{14}H_{18}SO_2$

(3*R*,4*R*)-4-ethyl-3-methyl-4-*p*-tolylthio γ-butyrolactone

$[\alpha]_D$= +66.5 (c=2.3; $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: *R*,*R*

J. Tercio B. Ferreira*, Jacqueline A. Marques and J. P. Marino*

Tetrahedron: Asymmetry **1994**, *5*, 641



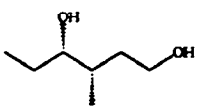
$C_7H_{12}O_2$

(3*S*,4*S*)-4-ethyl-3-methyl γ-butyrolactone

$[\alpha]_D$= -34.4 (c=2.0; $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: *S*,*S*

J. Tercio B. Ferreira*, Jacqueline A. Marques and J. P. Marino*

Tetrahedron: Asymmetry **1994**, *5*, 641



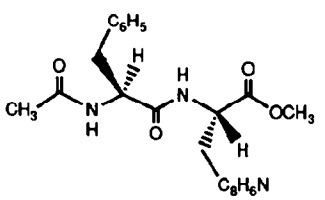
$C_7H_{16}O_2$

(3*R*,4*R*)-3-methyl-1,4-hexanediol

$[\alpha]_D$= +12.5 (c=1.0; $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: *R*,*R*

Olle Ramström, Ian A. Nicholls and Klaus Mosbach.

Tetrahedron: Asymmetry **1994**, *5*, 649



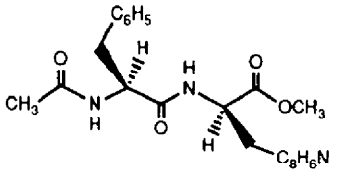
Source of chirality: *L*-phenylalanine and *L*-tryptophan
$[\alpha]_D^{20}$= + 11 (c = 0.010 g ml^{-1}, CH_3OH)
Absolute configuration: *SS*

$C_{23}H_{25}N_3O_4$

Methyl *N*-Acetyl-*S*-phenylalaninyl-*S*-tryptophanate

Olle Ramström, Ian A. Nicholls and Klaus Mosbach.

Tetrahedron: Asymmetry **1994,** *5,* 649



Source of chirality: *L*-phenylalanine and *D*-tryptophan

$[\alpha]_D^{20} = +54$ (c = 0.010 g ml^{-1}, CH_3OH)

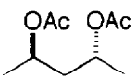
Absolute configuration: *SR*

$C_{23}H_{25}N_3O_4$

Methyl *N*-Acetyl-*S*-phenylalaninyl-*R*-tryptophanate

G. Caron and R. J. Kazlauskas

Tetrahedron: Asymmetry **1994,** *5,* 657



E.e. = 78% [by GC on Chiraldex G-TA]

Source of chirality: lipase-catalyzed kinetic resolution

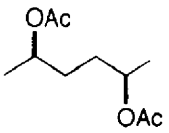
Absolute configuration: 2R,4R

$C_9H_{16}O_4$

(R,R)-2,4-diacetoxypentane

G. Caron and R. J. Kazlauskas

Tetrahedron: Asymmetry **1994,** *5,* 657



E.e. = 94% [by GC on Chiraldex G-TA]

Source of chirality: lipase-catalyzed kinetic resolution

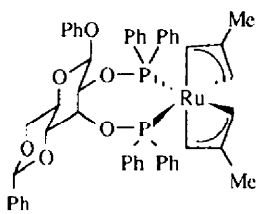
Absolute configuration: 2R,5R

$C_{10}H_{18}O_4$

(R,R)-2,5-diacetoxyhexane

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 665

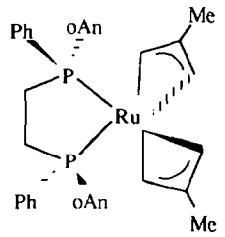


source of chirality : ß-PO-OP

$[\alpha]_D^{20} = -180$ (0.5 ; $CHCl_3$)

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 665

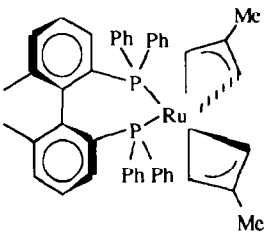


source of chirality : (R,R)-(-)-DIPAMP

$[\alpha]_D^{25} = -43$ (0.23 ; toluene)

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

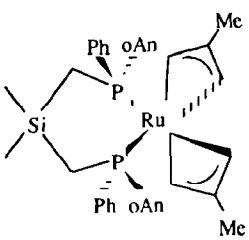
Tetrahedron: Asymmetry **1994,** *5,* 665



source of chirality : (S)-(+)-BIPHEMP

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 665

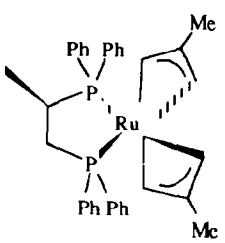


source of chirality : (R,R)-(-)-DIPAMPSi

$[\alpha]_D^{20} = +186$ (0.5 ; toluene)

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

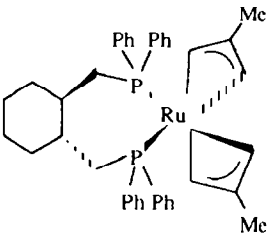
Tetrahedron: Asymmetry **1994,** *5,* 665



source of chirality : (R)-(+)-PROPHOS

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 665

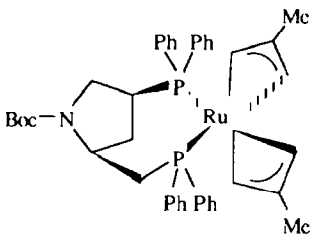


source of chirality : (R,R)-(-)-DIMPC

$[\alpha]_D^{20}$ = - 166 (0.35 ; toluene)

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

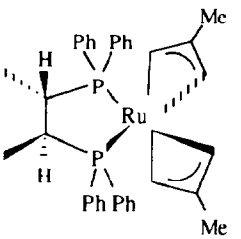
Tetrahedron: Asymmetry **1994,** *5,* 665



source of chirality : (S,S)-(-)-BPPM

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 665

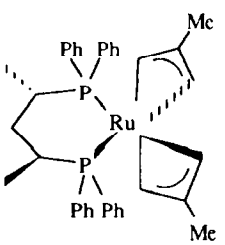


source of chirality : (S,S)(-)-CHIRAPHOS

$[\alpha]_D^{25}$ = + 60 (0.2 ; toluene)

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J A.Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 665

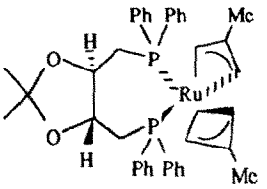


source of chirality : (S,S)-(-)-BDPP

$[\alpha]_D^{20}$ = + 255 (0.32 ; toluene)

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

Tetrahedron: Asymmetry **1994**, *5*, 665

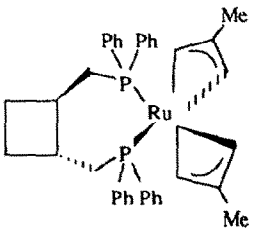


source of chirality : (R,R)-(-)-DIOP

$[\alpha]_D^{25}$ = + 202 (0.43 ; toluene)

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

Tetrahedron: Asymmetry **1994**, *5*, 665

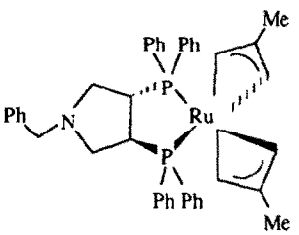


source of chirality : (R,R)-(+)-CBD

$[\alpha]_D^{20}$ = - 236 (0.5 ; toluene)

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

Tetrahedron: Asymmetry **1994**, *5*, 665

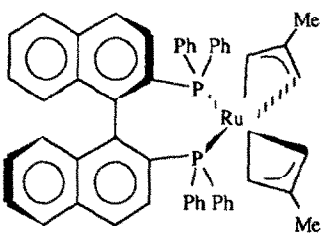


source of chirality : (S,S)-DEGUPHOS

$[\alpha]_D^{25}$ = + 40 (0.14 ; toluene)

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, M.C.Cano De Andrade, J.A.Laffitte

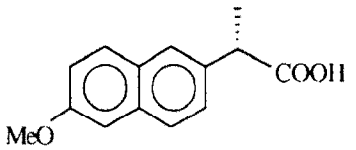
Tetrahedron: Asymmetry **1994**, *5*, 665



source of chirality : (R)-(+)-BINAP

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L Bischoff, M.C.Cano De Andrade, S.Darses, C.Galopin, J.A.Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 675

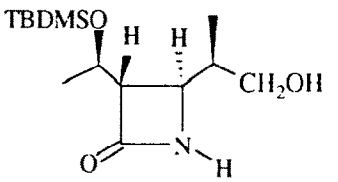


E.e. = 85 %

source of chirality : (S)-BinapRu(2-methylallyl)$_2$
absolute configuration 2S

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L Bischoff, M.C.Cano De Andrade, S.Darses, C.Galopin, J.A.Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 675

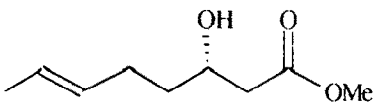


D.e. = 93 %

source of chirality : (S)-BinapRu(2-methylallyl)$_2$

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L.Bischoff, M.C.Cano De Andrade, S.Darses, C Galopin, J.A.Laffitte

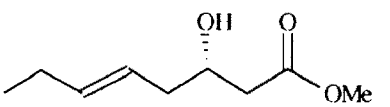
Tetrahedron: Asymmetry **1994,** *5,* 675



E.e. > 99 % (^{1}H NMR with Eu(tfc)$_3$)
$[\alpha]_D^{20}$ = +19.0 (1 ; $CHCl_3$)
source of chirality : in situ (S)-BinapRuBr$_2$
absolute configuration 3S

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X Pfister, L Bischoff, M.C.Cano De Andrade, S Darses, C.Galopin, J.A.Laffitte

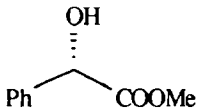
Tetrahedron: Asymmetry **1994,** *5,* 675



E.e. > 99 % (^{1}H NMR with Eu(tfc)$_3$)
$[\alpha]_D^{20}$ = +18.0 (1 ; $CHCl_3$)
source of chirality : (S)-BiphempRuBr$_2$
absolute configuration 3S

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L.Bischoff, M.C.Cano De Andrade, S.Darses, C.Galopin, J.A.Laffitte

Tetrahedron: Asymmetry **1994**, *5*, 675



E.e. = 86 %

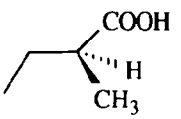
$[\alpha]_D^{20} = +123.8$ (1 : CH_3OH)

source of chirality : in situ (S)-MeO-BiphepRuBr$_2$

absolute configuration 2S

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L.Bischoff, M.C.Cano De Andrade, S.Darses, C.Galopin, J.A.Laffitte

Tetrahedron: Asymmetry **1994**, *5*, 675



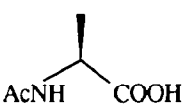
E.e. = 98 %

source of chirality : [RuCl$_2$(S)Biphemp]$_2$,NEt$_3$

absolute configuration 2S

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L.Bischoff, M.C.Cano De Andrade, S.Darses, C.Galopin, J.A.Laffitte

Tetrahedron: Asymmetry **1994**, *5*, 675



E.e. = 77 %

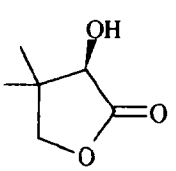
$[\alpha]_D^{20} = -51$ (2 ; H_2O)

source of chirality : (S)-BiphempRuBr$_2$

absolute configuration 2S

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L.Bischoff, M.C.Cano De Andrade, S.Darses, C.Galopin, J.A.Laffitte

Tetrahedron: Asymmetry **1994**, *5*, 675



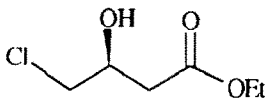
E.e. = 78 %

source of chirality : (R,R)-DipampRuBr$_2$

absolute configuration 2R

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L.Bischoff, M.C.Cano De Andrade, S.Darses, C.Galopin, J.A.Laffitte

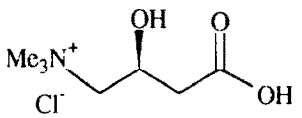
Tetrahedron: Asymmetry **1994,** *5,* 675



E.e. = 90 % (G.C.)
$[\alpha]_D^{20}$ = -18.8 (1 ; $CHCl_3$)
source of chirality : (S)-BinapRu(2-methylallyl)$_2$
absolute configuration 3S

J.P.Genêt, C Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L.Bischoff, M.C Cano De Andrade, S.Darses, C.Galopin, J.A.Laffitte

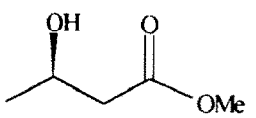
Tetrahedron: Asymmetry **1994,** *5,* 675



E.e. = 96 % (based on the rotation value of carnitine)
$[\alpha]_D^{26}$ = -15.9 (1 ; H_2O)
source of chirality : (S)-BiphempRuBr$_2$
absolute configuration 3S

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L Bischoff, M.C.Cano De Andrade, S.Darses, C.Galopin, J.A.Laffitte

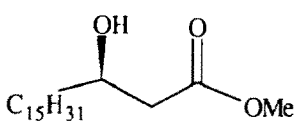
Tetrahedron: Asymmetry **1994,** *5,* 675



E.e. > 99 % (by G.C.)
$[\alpha]_D^{20}$ = - 48.5 (1.2 ; $CHCl_3$)
source of chirality : in situ (S)-MeO-BiphepRuBr$_2$
absolute configuration 3R

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L.Bischoff, M.C.Cano De Andrade, S.Darses, C Galopin, J A Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 675

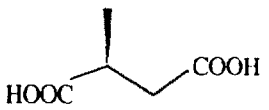


E.e. = 96 %

source of chirality : in situ (R)-BinapRuBr$_2$
absolute configuration 3R

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L.Bischoff, M.C.Cano De Andrade, S.Darses, C.Galopin, J.A.Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 675



E.e. = 98 %

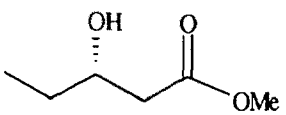
$[\alpha]_D^{20}$ = - 16.5 (2.2 ; EtOH)

source of chirality : in situ (R)-BinapRuBr$_2$

absolute configuration 2S

J.P.Genêt, C.Pinel, V.Ratovelomanana-Vidal, S.Mallart, X.Pfister, L.Bischoff, M.C.Cano De Andrade, S.Darses, C Galopin, J.A.Laffitte

Tetrahedron: Asymmetry **1994,** *5,* 675



E.e. > 99 % (by G.C.)

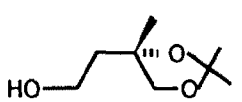
$[\alpha]_D^{20}$ = +37.6 (1 ; $CHCl_3$)

source of chirality : in situ (S)-BinapRuBr$_2$

absolute configuration 3S

P. Ferraboschi, P. Grisenti, A. Manzocchi, E. Santaniello

Tetrahedron: Asymmetry **1994,** *5,* 691



$C_8H_{16}O_3$

(S)-2-Methyl-1,2,4-butanetriol 1,2-acetonide

E.e. 84%

(by ^{1}H-NMR of (S)-MTPA ester)

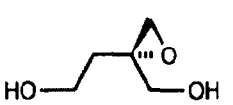
$[\alpha]_D$ -8.2 (c 1.67 $CHCl_3$)

Source of chirality: *Pseudomonas cepacia* lipase

Absolute configuration: (S)

P. Ferraboschi, P. Grisenti, A. Manzocchi, E. Santaniello

Tetrahedron: Asymmetry **1994,** *5,* 691



$C_5H_{10}O_3$

(S)-2-Methylene-1,4-butanediol oxide

E.e. 86%

(by ^{1}H-NMR of (S)-MTPA ester)

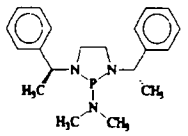
$[\alpha]_D$ -4.2 (c 1 $CHCl_3$)

Source of chirality: *Pseudomonas cepacia* lipase

Absolute configuration: (S)

R. Hulst, N.K. de Vries and B.L. Feringa.

Tetrahedron: Asymmetry **1994,** *5,* 699

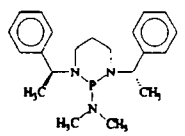


e.e. 98 % by ^{1}H and ^{31}P NMR.
Source of chirality, (*S*)-α-phenylethylamine.
Absolute configuration 1-S and 1'-S.

$C_{20}H_{28}N_3P$
N,N'-bis(1-(S)-Phenylethyl)-1,2-ethylenediamino-N,N'-diaza-N'',N''-dimethylphospholidine

R. Hulst, N.K. de Vries and B.L. Feringa.

Tetrahedron: Asymmetry **1994,** *5,* 699

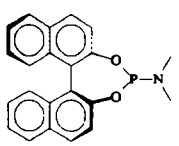


e.e. 98 % by ^{1}H and ^{31}P NMR.
Source of chirality, (*S*)-α-phenylethylamine.
Absolute configuration 1-S and 1'-S.

$C_{21}H_{30}N_3P$
N,N'-bis(1-(S)-Phenylethyl)-1,3-propylenediamino-N,N'-diaza-N'',N''-dimethylphospholidine

R. Hulst, N.K. de Vries and B.L. Feringa.

Tetrahedron: Asymmetry **1994,** *5,* 699

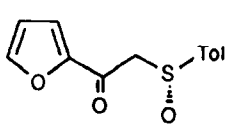


e.e. 98 % by ^{1}H and ^{31}P NMR.
Source of chirality, (+)-bis-ß-naphthol.
$[\alpha]_D^{20}$= 578.9 (c 0.06, $CHCl_3$)

$C_{22}H_{18}NO_2P$
2,2'-O,O'-(1,1'-Binaphthyl)-O,O'-dioxo-N,N-dimethylphospholidine

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994,** *5,* 709



E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

$[\alpha]_D$= +208.1 (c 1.13, $CHCl_3$)

$C_{13}H_{12}O_3S$

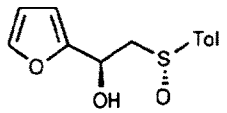
Source of chirality: (*R*)-Methyl-*p*-tolylsulfoxide

1-(2-Furyl)-1-oxo-2-*p*-tolylsulfinylethane

Absolute configuration: (S) *R*

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994**, *5*, 709



$C_{13}H_{14}O_3S$

1-(2-Furyl)-2-*p*-tolylsulfinylethanol

E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

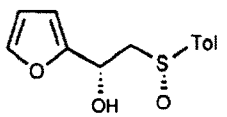
$[\alpha]_D$= +194.1 (c 1.00, $CHCl_3$)

Source of chirality: Asymm. sulfoxide-monitored carbonyl reduction. (*R*)-Methyl-*p*-tolylsulfoxide.

Absolute configuration: 1*S*, (S)*R*

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994**, *5*, 709



$C_{13}H_{14}O_3S$

1-(2-Furyl)-2-*p*-tolylsulfinylethanol

E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

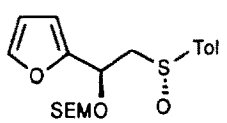
$[\alpha]_D$= +118.3 (c 1.35, $CHCl_3$)

Source of chirality: Asymm. sulfoxide-monitored carbonyl reduction. (*R*)-Methyl-*p*-tolylsulfoxide.

Absolute configuration: 1*R*, (S)*R*

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994**, *5*, 709



$C_{19}H_{28}O_4SSi$

1-(2-Furyl)-1-*O*-[(2'-trimethylsilylethoxy) methyl)]-2-*p*-tolylsulfinylethanol

E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

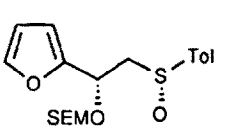
$[\alpha]_D$= +243.5 (c 1.13, $CHCl_3$)

Source of chirality: (*R*)-Methyl-*p*-tolylsulfoxide.

Absolute configuration: 1*S*, (S)*R*

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994**, *5*, 709



$C_{19}H_{28}O_4SSi$

1-(2-Furyl)-1-*O*-[(2'-trimethylsilylethoxy) methyl)]-2-*p*-tolylsulfinylethanol

E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

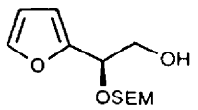
$[\alpha]_D$= -1.82 (c 1.00, $CHCl_3$)

Source of chirality: (*R*)-Methyl-*p*-tolylsulfoxide.

Absolute configuration: 1*R*, (S)*R*

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994,** *5,* 709



$C_{12}H_{22}O_4Si$

1-(2-Furyl)-1-*O*-[(2'-trimethylsilylethoxy) methyl)]-1,2-ethanediol

E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

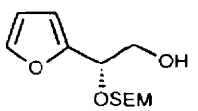
$[\alpha]_D$= +118.0 (c 0.52, $CHCl_3$)

Source of chirality: (*R*)-Methyl-*p*-tolylsulfoxide and *R*-Isopropylidene-*D*-glyceraldehyde.

Absolute configuration:*R*

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994,** *5,* 709



$C_{12}H_{22}O_4Si$

1-(2-Furyl)-1-*O*-[(2'-trimethylsilylethoxy) methyl)]-1,2-ethanediol

E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

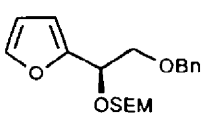
$[\alpha]_D$= -117.5 (c 1.57, $CHCl_3$)

Source of chirality: (*R*)-Methyl-*p*-tolylsulfoxide.

Absolute configuration:*S*

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994,** *5,* 709



$C_{19}H_{28}O_4Si$

1-(2-Furyl)-1-*O*-[(2'-trimethylsilylethoxy) methyl)]--2-*O*-benzyl-1,2-ethanediol

E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

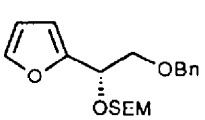
$[\alpha]_D$= +73.20 (c 2.44, $CHCl_3$)

Source of chirality: (*R*)-Methyl-*p*-tolylsulfoxide.

Absolute configuration:*R*

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994,** *5,* 709



$C_{19}H_{28}O_4Si$

1-(2-Furyl)-1-*O*-[(2'-trimethylsilylethoxy) methyl)]--2-*O*-benzyl-1,2-ethanediol

E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

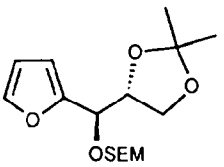
$[\alpha]_D$= -75.47 (c 1.57, $CHCl_3$)

Source of chirality: (*R*)-Methyl-*p*-tolylsulfoxide.

Absolute configuration:*S*

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994**, *5*, 709



$C_{16}H_{28}O_5Si$

1-(2-Furyl)-1-*O*-[(2'-trimethylsilylethoxy) methyl)]--2,3-*O*-isopropylidene-1,2,3-propanetriol

E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

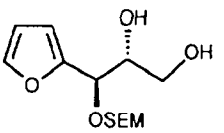
$[\alpha]_D$= +106.5 (c 1.03, $CHCl_3$)

Source of chirality: *R*-(+)-Isopropylidene-*D*-glyceraldehyde.

Absolute configuration:1 *R*, 2 *R*

J.M.Llera, M.Trujillo, M.E.Blanco and F.Alcudia

Tetrahedron: Asymmetry **1994**, *5*, 709



$C_{13}H_{24}O_5Si$

1-(2-Furyl)-1-*O*-[(2'-trimethylsilylethoxy) methyl)]--1,2,3-propanetriol

E.e.= 100% (by comparation of reported $[\alpha]_D$ value of a fhurter derivative)

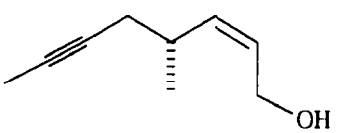
$[\alpha]_D$= +24.0 (c 0.92, CH_2Cl_2)

Source of chirality: *R*-(+)-Isopropylidene-*D*-glyceraldehyde.

Absolute configuration:1 *R*, 2 *R*

Monique Savignac, Jean-Olivier Durand and Jean-Pierre Genêt

Tetrahedron: Asymmetry **1994**, *5*, 717



4-Methyloct-6-yn-2-en-1-ol

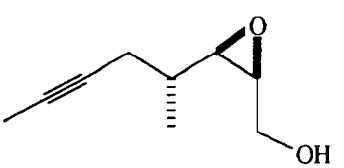
$[\alpha]_D$= 37 (c = 1.08, CH_2Cl_2)

Source of chirality: asymm. synth.

Configuration 4R

Monique Savignac, Jean-Olivier Durand and Jean-Pierre Genêt

Tetrahedron: Asymmetry **1994**, *5*, 717



2,3-Epoxy-4-methyloct-6-yn-1-ol

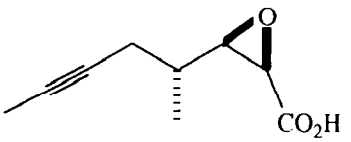
$[\alpha]_D$= 9.3 (c = 1.33, $CHCl_3$)

Source of chirality: asymm. synth.

Configuration 2S,3R,4R

Monique Savignac, Jean-Olivier Durand and Jean-Pierre Genêt

Tetrahedron: Asymmetry **1994,** *5,* 717



2,3-Epoxy-4-methyloct-6-ynoïc acid

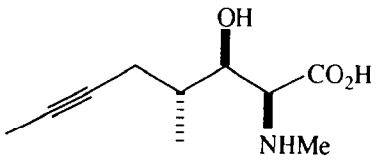
$[\alpha]_D = 14.9$ (c = 1.14, CH_2Cl_2)

Source of chirality: asymm. synth.

Configuration 2R,3R,4R

Monique Savignac, Jean-Olivier Durand and Jean-Pierre Genêt

Tetrahedron: Asymmetry **1994,** *5,* 717



2-Methylamino-3-hydroxy-4-methyloct-6-ynoïc acid

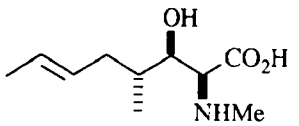
$[\alpha]_D = 30.6$ (c = 0.75, phosphate buffer Tritisol pH=7)

Source of chirality: asymm. synth.

Configuration 2S,3S,4R

Monique Savignac, Jean-Olivier Durand and Jean-Pierre Genêt

Tetrahedron: Asymmetry **1994,** *5,* 717



$C_{10}H_9NO_3$

4-[(E)-2-butenyl]-4,N-Dimethyl-L-Threonine (MeBmt)

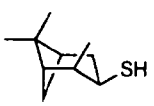
$[\alpha]_D = 11.8$ (c = 0.5, phosphate buffer Tritisol pH=7)

Source of chirality: asymm. synth.

Configuration 2S,3S,4R

Varinder K. Aggarwal,[a*] Marilena Kalomiri,[a] Andrew Thomas.[b]

Tetrahedron: Asymmetry **1994,** *5,* 723



$C_{10}H_{18}S$
(1S, 2S, 3R)-3-Pinanethiol

E.e = >95% [by chiral GC on precursor, see ref 15]

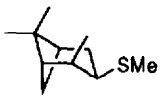
$[\alpha]_D^{24} = -5.83$ (c 1.32 in $CHCl_3$)

Source of chirality: natural and synthesis (Mitsunobu reaction)

Absolute configuration 1S, 2S, 3R

Varinder K. Aggarwal,[a*] Marilena Kalomiri,[a] Andrew Thomas.[b]

Tetrahedron: Asymmetry **1994**, *5*, 723



$C_{11}H_{20}S$
(1S, 2S, 3R)-3-Pinanylmethyl Sulfide

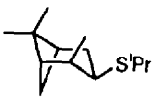
E.e = >95% [by chiral GC on precursor, see ref 15]
$[\alpha]_D^{24}$ = -2.1 (c 1 in $CHCl_3$)

Source of chirality: natural and synthesis

Absolute configuration 1S, 2S, 3R

Varinder K. Aggarwal,[a*] Marilena Kalomiri,[a] Andrew Thomas.[b]

Tetrahedron: Asymmetry **1994**, *5*, 723



$C_{13}H_{24}S$
(1S, 2S, 3R)-3-Pinanylisopropyl Sulfide

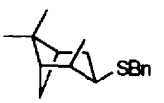
E.e = >95% [by chiral GC on precursor, see ref 15]
$[\alpha]_D^{24}$ = -2.66 (c 1.54 in $CHCl_3$)

Source of chirality: natural and synthesis

Absolute configuration 1S, 2S, 3R

Varinder K. Aggarwal,[a*] Marilena Kalomiri,[a] Andrew Thomas.[b]

Tetrahedron: Asymmetry **1994**, *5*, 723



$C_{17}H_{24}S$
(1S, 2S, 3R)-3-Pinanylbenzyl Sulfide

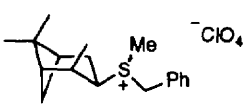
E.e = >95% [by chiral GC on precursor, see ref 15]
$[\alpha]_D^{24}$ = -2.25 (c:1.24 in $CHCl_3$)

Source of chirality: natural and synthesis

Absolute configuration 1S, 2S, 3R

Varinder K. Aggarwal,[a*] Marilena Kalomiri,[a] Andrew Thomas.[b]

Tetrahedron: Asymmetry **1994**, *5*, 723



$C_{18}H_{27}SClO_4$
Benzylmethyl [(1S, 2S, 3R)-3-pinanyl]sulfonium Perchlorate

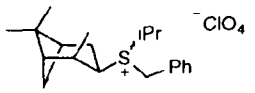
E.e = >95% [by chiral GC on precursor, see ref 15]
$[\alpha]_D^{24}$ = +0.67 (c 1.78 in Acetone)
Sample is mixture of diastereoisomers (70:30)

Source of chirality: natural and synthesis

Absolute configuration 1S, 2S, 3R

Varinder K. Aggarwal,[a]* Marilena Kalomiri,[a] Andrew Thomas.[b]

Tetrahedron: Asymmetry **1994,** *5,* 723

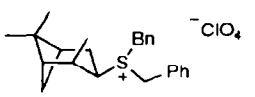


$C_{20}H_{31}SClO_4$
Benzylisopropyl[(1S, 2S, 3R)-3-pinanyl]sulfonium Perchlorate

E.e = >95% [by chiral GC on precursor, see ref 15]
$[\alpha]_D^{24}$ = -1.26 (c:2.03 in Acetone)
Sample is mixture of diastereoisomers (45:55)
Source of chirality: natural and synthesis
Absolute configuration 1S, 2S, 3R

Varinder K. Aggarwal,[a]* Marilena Kalomiri,[a] Andrew Thomas.[b]

Tetrahedron: Asymmetry **1994,** *5,* 723

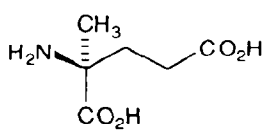


$C_{24}H_{31}SClO_4$
Dibenzyl[(1S, 2S, 3R)-3-pinanyl]sulfonium Perchlorate

E.e = >95% [by chiral GC on precursor, see ref 15]
$[\alpha]_D^{24}$ = -4.92 (c:2.01 in Acetone)
Source of chirality: natural and synthesis
Absolute configuration 1S, 2S, 3R

F.Acher and R.Azerad

Tetrahedron: Asymmetry **1994,** *5,* 731

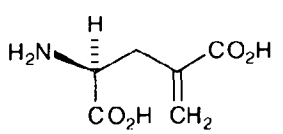


$C_6H_{11}NO_4$
2-methylglutamic acid

M.p. 183°C
$[\alpha]_D^{21}$ = + 11.5 (c 4, 6N HCl)
E.e.≥ 97 % [by HPLC of the N-acetyl-(S)-cysteine-*o*-phthalaldehyde adduct]
Source of chirality: chromatographic separation of the α-boroxazolidone-γ-(R)-phenylethylamide
Absolute configuration S

F.Acher and R.Azerad

Tetrahedron: Asymmetry **1994,** *5,* 731

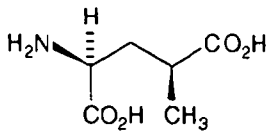


$C_6H_9NO_4$
4-methylene glutamic acid

M.p. 196-197°C
$[\alpha]_D^{21}$ = + 12.8 (c 1, 5N HCl)
E.e.≥ 94 % (by chiral GC of the N-trifluoroacetyl-O,O'-diisopropylester)
Source of chirality: chromatographic separation of the α-boroxazolidone-γ-(R)-phenylethylamide
Absolute configuration S

F.Acher and R.Azerad

Tetrahedron: Asymmetry **1994**, *5*, 731



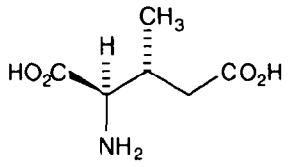
$C_6H_{11}NO_4$

Threo-4-methylglutamic acid

M.p. 151°C
$[\alpha]_D^{21}$ = + 22.8 (c 0.25, H_2O)
E.e.≥ 98 % (by chiral GC of the N-trifluoroacetyl-O,O'-diisopropylester)
Source of chirality: chromatographic separation of the α-boroxazolidone-γ-(R)-phenylglycinolamide
Absolute configuration 2S,4S

F.Acher and R.Azerad

Tetrahedron: Asymmetry **1994**, *5*, 731



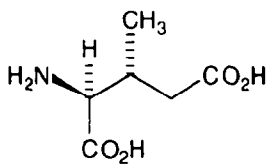
$C_6H_{11}NO_4$

Erythro-3-methylglutamic acid

M.p. 170°C
$[\alpha]_D^{21}$ = - 15.6 (c 1, H_2O)
E.e.≥ 99.5 % (by chiral GC of the N-trifluoroacetyl-O,O'-diisopropylester)
Source of chirality: chromatographic separation of the α-boroxazolidone-γ-(R)-phenylglycinolamide
Absolute configuration 2R,3R

F.Acher and R.Azerad

Tetrahedron: Asymmetry **1994**, *5*, 731



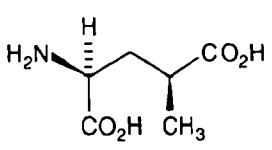
$C_6H_{11}NO_4$

Threo-3-methylglutamic acid

M.p. 163°C
$[\alpha]_D^{21}$ = + 14.4 (c 1, H_2O)
E.e.≥ 98 % (by chiral GC of the N-trifluoroacetyl-O,O'-diisopropylester)
Source of chirality: chromatographic separation of the α-boroxazolidone-γ-(R)-phenylglycinolamide
Absolute configuration 2S,3R

F.Acher and R.Azerad

Tetrahedron: Asymmetry **1994**, *5*, 731



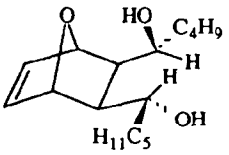
$C_6H_{11}NO_4$

Erythro-4-methylglutamic acid

M.p. 169°C
$[\alpha]_D^{21}$ = - 20.0 (c 0.6, 6N HCl)
E.e.≥ 95 % (by chiral GC of the N-trifluoroacetyl-O,O'-diisopropylester)
Source of chirality: chromatographic separation of the α-boroxazolidone-γ-(R)-phenylglycinolamide
Absolute configuration 2R,4S

R. Bloch, C. Brillet-Fernandez and G. Mandville

Tetrahedron: Asymmetry **1994**, *5*, 745



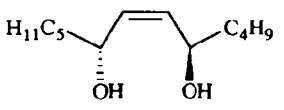
$C_{17}H_{30}O_3$

2-(1'Hydroxypentyl)-3-(1"-hydroxybutyl)-7-oxabicyclo [2.2.1]hept-5-ene

$[\alpha]_D^{20}$ = -8.5 (c 1, $CHCl_3$)
Source of chirality : from a precursor obtained by enzymatic resolution
Absolute configuration : 1*R*,2*R*,3*S*,4*S*,1'*R*,1"*R*

R. Bloch, C. Brillet-Fernandez and G. Mandville

Tetrahedron: Asymmetry **1994**, *5*, 745



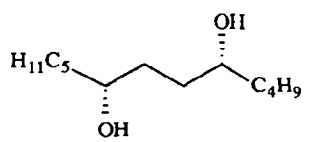
$C_{13}H_{26}O_2$

6-Tridecen-5,8-diol

Ee > 95% [^{1}H NMR with Eu(hfc)$_3$]
$[\alpha]_D^{20}$ = +1.7 (c 1, $CHCl_3$)
Source of chirality : from a precursor obtained by enzymatic resolution
Absolute configuration : 5*R*,8*R*

R. Bloch, C. Brillet-Fernandez and G. Mandville

Tetrahedron: Asymmetry **1994**, *5*, 745



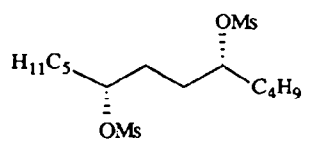
$C_{13}H_{28}O_2$

Tridecan-5,8-diol

$[\alpha]_D^{20}$ = -5.3 (c 0.8, $CHCl_3$)
Source of chirality : from a precursor obtained by enzymatic resolution
Absolute configuration : 5*R*,8*R*

R. Bloch, C. Brillet-Fernandez and G. Mandville

Tetrahedron: Asymmetry **1994**, *5*, 745



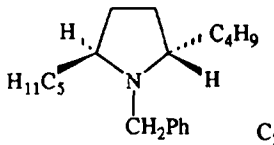
$C_{15}H_{32}O_6S_2$

5,8-bis[(methylsulfonyl)oxy]tridecane

$[\alpha]_D^{20}$ =+4.3 (c 1, $CHCl_3$)
Source of chirality : from a precursor obtained by enzymatic resolution
Absolute configuration : 5*R*,8*R*

R. Bloch, C. Brillet-Fernandez and G. Mandville

Tetrahedron: Asymmetry **1994**, *5*, 745



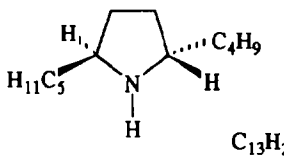
$C_{20}H_{33}N$

N-Benzyl-2-butyl-5-pentylpyrrolidine

$[\alpha]_D^{20}$ =+94 (c 0.83, $CHCl_3$)
Source of chirality : from a precursor obtained by enzymatic resolution
Absolute configuration : 2*S*,5*S*

R. Bloch, C. Brillet-Fernandez and G. Mandville

Tetrahedron: Asymmetry **1994**, *5*, 745



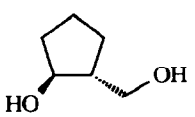
$C_{13}H_{27}N$

2-Butyl-5-pentylpyrrolidine

Ee > 95%
$[\alpha]_D^{20}$ =+5.6 (c 0.61, $CHCl_3$)
Source of chirality : from a precursor obtained by enzymatic resolution
Absolute configuration : 2*S*,5*S*

J. Weidner, F. Theil, H. Schick

Tetrahedron: Asymmetry **1994**, *5*, 751



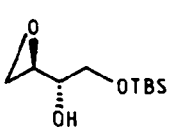
$C_6H_{12}O_2$

(1S,2R)-2-(Hydroxymethyl)cyclopentanol

Ee >99% (by GLC on Lipodex E)
$[\alpha]_D^{20}$ +13.4 (c 1, $CHCl_3$)
Source of chirality: Resolution by lipase-catalyzed acetylation
Absolute configuration: 1S,2R (assigned by comparison of $[\alpha]_D$)

Mukund K Gurjar* and N Rama Devi

Tetrahedron: Asymmetry **1994**, *5*, 755

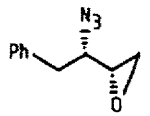


$C_{10}H_{22}O_3Si$
(2S,3R)-1-tert.Butyldimethylsilyl-3,4-epoxybutane 1,2-diol.

Ee => 90%
$[\alpha]_D$ = + 13 (c 1.1, $CHCl_3$)
Source of chirality : Asymmetric synthesis (Sharpless epoxidation)
Absolute configuration - 2S,3R.

Mukund K Gurjar* and N Rama Devi

Tetrahedron: Asymmetry **1994**, *5*, 755

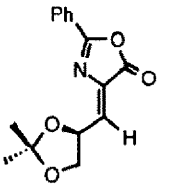


$C_{10}H_{11}N_3O$
(2R,3S)-3-Azido-1,2-epoxy-4-phenyl butane

Ee = > 90%
$[\alpha]_D$ = + 20.9 (c 0.52, $CHCl_3$)
Source of chirality : Asymmetric synthesis
Absolute configuration - 2R,3S.

Elena Bufiuel, Carlos Cativiela*, Maria D. Diaz-de-Villegas and José I. García

Tetrahedron: Asymmetry **1994**, *5*, 759



d.e.>98% by HPLC
$[\alpha]_D^{20}$ + 34.5 (c = 1, $CHCl_3$)
Source of chirality : natural
Absolute configuration : *S*

$C_{15}H_{15}NO_4$
Z -2-phenyl -4-[*(S)* -2,2-dimethyl-1,3-dioxolan-4-ylmethylen]-5(4H)-oxazolone

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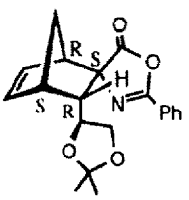
Elena Bufiuel, Carlos Cativiela*, Maria D. Diaz-de-Villegas and José I. García

Tetrahedron: Asymmetry **1994**, *5*, 759

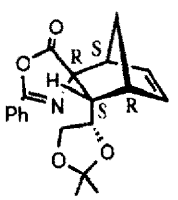


d.e.>98% by HPLC
$[\alpha]_D^{20}$ + 142.8 (c = 1, $CHCl_3$)
Source of chirality : diastereoselective cycloaddition
Absolute configuration : *1R, 2S, 3R, 4S*

$C_{20}H_{21}NO_4$
(1R,2S,3R,4S) -3-[*(S)* -2,2-dimethyl-1,3-dioxolan-4-yl]-bicyclo[2.2.1.]hept-5-en-2-spiro-[4'[2'-phenyl-5'(4'H)-oxazolone]]

Elena Bufiuel, Carlos Cativiela*, Maria D. Diaz-de-Villegas and José I. García

Tetrahedron: Asymmetry **1994**, *5*, 759

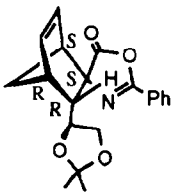


d.e.>98% by HPLC
$[\alpha]_D^{20}$ - 103.4 (c = 1, $CHCl_3$)
Source of chirality : diastereoselective cycloaddition
Absolute configuration : *1S, 2R, 3S, 4R*

$C_{20}H_{21}NO_4$
(1S,2R,3S,4R) -3-[*(S)* -2,2-dimethyl-1,3-dioxolan-4-yl]-bicyclo[2.2.1.]hept-5-en-2-spiro-[4'[2'-phenyl-5'(4'H)-oxazolone]]

Elena Buñuel, Carlos Cativiela*, Maria D. Diaz-de-Villegas and José I. García

Tetrahedron: Asymmetry **1994,** *5,* 759



d.e.>98% by HPLC

$[\alpha]_D^{20}$ - 27.6 (c = 0.5, $CHCl_3$)

Source of chirality : diastereoselective cycloaddition

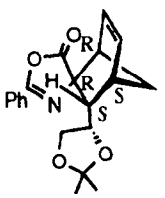
Absolute configuration : *1S, 2S, 3R, 4R*

$C_{20}H_{21}NO_4$

(1S,2S,3R,4R) -3-[*(S)* -2,2-dimethyl-1,3-dioxolan-4-yl]bicyclo-[2.2.1.]hept-5-en-2-spiro-{4'[2'-phenyl-5'(4'H)-oxazolone]}

Elena Buñuel, Carlos Cativiela*, Maria D. Diaz-de-Villegas and José I. García

Tetrahedron: Asymmetry **1994,** *5,* 759



d.e.>98% by HPLC

$[\alpha]_D^{20}$ + 34.5 (c = 1, $CHCl_3$)

Source of chirality : diastereoselective cycloaddition

Absolute configuration : *1R, 2R, 3S, 4S*

$C_{20}H_{21}NO_4$

(1R,2R,3S,4S) -3-[*(S)* -2,2-dimethyl-1,3-dioxolan-4-yl]bicyclo-[2.2.1.]hept-5-en-2-spiro-{4'[2'-phenyl-5'(4'H)-oxazolone]}