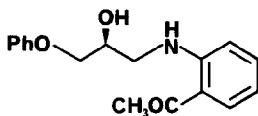


STEREOCHEMISTRY ABSTRACTS

A. Kamal and M.V. Rao

Tetrahedron: Asymmetry **1991**, *2*, 751



$C_{17}H_{19}NO_3$

(2'-Acetylanilino)-3-(phenoxy)-2-propanol

e.e. = 96% [For diacetate by HPLC using α_1 -AGP column]

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

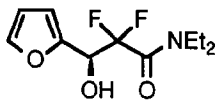
Source of chirality: Enzymatic resolution

Absolute Configuration: S

[assigned by chemical correlation to (2S)-Propranolol, see J.M. Klunder, S.Y. Ko and K.B. Sharpless, *J.Org.Chem.* **51** (1986) 3710.]

T. Tsukamoto, T. Yoshiyama, and T. Kitazume

Tetrahedron: Asymmetry **1991**, *2*, 759



$C_{11}H_{15}F_2NO_3$

N,N-Diethyl-2,2-difluoro-3-(2-furyl)-3-hydroxypropionamide

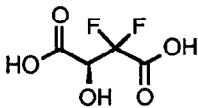
E.e. = >98% [by 1H NMR analysis of MTPA ester]

$[\alpha]_D^{23} +25.1$ (c 0.9, MeOH)

Absolute configuration : S

T. Tsukamoto, T. Yoshiyama, and T. Kitazume

Tetrahedron: Asymmetry **1991**, *2*, 759



$C_4H_4F_2O_5$

Difluoromalic acid

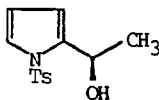
E.e. = >98% [Estimated from the ee value of the starting material]

$[\alpha]_D^{25} -6.1$ (c 1.2, H₂O)

Absolute configuration : S

W.S. Zhou*, Dong W.

Tetrahedron: Asymmetry **1991**, *2*, 767



$C_{13}H_{15}NO_3S$

(R)- α -(N-tosyl-pyrrolyl)-ethan-1-ol

E.e. > 95 (Mosher ester)

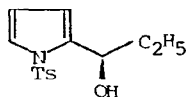
$[\alpha]_D^{20} = +21.5$ (C=1.0, Ethylacetate)

Source of chirality: Kinetic resolution

(Sharpless asymmetric epoxidation)

Absolute configuration: R (Horeau's method)

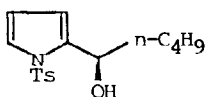
W S. Zhou* .Dong W.



$C_{14}H_{17}NO_3S$
 (R)- α -(N-tosyl-pyrrolyl)-propan-1-ol

E.e= 92 (Mosher ester)
 $[\alpha]_D^{20} = +37.1$ (C=1.0, Ethylacetate)
 Source of chirality: Kinetic resolution
 (Sharpless asymmetric epoxidation)
 Absolute configuration: **R** (Horeau's method)

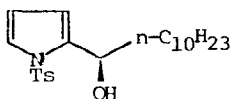
W S Zhou* .Dong W.



$C_{16}H_{21}NO_3S$
 (R)- α -(N-tosyl-pyrrolyl)-pentan-1-ol

E.e= 90 (Mosher ester)
 $[\alpha]_D^{20} = +42.6$ (C=1.0, Ethylacetate)
 Source of chirality: Kinetic resolution
 (Sharpless asymmetric epoxidation)
 Absolute configuration: **R** (Horeau's method)

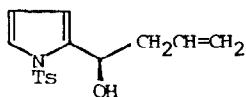
W.S.Zhou* .Dong W.



$C_{22}H_{23}NO_3S$
 (R)- α -(N-tosyl-pyrrolyl)-nonan-1-ol

E.e= 90 (Mosher ester)
 $[\alpha]_D^{20} = +38.0$ (C=1.0, Ethylacetate)
 Source of chirality: Kinetic resolution
 (Sharpless asymmetric epoxidation)
 Absolute configuration: **R** (Horeau's method)

W.S.Zhou* .Dong W.

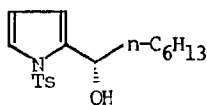


$C_{15}H_{17}NO_3S$
 (R)- α -(N-tosyl-pyrrolyl)-buten-3-ol

E.e 95 (Mosher ester)
 $[\alpha]_D^{20} = +65.6$ (C=1.1, Ethylacetate)
 Source of chirality: Kinetic resolution
 (Sharpless asymmetric epoxidation)
 Absolute configuration: **R** (Horeau's method)

W.S. Zhou* .Dong .W.

Tetrahedron: Asymmetry **1991**, *2*, 767

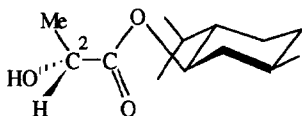


$C_{18}H_{25}NO_3S$
(S)- α -(N-tosyl-pyrrolyl)-heptan-1-ol

E.e 95 (Mosher ester)
 $[\alpha]_D^{20} = -45.5$ (C=1.0, Ethylacetate)
Source of chirality: Kinetic resolution
(Sharpless asymmetric epoxidation)
Absolute configuration: S (Horeau's method)

G. BOIREAU, A.DEBERLY

Tetrahedron: Asymmetry **1991**, *2*, 771

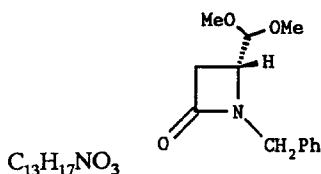


2R (-) menthyl lactate
 $C_{13}H_{24}O_3$

D.e. 90% (by GLC analysis)
Source of chirality : (-) menthol
Absolute configuration 2R (assigned by identification of the minor diastereoisomer with an authentic sample of (2S) (-) menthyl lactate)

M. Lubben, B.L. Feringa

Tetrahedron: Asymmetry **1991**, *2*, 775



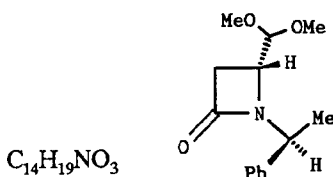
$C_{13}H_{17}NO_3$
N-benzyl-4(R)-dimethoxy-
methyl-2-azetidinone.

E.e. = 92% (by 1H NMR)
 $[\alpha]_D^{25} = -18.7$ (c 3, $CHCl_3$)
Source of chirality: asymmetric
synthesis from 5(R)-menthyloxy-
2[5H]-furanone

Absolute configuration: 4R

M. Lubben, B.L. Feringa

Tetrahedron: Asymmetry **1991**, *2*, 775



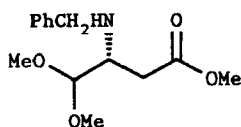
$C_{14}H_{19}NO_3$
N-((S)- α -methylbenzyl)-4(R)-
dimethoxymethyl-2-azetidinone.

D.e. = 92% (by 1H NMR)
 $[\alpha]_D^{25} = +26.0$ (c 1.9, $CHCl_3$)
Source of chirality: asymmetric
synthesis from 5(R)-menthyloxy-
2[5H]-furanone

Absolute configuration: 4R, 2'S

M. Lubben, B.L. Feringa

Tetrahedron: Asymmetry 1991, 2, 775



C₁₄H₂₁NO₄

Methyl-3(R)-benzylamino-4,4-dimethoxybutyrate

E.e. = 92% (by ¹H NMR)

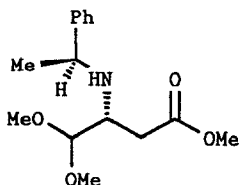
[α]₄₃₆²⁵ = -7.2 (c 1.3, CHCl₃)

Source of chirality: asymmetric synthesis from 5(R)-menthyloxy-2[5H]-furanone

Absolute configuration: 3R

M. Lubben, B.L. Feringa

Tetrahedron: Asymmetry 1991, 2, 775



C₁₅H₂₃NO₄

Methyl-3(R)-((S)-α-methylbenzylamino)-4,4-dimethoxybutyrate

D.e. = 92% (by ¹H NMR)

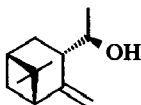
[α]₄₃₆²⁵ = -42.0 (c 2.3, CHCl₃)

Source of chirality: asymmetric synthesis from 5(R)-menthyloxy-2[5H]-furanone

Absolute configuration: 3R, 2'S

A. Köver, T. Schottelius and H.M.R. Hoffmann

Tetrahedron: Asymmetry 1991, 2, 779



C₁₂H₂₀O

3-(1-Hydroxyethyl)-6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane

ee > 97% [GC, ¹H NMR, ¹³C NMR]

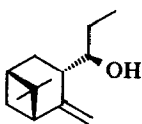
[α]_D²⁰ = 27.64 (c 0.955, MeOH)

Source of chirality: myrtenyl bromide, α_D²⁰ (neat) -34.4 (> 97% ee)

Absolute configuration: 1R,3S,5R,11R

A. Köver, T. Schottelius and H.M.R. Hoffmann

Tetrahedron: Asymmetry 1991, 2, 779



C₁₃H₂₂O

3-(1-Hydroxypropyl)-6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane

ee > 97% [GC, ¹H NMR, ¹³C NMR]

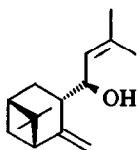
[α]_D²⁰ = 45.33 (c 0.77, MeOH)

Source of chirality: myrtenyl bromide, α_D²⁰ (neat) -34.4 (> 97% ee)

Absolute configuration: 1R,3S,5R,11R

A. Köver, T. Schottelius and H.M.R. Hoffmann

Tetrahedron: Asymmetry **1991**, *2*, 779



ee > 97% [GC, ^1H NMR, ^{13}C NMR]

$[\alpha]_{\text{D}}^{24} = 19.03$ (c 1.455, MeOH)

Source of chirality: myrtenyl bromide, α_{D}^{20} (neat) -34.4 (> 97% ee)

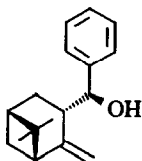
Absolute configuration: 1R,3S,5R,11S

$\text{C}_{15}\text{H}_{24}\text{O}$

3-(1-Hydroxy-3-methyl-2-buten-1-yl)-6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane

A. Köver, T. Schottelius and H.M.R. Hoffmann

Tetrahedron: Asymmetry **1991**, *2*, 779



ee > 97% [GC, ^1H NMR, ^{13}C NMR]

$[\alpha]_{\text{D}}^{21} = 34.47$ (c 0.795, MeOH)

Source of chirality: myrtenyl bromide, α_{D}^{20} (neat) -34.4 (> 97% ee)

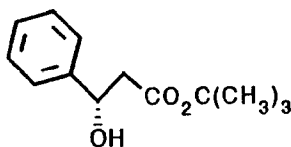
Absolute configuration: 1R,3S,5R,11S

$\text{C}_{17}\text{H}_{22}\text{O}$

3-(1-Hydroxybenzyl)-6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane

K. Soal and Y. Kawase

Tetrahedron: Asymmetry **1991**, *2*, 781



E.e. = 75% [by hplc using a chiral column]

$[\alpha]_{\text{D}}^{22} = -32.5$ (c 2.0, CHCl_3)

Source of chirality: asym. synth. (Reformatsky)

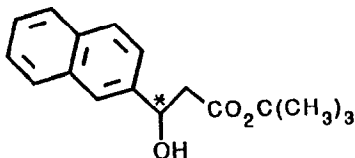
Absolute configuration: S

$\text{C}_{13}\text{H}_{18}\text{O}_3$

t-butyl 3-hydroxy-3-phenylpropanoate

K. Soal and Y. Kawase

Tetrahedron: Asymmetry **1991**, *2*, 781



E.e. = 78% [by hplc using a chiral column]

$[\alpha]_{\text{D}}^{26} = -26.9$ (c 1.1, CHCl_3)

Source of chirality: asym. synth. (Reformatsky)

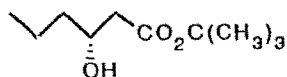
Absolute configuration: not determined

$\text{C}_{17}\text{H}_{20}\text{O}_3$

t-butyl 3-hydroxy-3-(2-naphthyl)propanoate

K. Soai and Y. Kawase

Tetrahedron: Asymmetry **1991**, *2*, 781



E.e. = 56% [by optical rotation]

$[\alpha]_D^{24} -13.6$ (c 0.9, CHCl₃)

Source of chirality: asymm. synth. (Reformatsky)

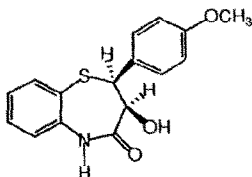
Absolute configuration: R

C₁₀H₂₀O₃

t-butyl 3-hydroxyhexanoate

C. Giordano, A. Restelli

Tetrahedron: Asymmetry **1991**, *2*, 785



C₁₆H₁₅NO₃S

3-Hydroxy-2-(4-methoxyphenyl)-2,3-dihydro-1,5-benzothiazepin-4-(5H)-one

e.e. = 100% [by ¹H NMR]

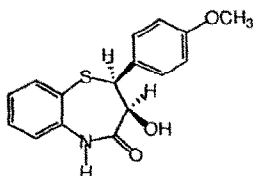
$[\alpha]_D^{25} = +55.2$ (c 1, CHCl₃)

New chiral solvating agent for ee determination of α -arylalkanoic acids, α -hydroxy acids, alkanesulfonic acids, alcohols and 1,5-benzothiazepines

Absolute configuration: 2S,3S

C. Giordano, A. Restelli

Tetrahedron: Asymmetry **1991**, *2*, 785



C₁₆H₁₅NO₃S

3-Hydroxy-2-(4-methoxyphenyl)-2,3-dihydro-1,5-benzothiazepin-4-(5H)-one

e.e. = 100% [by ¹H NMR]

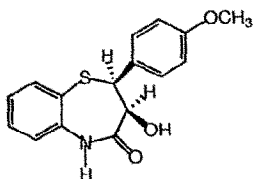
$[\alpha]_D^{25} = +55.2$ (c 1; CHCl₃)

New chiral solvating agent for ee determination of α -arylalkanoic acids, α -hydroxy acids, alkanesulfonic acids, alcohols and 1,5-benzothiazepines.

Absolute configuration: 2S,3S

C. Giordano, A. Restelli

Tetrahedron: Asymmetry **1991**, *2*, 785



C₁₆H₁₅NO₃S

3-Hydroxy-2-(4-methoxyphenyl)-2,3-dihydro-1,5-benzothiazepin-4-(5H)-one

e.e. = 100% [by ¹H NMR]

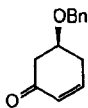
$[\alpha]_D^{25} = +55.2$ (c 1; CHCl₃)

New chiral solvating agent for ee determination of α -arylalkanoic acids, α -hydroxy acids, alkanesulfonic acids, alcohols and 1,5-benzothiazepines.

Absolute configuration: 2S,3S

L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle

Tetrahedron: Asymmetry **1991**, *2*, 789



C₁₃H₁₄O₂

5(S)-Benzyloxy-cyclohex-2-en-1-one

E.e. = >95 % [by ¹H NMR of a precursor]

[α]_D²⁰ = -5.6 (c 0.9, CHCl₃)

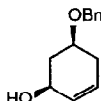
Source of chirality : enantiotoposelective enzymatic hydrolysis of a precursor.

Absolute configuration : 5(S)

(assigned by chemical correlation).

L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle

Tetrahedron: Asymmetry **1991**, *2*, 789



C₁₃H₁₆O₂

5(S)-Benzyloxy-cyclohex-2-en-1(S)-ol

E.e. = >95 % [by ¹H NMR of a precursor]

[α]_D²⁰ = -53.3 (c 0.4, CHCl₃)

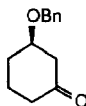
Source of chirality : enantiotoposelective enzymatic hydrolysis of a precursor.

Absolute configuration : 1(S),5(S)

(assigned by chemical correlation).

L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle

Tetrahedron: Asymmetry **1991**, *2*, 789



C₁₃H₁₆O₂

3(R)-Benzyloxy-cyclohexan-1-one

E.e. = 80 % [by ¹H NMR of a precursor]

[α]_D²⁰ = +9.45 (c 0.9, CHCl₃)

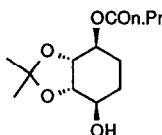
Source of chirality : enantiotoposelective enzymatic hydrolysis of a precursor.

Absolute configuration : 3(R)

(assigned by CD and chemical correlation).

L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle

Tetrahedron: Asymmetry **1991**, *2*, 789



C₁₃H₂₂O₅

4(S)-Butanoyloxy-2,3-O-isopropylidene-cyclohexane-1(R),2(S),3(R)-triol

E.e. = >95 % [by ¹H NMR in the presence of Eu(hfc)₃]

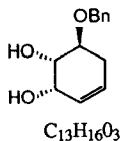
[α]_D²⁰ = +10.8 (c 1.3, CHCl₃)

Source of chirality : enantiotoposelective enzymatic hydrolysis.

Absolute configuration : 1(R),2(S),3(R)

(assigned by chemical correlation).

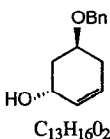
L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle



3(S)-Benzyloxy-cyclohex-5-ene-1(S),2(S)-diol

E.e. = >95 % [by 1H NMR of a precursor]
 $[\alpha]_D^{20} = +167.9$ (c 1.2, $CHCl_3$)
 Source of chirality : enantiotoposelective enzymatic hydrolysis of a precursor.
 Absolute configuration : 1(S),2(S),3(S)
 (assigned by chemical correlation).

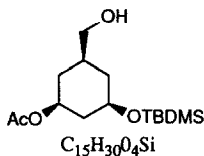
L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle



5(S)-Benzyloxy-cyclohex-2-ene-1(R)-ol

E.e. = >95 % [by 1H NMR of a precursor]
 $[\alpha]_D^{20} = +91.4$ (c 1.3, $CHCl_3$)
 Source of chirality : enantiotoposelective enzymatic hydrolysis of a precursor.
 Absolute configuration : 1(R),5(S)
 (assigned by chemical correlation).

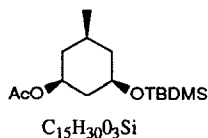
L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle



3(R)-Acetoxy-5(R)-L-butyltrimethylsilyloxy-cyclohexan-1(R)-yl-methanol

E.e. = 95 % [by 1H NMR of a precursor]
 $[\alpha]_D^{20} = -1.9$ (c 1.0, $CHCl_3$)
 Source of chirality : enantiotoposelective enzymatic hydrolysis of a precursor.
 Absolute configuration : 1(R),3(S),5(R)
 (assigned by chemical correlation).

L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle



3(R)-L-Butyldimethylsilyloxy-5(R)-methyl-cyclohexan-1(S)-yl-acetate

E.e. = 95 % [by 1H NMR of a precursor]
 $[\alpha]_D^{20} = -9.3$ (c 0.64, $CHCl_3$)
 Source of chirality : enantiotoposelective enzymatic hydrolysis of a precursor.
 Absolute configuration : 1(S),3(R),5(R)
 (assigned by chemical correlation).

L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle

Tetrahedron: Asymmetry 1991, 2, 789

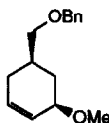


C₇H₁₀O
5(S)-Methyl-cyclohex-2-en-1-one

E.e. = 95 % [by ¹H NMR of a precursor]
[α]_D²⁰ = +81.4 (c 0.54, CHCl₃)
Source of chirality : enantioselective enzymatic hydrolysis of a precursor.
Absolute configuration : 5(S)
(assigned by comparison with literature data).

L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle

Tetrahedron: Asymmetry 1991, 2, 789

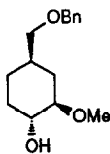


C₁₅H₂₀O₂
5(R)-Benzyloxymethyl-3(R)-methoxy-cyclohex-1-ene

E.e. = 95 % [by ¹H NMR of a precursor]
[α]_D²⁰ = -16.3 (c 1.7, CHCl₃)
Source of chirality : enantioselective enzymatic hydrolysis of a precursor.
Absolute configuration : 3(R),5(R)
(assigned by chemical correlation).

L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle

Tetrahedron: Asymmetry 1991, 2, 789

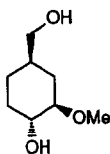


C₁₅H₂₂O₃
4(R)-Benzyloxymethyl-2(R)-methoxy-cyclohexan-1(R)-ol

E.e. = 95 % [by ¹H NMR of a precursor]
[α]_D²⁰ = -42.7 (c 1.0, CHCl₃)
Source of chirality : enantioselective enzymatic hydrolysis of a precursor.
Absolute configuration : 1(R),2(R),4(R)
(assigned by chemical correlation).

L. Dumortier, M. Carda, J. Van der Eycken, G. Snatzke and M. Vandewalle

Tetrahedron: Asymmetry 1991, 2, 789

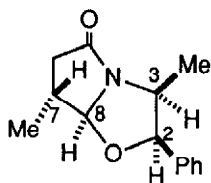


C₈H₁₆O₃
4(R)-Hydroxymethyl-2(R)-methoxy-cyclohexan-1(R)-ol

E.e. = 95 % [by ¹H NMR of a precursor]
[α]_D²⁰ = -56.0 (c 1.0, CHCl₃)
Source of chirality : enantioselective enzymatic hydrolysis of a precursor.
Absolute configuration : 1(R),2(R),4(R)
(assigned by comparison with literature data).

C. Gennari, G. Poli, C. Scolastico and M. Vassallo

Tetrahedron: Asymmetry **1991**, *2*, 793



$C_{14}H_{17}NO_2$

3,7-Dimethyl-2-phenyl-(1-oxa-4-azabicyclo[3.3.0]octan-5-one)

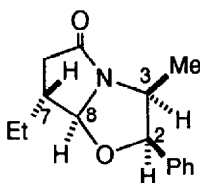
E.e.=100%; D.e.≥97% by 1H , ^{13}C nmr and capillary vpc.

Source of chirality: natural [(1R,2S)-(-)Norephedrine] and asymm.synth.(radical cyclization).

Absolute configuration 2R, 3S, 7R, 8S
assigned by n.O.e. difference experiments and by comparison of experimental coupling constants with calculated values (MM2 modelling, Altona equation).

C. Gennari, G. Poli, C. Scolastico and M. Vassallo

Tetrahedron: Asymmetry **1991**, *2*, 793



$C_{15}H_{19}NO_2$

7-Ethyl-3-methyl-2-phenyl-(1-oxa-4-azabicyclo[3.3.0]octan-5-one)

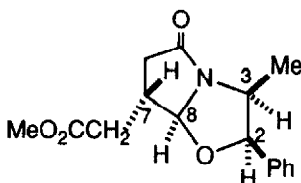
E.e.=100%; D.e.≥97% by 1H , ^{13}C nmr and capillary vpc.

Source of chirality: natural [(1R,2S)-(-)Norephedrine] and asymm.synth.(radical cyclization).

Absolute configuration 2R, 3S, 7R, 8S
assigned by n.O.e. difference experiments and by comparison of experimental coupling constants with calculated values (MM2 modelling, Altona equation).

C. Gennari, G. Poli, C. Scolastico and M. Vassallo

Tetrahedron: Asymmetry **1991**, *2*, 793



$C_{16}H_{19}NO_4$

7-Methoxycarbonylmethyl-3-methyl-2-phenyl-(1-oxa-4-azabicyclo[3.3.0]octan-5-one)

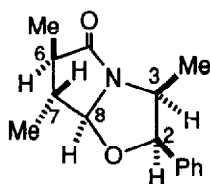
E.e.=100%; D.e.≥97% by 1H , ^{13}C nmr and capillary vpc.

Source of chirality: natural [(1R,2S)-(-)Norephedrine] and asymm.synth.(radical cyclization).

Absolute configuration 2R, 3S, 7S, 8S
assigned by n.O.e. difference experiments and by comparison of experimental coupling constants with calculated values (MM2 modelling, Altona equation).

C. Gennari, G. Poli, C. Scolastico and M. Vassallo

Tetrahedron: Asymmetry **1991**, *2*, 793



$C_{15}H_{19}NO_2$

2-Phenyl-3,6,7-trimethyl-(1-oxa-4-azabicyclo[3.3.0]octan-5-one)

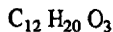
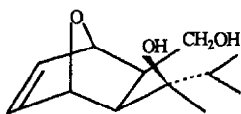
E.e.=100%; D.e.≥97% by 1H , ^{13}C nmr and capillary vpc.

Source of chirality: natural [(1R,2S)-(-)Norephedrine] and asymm.synth.(radical cyclization).

Absolute configuration 2R, 3S, 6R, 7R, 8S
assigned by n.O.e. difference experiments and by comparison of experimental coupling constants with calculated values (MM2 modelling, Altona equation).

R. Bloch and C. Brillet

Tetrahedron: Asymmetry **1991**, *2*, 797



2-Hydroxymethyl-3-(1,2-dimethyl-1-hydroxypropyl)-7-oxabicyclo[2.2.1]hept-5-ene

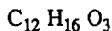
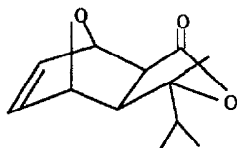
$$[\alpha]_D^{20} = -5 \text{ (c 1.7, } CHCl_3)$$

Source of chirality : from a precursor obtained by enzymatic hydrolysis.

Absolute configuration : 1R,2R,3R,4S,8R

R. Bloch and C. Brillet

Tetrahedron: Asymmetry **1991**, *2*, 797



4,10-Dioxo-5-isopropyl-5-methyltricyclo[5.2.1.0^{2,6}]dec-8-en-3-one

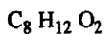
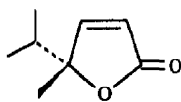
$$[\alpha]_D^{20} = -106 \text{ (c 1.08, } CHCl_3)$$

Source of chirality : from a precursor obtained by enzymatic hydrolysis.

Absolute configuration : 1R,2S,5R,6R,7S

R. Bloch and C. Brillet

Tetrahedron: Asymmetry **1991**, *2*, 797



4-isopropyl-4-methyl-2-butenolide

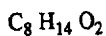
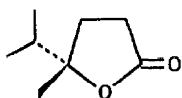
$$[\alpha]_D^{20} = -44 \text{ (c 0.83, } CHCl_3)$$

Source of chirality : from a precursor obtained by enzymatic hydrolysis.

Absolute configuration : 4R

R. Bloch and C. Brillet

Tetrahedron: Asymmetry **1991**, *2*, 797



4,5-Dimethyl-4-hexanolide

$E_e > 95\%$ (by NMR with $Eu(hfc)_3$)

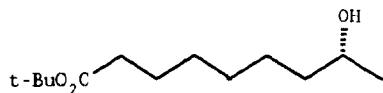
$$[\alpha]_D^{20} = +10 \text{ (c 0.64, } CHCl_3)$$

Source of chirality : from a precursor obtained by enzymatic hydrolysis.

Absolute configuration : 4S

G.Solladié, I.Fernandez, C.Maestro

Tetrahedron: Asymmetry 1991, 2, 801



$C_{13}H_{26}O_3$

t-Butyl (8R)-hydroxynonanoate

e.e > 95%

$[\alpha]_D - 6$ (c=1, acetone)

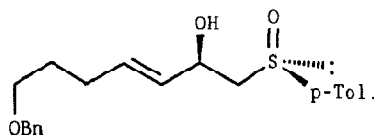
Source of chirality: asymmetric reduction of the β -ketosulfoxide

Absolute configuration: R

(assigned from the reduction mechanism)

G.Solladié, I.Fernandez, C.Maestro

Tetrahedron: Asymmetry 1991, 2, 801



$C_{21}H_{26}O_3S$

[(2R, (S)R, 3E)-7-benzyloxy-1-[(R)-p-tolylsulfinyl]-3-hepten-2-ol

e.e > 95%

$[\alpha]_D + 98$ (c=2, acetone)

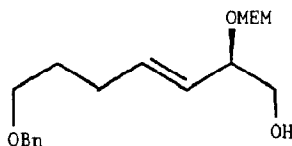
Source of chirality: asymmetric reduction of the β -ketosulfoxide

Absolute configuration: 2R, (S)R

(assigned from the reduction mechanism)

G.Solladié, I.Fernandez, C.Maestro

Tetrahedron: Asymmetry 1991, 2, 801



$C_{18}H_{28}O_5$

(2R, 3E)-7-benzyloxy-2-[(2'-methoxyethoxy)methoxy]-3-hepten-1-ol

e.e > 95%

$[\alpha]_D - 81,5$ (c=1.15, acetone)

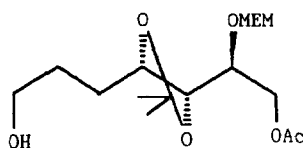
Source of chirality: asymmetric reduction of the β -ketosulfoxide

Absolute configuration: R

(assigned from the reduction mechanism)

G.Solladié, I.Fernandez, C.Maestro

Tetrahedron: Asymmetry 1991, 2, 801



$C_{16}H_{30}O_8$

(2S, 3S, 4S)-7-hydroxy-3,4-isopropylidenedioxy-2-[(2'-methoxyethoxy)methoxy]heptyl acetate

e.e > 95%

$[\alpha]_D - 21$ (c=2.35, acetone)

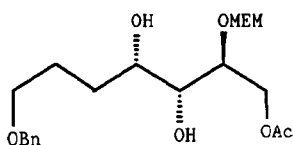
Source of chirality: asymmetric reduction of the β -ketosulfoxide and osmylation

Absolute configuration: 2S, 3S, 4S

(assigned from the reaction mechanism and correlation to the natural product)

G. Solladié, I. Fernandez, C. Maestro

Tetrahedron: Asymmetry **1991**, *2*, 801



(2S,3R,4S)-1-acetoxy-7-benzyloxy-
[(2'-methoxyethoxy)methoxy]-3,4-
heptane diol

e.e > 95%

$[\alpha]_D -3$ (c=1.42, acetone)

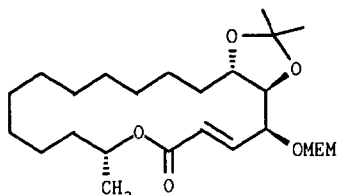
Source of chirality: asymmetric reduction of the β -ketosulfoxide and osmylation

Absolute configuration: 2S,3R,4S

(assigned from the reaction mechanism and correlation to the natural product)

G. Solladié, I. Fernandez, C. Maestro

Tetrahedron: Asymmetry **1991**, *2*, 801



(2E,4S,5S,6S,17R)-5,6-isopropylidenedioxy-4[(2'-methoxy-
ethoxy)methoxy]-17-methyl-2-heptadecenolide

e.e > 95%

$[\alpha]_D +10$ (c=0.96, methylene chloride)

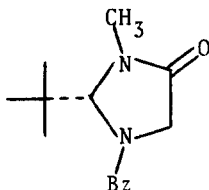
Source of chirality: asymmetric reduction of the β -ketosulfoxide and osmylation

Absolute configuration: 4S,5S,6S,17R

(assigned from the reaction mechanism and correlation to the natural product)

E. Juaristi, B. Rizo, V. Natal, J. Escalante
and I. Regla

Tetrahedron: Asymmetry **1991**, *2*, 821



e.e. = 96%

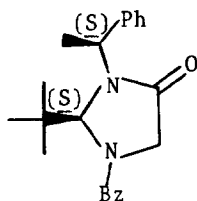
$[\alpha]_{29}^D = -123$ (c = 1, CH_2Cl_2).

Source of chirality: (S)- α -methyl-
benzylamine mediated resolution.

(R)-1-Benzoyl-2-tert-butyl-3-methyl-1,3-imidazolidin-4-one.

E. Juaristi, B. Rizo, V. Natal, J. Escalante
and I. Regla

Tetrahedron: Asymmetry **1991**, *2*, 821



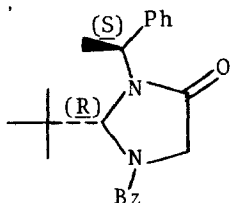
$[\alpha]_{29}^D = +60.5$ (c = 1, CH_2Cl_2).

Source of chirality: (S)- α -methyl-
benzylamine.

(S,S)-1-Benzoyl-2-tert-butyl-3-(α -phenylethyl)-1,3-imidazolidin-4-one.

E. Juaristi, B. Rizo, V. Natal, J. Escalante
and I. Regla .

Tetrahedron: Asymmetry 1991, 2, 821



$[\alpha]_{29}^D = +45.5$ (c = 1, CH_2Cl_2).
Source of chirality: (S)- α -methyl-
benzylamine.

(R,S)-1-Benzoyl-2-tert-butyl-3-(α -phenylethyl)-1,3-imidazolidin-4-one.