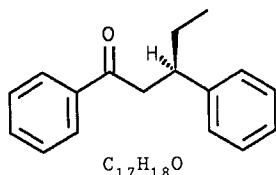


STEREOCHEMISTRY ABSTRACTS

J.F.G.A. Jansen and B.L. Feringa

Tetrahedron: Asymmetry **1992**, *3*, 581

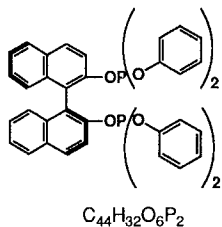


1,3-diphenyl-penta-1-one

e.e. \leq 85% by HPLC analysis, chiracel OD
 source of chirality: enantioselective 1,4-addition
 absolute configuration 3R

N. Sakai, K. Nozaki, K. Mashima, and H. Takaya

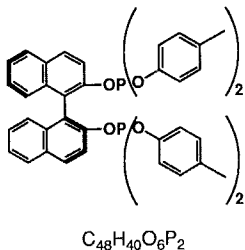
Tetrahedron: Asymmetry **1992**, *3*, 583



E.e. $>$ 99% [by HPLC analysis]
 $[\alpha]_D^{20} = -19.33$ (c 1.80, $CHCl_3$)
 Source of chirality: (S)-binaphthol
 Absolute configuration: S

N. Sakai, K. Nozaki, K. Mashima, and H. Takaya

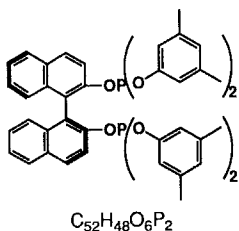
Tetrahedron: Asymmetry **1992**, *3*, 583



E.e. $>$ 99% [by HPLC analysis]
 $[\alpha]_D^{20} = -30.99$ (c 1.17, $CHCl_3$)
 Source of chirality: (S)-binaphthol
 Absolute configuration: S

N. Sakai, K. Nozaki, K. Mashima, and H. Takaya

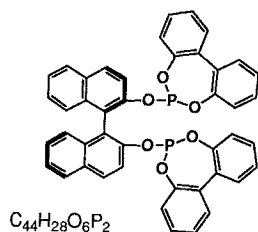
Tetrahedron: Asymmetry **1992**, *3*, 583



E.e. $>$ 99% [by HPLC analysis]
 $[\alpha]_D^{20} = +20.4$ (c 2.87, $CHCl_3$)
 Source of chirality: (S)-binaphthol
 Absolute configuration: S

N. Sakai, K. Nozaki, K. Mashima, and H. Takaya

Tetrahedron: Asymmetry **1992**, 3, 583



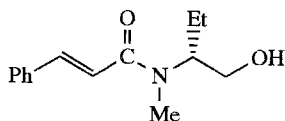
$C_{44}H_{28}O_6P_2$

$C_{44}H_{28}O_6P_2$

E.e = >99% [by HPLC analysis]
 $[\alpha]_D^{20} = +43.39$ (c 1.09, $CHCl_3$)
Source of chirality: (*R*)-binaphthol
Absolute configuration: R

J. Touet, S. Baudouin and E. Brown

Tetrahedron: Asymmetry **1992**, 3, 587



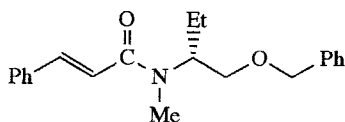
$C_{14}H_{19}NO_2$

(*R*)-(+)-N-(1-Hydroxybut-2-yl)
N-methylcinnamide

mp. 75°C
 $[\alpha]_D +23.8$ (c 2, PhH)
Ee = 100%
Chiral source :
(*R*)-(-)-2-aminobutan-1-ol
Absolute configuration : R

J. Touet, S. Baudouin and E. Brown

Tetrahedron: Asymmetry **1992**, 3, 587



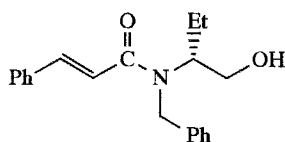
$C_{21}H_{25}NO_2$

(*R*)-(+)-N-(1-Benzyloxybut-2-yl)
N-methylcinnamide

$[\alpha]_D +80$ (c 2,8, MeOH)
Ee = 100%
Chiral source :
(*R*)-(-)-2-aminobutan-1-ol
Absolute configuration : R

J. Touet, S. Baudouin and E. Brown

Tetrahedron: Asymmetry **1992**, 3, 587



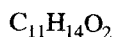
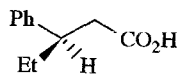
$C_{20}H_{23}NO_2$

(*R*)-(+)-N-Benzyl-N-(1-hydroxybut-2-yl)
cinnamide

mp. 85.8°C
 $[\alpha]_D +10$ (c 5, MeOH)
Ee = 100%
Chiral source :
(*R*)-(-)-2-aminobutan-1-ol
Absolute configuration : R

J. Touet, S. Baudouin and E. Brown

Tetrahedron: Asymmetry **1992**, 3, 587



(R)-(-)-3-Phenylpentanoic acid

$[\alpha]_D -46$ (c 4, PhH)

Ee = 92%

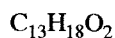
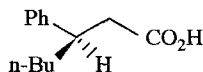
Chiral source :

(R)-(-)-2-aminobutan-1-ol

Absolute configuration : R

J. Touet, S. Baudouin and E. Brown

Tetrahedron: Asymmetry **1992**, 3, 587



(R)-(-)-3-Phenylheptanoic acid

$[\alpha]_{578} -37$ (c 8, PhH)

Ee = 100%

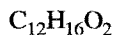
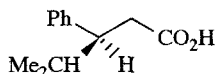
Chiral source :

(R)-(-)-2-aminobutan-1-ol

Absolute configuration : R

J. Touet, S. Baudouin and E. Brown

Tetrahedron: Asymmetry **1992**, 3, 587



(R)-(-)-3-Phenyl-4-methylpentanoic acid

$[\alpha]_D -31.8$ (c 3.8, PhH)

Ee = 78.5%

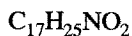
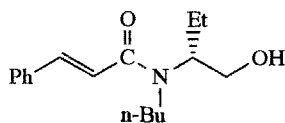
Chiral source :

(R)-(-)-2-aminobutan-1-ol

Absolute configuration : R

J. Touet, S. Baudouin and E. Brown

Tetrahedron: Asymmetry **1992**, 3, 587



(R)-(+)-N-Butyl-N-(1-hydroxybut-2-yl)
cinnamamide

$[\alpha]_D +4$ (c 5, MeOH)

Ee = 100%

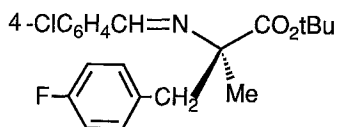
Chiral source :

(R)-(-)-2-aminobutan-1-ol

Absolute configuration : R

M.J. O'Donnell and S. Wu

Tetrahedron: Asymmetry **1992**, 3, 591



E.e.=50% (by chiral HPLC)

Source of chirality: phase-transfer catalyst derived from cinchonine

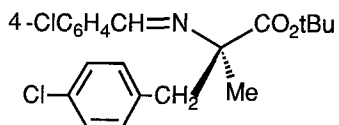
Absolute configuration: R

C₂₁H₂₃ClFNO₂

1,1-Dimethylethyl 4-fluoro-N-[(4-chlorophenyl)methylene]- α -methyl-D-phenylalaninate

M.J. O'Donnell and S. Wu

Tetrahedron: Asymmetry **1992**, 3, 591



E.e.=48% (by chiral HPLC)

Source of chirality: phase-transfer catalyst derived from cinchonine

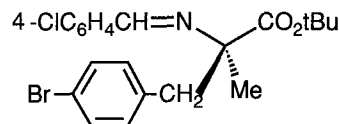
Absolute configuration: R

C₂₁H₂₃Cl₂NO₂

1,1-Dimethylethyl 4-chloro-N-[(4-chlorophenyl)methylene]- α -methyl-D-phenylalaninate

M.J. O'Donnell and S. Wu

Tetrahedron: Asymmetry **1992**, 3, 591



E.e.=44% (by chiral HPLC)

Source of chirality: phase-transfer catalyst derived from cinchonine

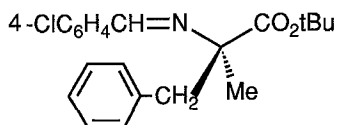
Absolute configuration: R

C₂₁H₂₃BrClNO₂

1,1-Dimethylethyl 4-bromo-N-[(4-chlorophenyl)methylene]- α -methyl-D-phenylalaninate

M.J. O'Donnell and S. Wu

Tetrahedron: Asymmetry **1992**, 3, 591



E.e.=44% (by chiral HPLC)

Source of chirality: phase-transfer catalyst derived from cinchonine

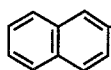
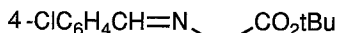
Absolute configuration: R

C₂₁H₂₄ClNO₂

1,1-Dimethylethyl N-[(4-chlorophenyl)methylene]- α -methyl-D-phenylalaninate

M.J. O'Donnell and S. Wu

Tetrahedron: Asymmetry **1992**, 3, 591



C₂₅H₂₆ClNO₂

1,1-Dimethylethyl [((4-chlorophenyl)methylene)-amino]- α -methyl-2-naphthalene-(R)-propanoate

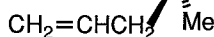
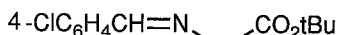
E.e.=42% (by chiral HPLC)

Source of chirality: phase-transfer catalyst derived from cinchonine

Absolute configuration: R

M.J. O'Donnell and S. Wu

Tetrahedron: Asymmetry **1992**, 3, 591



C₁₇H₂₂ClNO₂

1,1-Dimethylethyl 2-(((4-chlorophenyl)methylene)-amino)-2-methyl-(R)-4-pentenoate

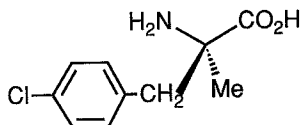
E.e.=36% (by chiral HPLC)

Source of chirality: phase-transfer catalyst derived from cinchonine

Absolute configuration: R

M.J. O'Donnell and S. Wu

Tetrahedron: Asymmetry **1992**, 3, 591



C₁₀H₁₂ClNO₂

4-Chloro- α -methyl-D-phenylalanine

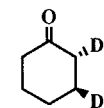
E.e.>97% (by HPLC of diastereomeric GITC derivative)

Source of chirality: phase-transfer catalyst derived from cinchonine then crystallization of racemate

Absolute configuration: R
(assigned by HPLC of GITC derivative)

G. Dauphin, J.G. Gourcy and H. Veschambre

Tetrahedron: Asymmetry **1992**, 3, 595



C₆H₈D₂O

$[\alpha]^{25}_D = +3.2$ (c = 0.1, CHCl₃)

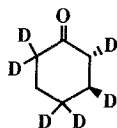
Absolute configuration : (2R, 3S) by NMR

Source of chirality : Microbiological reduction

(+)-2,3-dideuteriocyclohexan-1-one

G. Dauphin, J.G. Gourcy and H. Veschambre

Tetrahedron: Asymmetry **1992**, *3*, 595



(+)-2,3,4,4,6,6-hexadeuteriocyclohexan-1-one

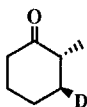
$[\alpha]^{25}_D = + 3.8$ ($c = 0.12$, $CHCl_3$)

Absolute configuration : (2R, 3S) by NMR

Source of chirality : Microbiological reduction

G. Dauphin, J.G. Gourcy and H. Veschambre

Tetrahedron: Asymmetry **1992**, *3*, 595



(-)-2-methyl-3-deuteriocyclohexan-1-one

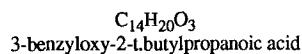
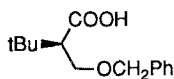
$[\alpha]^{25}_D = - 8$ ($c = 0.2$, $CHCl_3$)

Absolute configuration : (2R, 3S) by NMR

Source of chirality : Microbiological reduction

Ivan Steels, Pierre J. De Clercq*, and J.P.Declercq

Tetrahedron: Asymmetry **1992**, *3*, 599



E.e. = >95 % (nmr of methylester in presence of tris[3-heptafluoropropylhydroxymethylene-(+)-camphorato]europium(III))

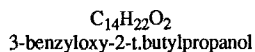
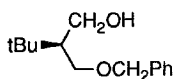
$[\alpha]_D = -11$ (c 0.71, MeOH)

Source of chirality : resolution with S(-)- α -methylbenzylamine (5 crystall. from EtOAc)

Absolute configuration : R (assigned by rel. X-ray of synthetic intermediate).

Ivan Steels, Pierre J. De Clercq*, and J.P.Declercq

Tetrahedron: Asymmetry **1992**, *3*, 599



E.e. = >95 % (nmr /chiral shift reagent of synth. intermed.)

$[\alpha]_{365} = -3$ (c 0.90, MeOH)

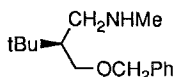
Source of chirality : resolution of synth. intermed.

Absolute configuration : S (assigned by rel. X-ray of synthetic intermediate).

X-ray of synthetic intermediate).

Ivan Steels, Pierre J. De Clercq*, and J.P.Declercq

Tetrahedron: Asymmetry **1992**, 3, 599

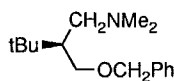


$C_{15}H_{25}NO$
N-methyl-3-benzyloxy-2-t-butylpropanamide

E.e. = >95 % (nmr /chiral shift reagent of synth. intermed.)
 $[\alpha]_{365} = +20$ (c 1.41, MeOH)
Source of chirality : resolution of synth. intermed.
Absolute configuration : S (assigned by rel. X-ray of synthetic intermediate).

Ivan Steels, Pierre J. De Clercq*, and J.P.Declercq

Tetrahedron: Asymmetry **1992**, 3, 599

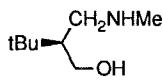


$C_{16}H_{27}NO$
N,N-dimethyl-3-benzyloxy-2-t-butylpropanamide

E.e. = >95 % (nmr /chiral shift reagent of synth. intermed.)
 $[\alpha]_D = +40$ (c 0.80, MeOH)
Source of chirality : resolution of synth. intermed.
Absolute configuration : S (assigned by rel. X-ray of synthetic intermediate).

Ivan Steels, Pierre J. De Clercq*, and J.P.Declercq

Tetrahedron: Asymmetry **1992**, 3, 599

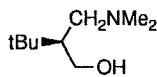


$C_8H_{19}NO$
2-t-butyl-3-(N-methylamino)propanol

E.e. = >95 % (nmr /chiral shift reagent of synth. intermed.)
 $[\alpha]_D = +32$ (c 0.92, MeOH)
Source of chirality : resolution of synth. intermed.
Absolute configuration : S (assigned by rel. X-ray of synthetic intermediate).

Ivan Steels, Pierre J. De Clercq*, and J.P.Declercq

Tetrahedron: Asymmetry **1992**, 3, 599

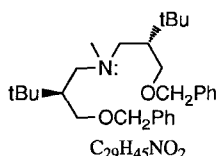


$C_9H_{21}NO$
2-t-butyl-3-(N,N-dimethylamino)propanol

E.e. = >95 % (nmr /chiral shift reagent of synth. intermed.)
 $[\alpha]_D = +64$ (c 0.75, MeOH)
Source of chirality : resolution of synth. intermed.
Absolute configuration : S (assigned by rel. X-ray of synthetic intermediate).

Ivan Steels, Pierre J. De Clercq*, and J.P.Declercq

Tetrahedron: Asymmetry **1992**, *3*, 599

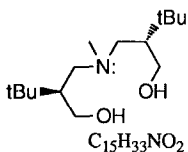


$C_{29}H_{45}NO_2$
N,N-di-(2-t-butyl-3-benzyloxypropyl)-N-methylamine

E.e. = >95 % (nmr /chiral shift reagent of synth. intermed.)
[α]_D = +75 (c 0.42, MeOH)
Source of chirality : resolution of synth. intermed.
Absolute configuration : S,S (assigned by rel. X-ray of synthetic intermediate).

Ivan Steels, Pierre J. De Clercq*, and J.P.Declercq

Tetrahedron: Asymmetry **1992**, *3*, 599

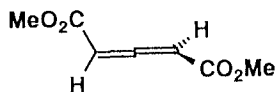


$C_{15}H_{33}NO_2$
N,N-di-(2-t-butyl-3-hydroxypropyl)-N-methylamine

E.e. = >95 % (nmr /chiral shift reagent of synth. intermed.)
[α]_D = +94 (c 1.37, MeOH)
Source of chirality : resolution of synth. intermed.
Absolute configuration : S,S (assigned by X-ray of corresponding ammonium S-(+)-10-camphorsulfonate salt).

Y. Naruse, H. Watanabe, and S. Inagaki

Tetrahedron: Asymmetry **1992**, *3*, 603

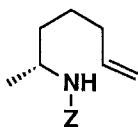


$C_7H_8O_4$
dimethyl (S)-2,3-pentadienedioate

E.e. = 82.0% [by nmr with (+)-Eu(hfc)₃]
Source of chirality: by complexation with Eu(hfc)₃
Absolute configuration S
(assigned by comparison with calculated optical rotation)

H.Takahata, H. Bandoh, M. Hanayama, and T. Momose

Tetrahedron: Asymmetry **1992**, *3*, 607



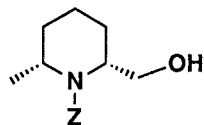
$C_{15}H_{21}NO_2$

(R)-6-Benzyloxycarbonylamino-1-heptene

E.e.=100%
mp.: 56-57 °C
[α]_D²⁶ = -7.12 (c 1.11, CH₂Cl₂)
Source of chirality: D-alanine
Absolute configuration: R

H.Takahata, H. Bandoh, M. Hanayama, and T. Momose

Tetrahedron: Asymmetry **1992**, 3, 607



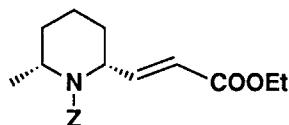
E.e.=100%
[α]_D²⁶ = -12.9 (c 2.105, MeOH)
Source of chirality: D-alanine
Absolute configuration: 2*R*,6*R*

C₁₅H₂₁NO₃

(2*R*,6*R*)-1-Benzyloxycarbonyl-2-hydroxymethyl-6-methylpiperidine

H.Takahata, H. Bandoh, M. Hanayama, and T. Momose

Tetrahedron: Asymmetry **1992**, 3, 607



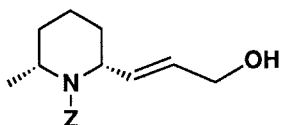
E.e.=100%
[α]_D²⁴ = +77.3 (c 1.125, CHCl₃)
Source of chirality: D-alanine
Absolute configuration: 2*R*,6*R*

C₁₉H₂₅NO₄

Ethyl 3-[(2*R*,6*R*)-1-Benzyloxycarbonyl-6-methyl-2-piperidinyl]-2-propenoate

H.Takahata, H. Bandoh, M. Hanayama, and T. Momose

Tetrahedron: Asymmetry **1992**, 3, 607



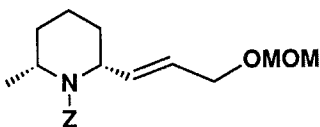
E.e.=100%
[α]_D²⁶ = +39.4 (c 1.985, CHCl₃)
Source of chirality: D-alanine
Absolute configuration: 2*R*,6*R*

C₁₇H₂₃NO₃

3-[(2*R*,6*R*)-1-Benzyloxycarbonyl-6-methyl-2-piperidinyl]-2-propen-1-ol

H.Takahata, H. Bandoh, M. Hanayama, and T. Momose

Tetrahedron: Asymmetry **1992**, 3, 607



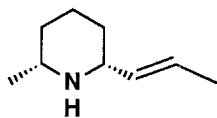
E.e.=100%
[α]_D²⁵ = +43.4 (c 1.625, CHCl₃)
Source of chirality: D-alanine
Absolute configuration: 2*R*,6*R*

C₁₉H₂₇NO₄

(2*R*,6*R*)-1-Benzyloxycarbonyl-2-{3-[(methoxymethyl)oxy]-1-propenyl}-6-methylpiperidine

H.Takahata, H. Bandoh, M. Hanayama, and T. Momose

Tetrahedron: Asymmetry **1992**, 3, 607



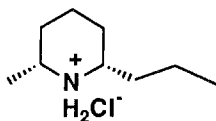
E.e. = >93%
[α]_D²⁵ = -9.8 (c 1.2, EtOH)
Source of chirality: D-alanine
Absolute configuration: 2*R*,6*R*

C₉H₁₇N

(2*R*,6*R*)-6-methyl-2-(1-propenyl)piperidine

H.Takahata, H. Bandoh, M. Hanayama, and T. Momose

Tetrahedron: Asymmetry **1992**, 3, 607



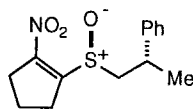
E.e. = >99%
mp.: 246-247 °C
[α]_D²⁶ = +12.7 (c 1.0, EtOH)
Source of chirality: D-alanine
Absolute configuration: 2*S*,6*R*

C₉H₂₀NCl

(2*S*,6*R*)-6-methyl-2-propylpiperidine

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, 3, 609



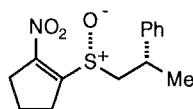
C₁₄H₁₇NO₃S

E.e. 100%
[α]_D²⁰ = -72.9 (c 1.68, CHCl₃)
Source of chirality: (*S*)-Phenylpropionic acid
Absolute configuration: 2*S*, *SS*
Use: Chiral dienophile for asymmetric Diels - Alder reaction

(2*S*,*SS*)-1-nitro-2-(2-phenylpropylsulfinyl)cyclopentene

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, 3, 609



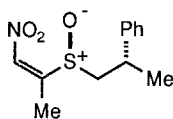
C₁₄H₁₇NO₃S

E.e. 100%
[α]_D²⁰ = +388.3 (c 0.84, CHCl₃)
Source of chirality: (*S*)-Phenylpropionic acid
Absolute configuration: 2*S*, *SR*
Use: Chiral dienophile for asymmetric Diels - Alder reaction

(2*S*,*SR*)-1-nitro-2-(2-phenylpropylsulfinyl)cyclopentene

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, *3*, 609



C₁₂H₁₅NO₃S

(Z)-(2S,SS)-1-Nitro-2-(2-phenylpropylsulfanyl)-1-propene

E.e. 100%

[α]_D²⁰ -10.4 (c 0.72, CHCl₃)

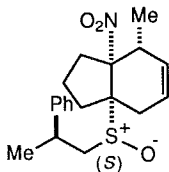
Source of chirality: (S)-Phenylpropionic acid

Absolute configuration: 2S, SS

Use: Chiral dienophile for asymmetric Diels - Alder reaction

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, *3*, 609



C₁₉H₂₅NO₃S

(1R,2R,6S,2'S,SS)-2-Methyl-1-nitro-6-(2'-phenylpropylsulfanyl)bicyclo[4.3.0]-3-nonene

D.e. 100%

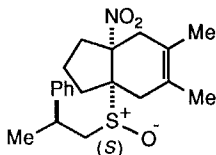
[α]_D²² -211.3 (c 0.43, CHCl₃)

Source of chirality: Asymmetric Diels - Alder reaction under high pressure

Absolute configuration: 1R, 2R, 6S, 2'S, SS

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, *3*, 609



C₂₀H₂₇NO₃S

(1R,6S,2'S,SS)-3,4-Dimethyl-1-nitro-6-(2'-phenylpropylsulfanyl)bicyclo[4.3.0]-3-nonene

D.e. 100%

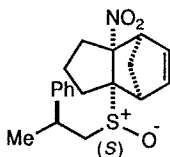
[α]_D²⁰ -49.7 (c 1.27, CHCl₃)

Source of chirality: Asymmetric Diels - Alder reaction under high pressure

Absolute configuration: 1R, 6S, 2'S, SS

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, *3*, 609



C₁₉H₂₃NO₃S

(1R,2R,6S,7S,2'S,SS)-2-Nitro-6-(2'-phenylpropylsulfanyl)tricyclo[5.2.1.0^{2,6}]-8-decene

D.e. 100%

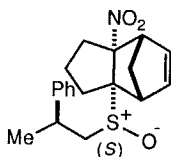
[α]_D²⁰ -47.6 (c 0.79, CHCl₃)

Source of chirality: Asymmetric Diels - Alder reaction under high pressure

Absolute configuration: 1R, 2R, 6S, 7S, 2'S, SS

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, *3*, 609



C₁₉H₂₃NO₃S

D.e. 92%

[α]_D²⁰ -47.5 (c 0.96, CHCl₃)

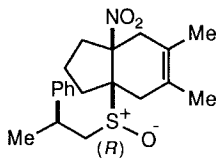
Source of chirality: Asymmetric Diels - Alder reaction under high pressure

Absolute configuration: 1*S*, 2*R*, 6*S*, 7*R*, 2'*S*, *SS*

(1*S*,2*R*,6*S*,7*R*,2'*S*,*SS*)-2-Nitro-6-(2'-phenylpropylsulfanyl)tricyclo[5.2.1.0^{2,6}]-8-decene

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, *3*, 609



C₂₀H₂₇NO₃S

D.e. 100%

[α]_D²⁰ +41.9 (c 0.65, CHCl₃)

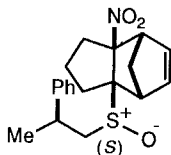
Source of chirality: Asymmetric Diels - Alder reaction under high pressure

Absolute configuration: 1*S*, 6*R*, 2'*S*, *SR*

(1*S*,6*R*,2'*S*,*SR*)-3,4-Dimethyl-1-nitro-6-(2'-phenylpropylsulfanyl)bicyclo[4.3.0]-3-nonene

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, *3*, 609



C₁₉H₂₃NO₃S

D.e. 100%

[α]_D²⁰ +72.1 (c 0.97, CHCl₃)

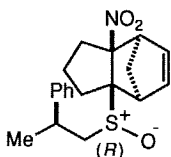
Source of chirality: Asymmetric Diels - Alder reaction under high pressure

Absolute configuration: 1*S*, 2*S*, 6*R*, 7*R*, 2'*S*, *SR*

(1*S*,2*S*,6*R*,7*R*,2'*S*,*SR*)-2-Nitro-6-(2'-phenylpropylsulfanyl)tricyclo[5.2.1.0^{2,6}]-8-decene

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, *3*, 609



C₁₉H₂₃NO₃S

D.e. 100%

[α]_D²⁰ +110.2 (c 0.97, CHCl₃)

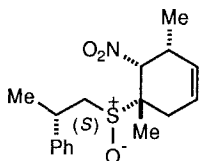
Source of chirality: Asymmetric Diels - Alder reaction under high pressure

Absolute configuration: 1*R*, 2*S*, 6*R*, 7*S*, 2'*S*, *SR*

(1*R*,2*S*,6*R*,7*S*,2'*S*,*SR*)-2-Nitro-6-(2'-phenylpropylsulfanyl)tricyclo[5.2.1.0^{2,6}]-8-decene

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, *3*, 609



D.e. 100%

$[\alpha]_D^{20}$ -197.4 (*c* 0.57, CHCl₃)

Source of chirality: Asymmetric Diels - Alder reaction under high pressure

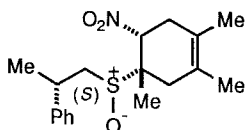
Absolute configuration: 1*R*, 2*S*, 6*R*, 2'*S*, *SS*

C₁₇H₂₃NO₃S

(1*R*,2*S*,6*R*,2'*S*,*SS*)-2,6-Dimethyl-1-nitro-2-(2'-phenylpropylsulfinyl)-4-cyclohexene

K. Fuji, K. Tanaka, H. Abe, K. Matsumoto,
T. Taga, and Y. Miwa

Tetrahedron: Asymmetry **1992**, *3*, 609



D.e. 100%

$[\alpha]_D^{20}$ -84.2 (*c* 1.10, CHCl₃)

Source of chirality: Asymmetric Diels - Alder reaction under high pressure

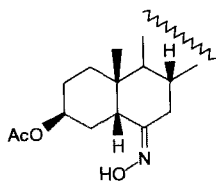
Absolute configuration: 1*R*, 2*S*, 2'*S*, *SS*

C₁₈H₂₅NO₃S

(1*R*,2*S*,2'*S*,*SS*)-1-Nitro-2-(2'-phenylpropylsulfinyl)-2,4,5-trimethyl-4-cyclohexene

H. Duddeck, J. Frelek, C. Krüger, G. Snatzke,
W. J. Szczepek, P. Wagner, and S. Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



CD[($\Delta\epsilon(\lambda_{\max})$)] = +0.89 (221)
(MeCN)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

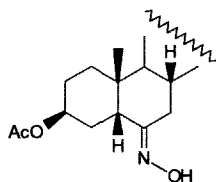
$[\alpha]_D$: +10.4 (CHCl₃, *c* = 1.2)

C₂₉H₄₉NO₃

(6*Z*)-6-Hydroximino-5β-cholestan-3β-ol 3-acetate (1)

H. Duddeck, J. Frelek, C. Krüger, G. Snatzke,
W. J. Szczepek, P. Wagner, and S. Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



CD[($\Delta\epsilon(\lambda_{\max})$)] = -5.53 (214), +3.0 (196)
(MeCN)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

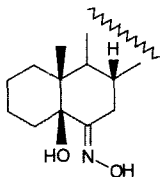
$[\alpha]_D$: -11.3 (CHCl₃, *c* = 1.3)

C₂₉H₄₉NO₃

(6*E*)-6-Hydroximino-5β-cholestan-3β-ol 3-acetate (2)

H.Duddeck, J.Frelek, C.Krüger, G.Snatzke,
W.J.Szczepek, P.Wagner, and S.Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



CD[$(\Delta\epsilon(\lambda_{\max}))$] = -7.55(214), +12.8(196)
(MeCN)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

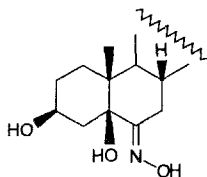
$[\alpha]_D$: +5.9(CHCl₃, c=1.8)

C₂₇H₄₇NO₂

(6E)-6-Hydroximino-5β-cholestan-5-ol (3)

H.Duddeck, J.Frelek, C.Krüger, G.Snatzke,
W.J.Szczepek, P.Wagner, and S.Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



CD[$(\Delta\epsilon(\lambda_{\max}))$] = -6.19(214), +13.4(195)
(MeCN)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

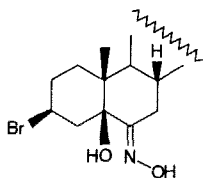
$[\alpha]_D$: +26.2(CHCl₃, c=1.3)

C₂₇H₄₇NO₃

(6E)-6-Hydroximino-5β-cholestane-3β,5-diol (4)

H.Duddeck, J.Frelek, C.Krüger, G.Snatzke,
W.J.Szczepek, P.Wagner, and S.Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



CD[$(\Delta\epsilon(\lambda_{\max}))$] = -6.54(215), +15.9(196)
(MeCN)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

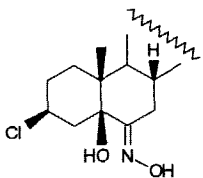
$[\alpha]_D$: +21.9(CHCl₃, c=1.5)

C₂₇H₄₆BrNO₂

(6E)-6-Hydroximino-3β-bromo-5β-cholestan-5-ol (5)

H.Duddeck, J.Frelek, C.Krüger, G.Snatzke,
W.J.Szczepek, P.Wagner, and S.Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



CD[$(\Delta\epsilon(\lambda_{\max}))$] = -7.74(215), +17.7(196)
(MeCN)

Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.

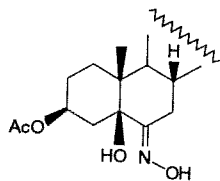
$[\alpha]_D$: +23.2(CHCl₃, c=1.3)

C₂₇H₄₆ClNO₂

(6E)-6-Hydroximino-3β-chloro-5β-cholestan-5-ol (6)

H.Duddeck, J.Frelek, C.Krüger, G.Snatzke,
W.J.Szczepek, P.Wagner, and S.Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



$$\text{CD}[(\Delta\epsilon(\lambda_{\text{max}})] = -6.12(215), +11.6(196) \\ (\text{MeCN})$$

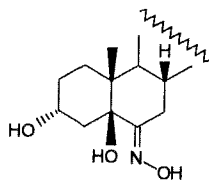
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
 $[\alpha]_{\text{D}}$: +7.4(CHCl_3 , $c=14.6$)

$\text{C}_{29}\text{H}_{49}\text{NO}_4$

(6E)-6-Hydroximino-5 β -cholestane-3 β ,5-diol 3-acetate (**7**)

H.Duddeck, J.Frelek, C.Krüger, G.Snatzke,
W.J.Szczepek, P.Wagner, and S.Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



$$\text{CD}[(\Delta\epsilon(\lambda_{\text{max}})] = -7.07(214), +11.8(196) \\ (\text{MeCN})$$

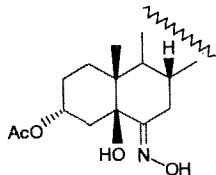
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
 $[\alpha]_{\text{D}}$: +1.8(CHCl_3 , $c=1.5$)

$\text{C}_{27}\text{H}_{47}\text{NO}_3$

(6E)-6-Hydroximino-5 β -cholestane-3 α ,5-diol (**8**)

H.Duddeck, J.Frelek, C.Krüger, G.Snatzke,
W.J.Szczepek, P.Wagner, and S.Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



$$\text{CD}[(\Delta\epsilon(\lambda_{\text{max}})] = -7.92(214), +13.3(192) \\ (\text{MeCN})$$

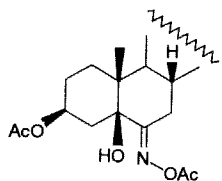
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
 $[\alpha]_{\text{D}}$: +17.4(CHCl_3 , $c=1.3$)

$\text{C}_{29}\text{H}_{49}\text{NO}_4$

(6E)-6-Hydroximino-5 β -cholestane-3 α ,5-diol 3-acetate (**9**)

H.Duddeck, J.Frelek, C.Krüger, G.Snatzke,
W.J.Szczepek, P.Wagner, and S.Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



$$\text{CD}[(\Delta\epsilon(\lambda_{\text{max}})] = -6.52(219), +13.6(199) \\ (\text{MeCN})$$

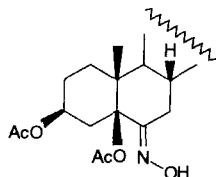
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
 $[\alpha]_{\text{D}}$: -0.7(CHCl_3 , $c=10.0$)

$\text{C}_{31}\text{H}_{51}\text{NO}_5$

(6E)-6-Acetoximino-5 β -cholestane-3 β ,5-diol 3-acetate (**10**)

H. Duddeck, J. Frelek, C. Krüger, G. Snatzke,
W. J. Szczepek, P. Wagner, and S. Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



$$\text{CD}[(\Delta\epsilon(\lambda_{\text{max}})] = +1.30(225) \\ (\text{MeCN})$$

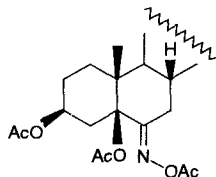
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
[α]_D: -34.3(CHCl₃, c=11.4)

C₃₁H₅₁NO₅

(6E)-6-Hydroximino-5β-cholestane-3β,5-diol 3,5-diacetate (**11**)

H. Duddeck, J. Frelek, C. Krüger, G. Snatzke,
W. J. Szczepek, P. Wagner, and S. Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



$$\text{CD}[(\Delta\epsilon(\lambda_{\text{max}})] = +1.92(228) \\ (\text{MeCN})$$

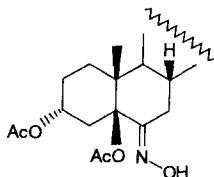
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
[α]_D: -43.4(CHCl₃, c=9.8)

C₃₃H₅₃NO₆

(6E)-6-Acetoximino-5β-cholestane-3β,5-diol 3,5-diacetate (**12**)

H. Duddeck, J. Frelek, C. Krüger, G. Snatzke,
W. J. Szczepek, P. Wagner, and S. Werner

Tetrahedron: Asymmetry **1992**, *3*, 613



$$\text{CD}[(\Delta\epsilon(\lambda_{\text{max}})] = +1.04(230) \\ (\text{MeCN})$$

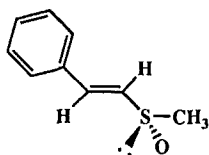
Source of chirality: from natural cholesterol.
Oxime-E/Z configuration from NMR and CD.
[α]_D: -52.0(CHCl₃, c=1.1)

C₃₁H₅₁NO₅

(6E)-6-Hydroximino-5β-cholestane-3α,5-diol 3,5-diacetate (**13**)

C. Rossi, A. Fauve, M. Madesclaire, D. Roche, F.A. Davis, R.T. Reddy

Tetrahedron: Asymmetry **1992**, *3*, 629



C₉H₁₀OS

(E)-(S)-Methyl-(2-phenyl)
vinyl sulfoxide

E.e ≥ 98 % (by HPLC on Chiralcel OB column)

$$[\alpha]_D^{25} = +176 (c = 0.010, \text{acetone})$$

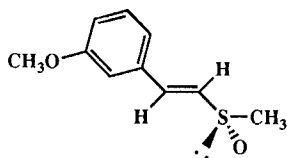
Source of chirality : microbiological oxidation of sulfide

Absolute configuration : S

(assigned by ¹H-NMR with reference to X-ray data).

C. Rossi, A. Fauve, M. Madesclaire, D. Roche, F.A. Davis, R.T. Reddy

Tetrahedron: Asymmetry **1992**, 3, 629



C₁₀H₁₂O₂S

(*E*)-(*S*)-Methyl-[2-phen-(3'-methoxy)-yl] vinyl sulfoxide

E.e ≥ 98 % (by HPLC on Chiralcel OB column)

[α]_D²⁵ = + 157 (c = 0.012, acetone)

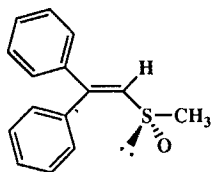
Source of chirality : microbiological oxidation of sulfide

Absolute configuration : S

(assigned by ¹H-NMR with reference to X-ray data).

C. Rossi, A. Fauve, M. Madesclaire, D. Roche, F.A. Davis, R.T. Reddy

Tetrahedron: Asymmetry **1992**, 3, 629



C₁₅H₁₄OS

Methyl-(2,2-diphenyl) vinyl sulfoxide

E.e = 68 % (by ¹H-NMR with Eu(hfc)₃)

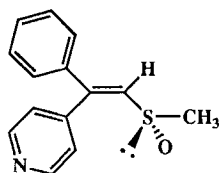
Source of chirality : (-)-sulfonyl oxaziridine-based oxidation of sulfide

Absolute configuration : S

(assigned by ¹H-NMR with reference to X-ray data).

C. Rossi, A. Fauve, M. Madesclaire, D. Roche, F.A. Davis, R.T. Reddy

Tetrahedron: Asymmetry **1992**, 3, 629



C₁₄H₁₃NOS

(*Z*)-(*S*)-Methyl-(2-phenyl 2-pyrid-4'-yl) vinyl sulfoxide

E.e ≥ 98 % (by HPLC on Chiralcel OB column)

[α]_D²⁵ = - 45 (c = 0.013, acetone)

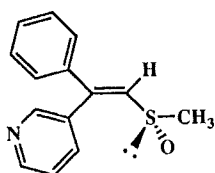
Source of chirality : microbiological oxidation of sulfide

Absolute configuration : S

(assigned by ¹H-NMR with reference to X-ray data of *R* enantiomer).

C. Rossi, A. Fauve, M. Madesclaire, D. Roche, F.A. Davis, R.T. Reddy

Tetrahedron: Asymmetry **1992**, 3, 629



C₁₄H₁₃NOS

(*Z*)-(*S*)-Methyl-(2-phenyl-2-pyrid-3'-yl) vinyl sulfoxide

E.e = 72 % (by HPLC on Chiralcel OB column)

[α]_D²⁵ = - 25 (c = 0.050, acetone)

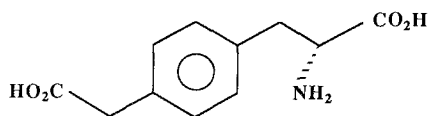
Source of chirality : (-)-diethyl tartrate/Ti(O-*i*Pr)₄-based oxidation of sulfide

Absolute configuration : S

(assigned by ¹H-NMR with reference to X-ray data).

C. Garbay-Jaureguiberry, I. McCort-Tranchepain, B. Barbe,
D. Ficheux and B.P. Roques

Tetrahedron: Asymmetry **1992**, *3*, 637



C₁₁H₁₃NO₄

p-Carboxymethylphenylalanine

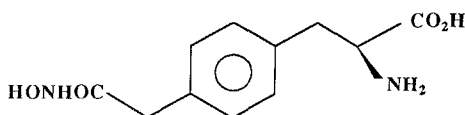
E.e. > 98% (based on chiral HPLC
of a precursor)

$[\alpha]_D^{25} = + 18.7$ (c1, H₂O)

Source of chirality : enantioselective
enzymatic hydrolysis of a precursor.
Absolute configuration 2R (D series).

C. Garbay-Jaureguiberry, I. McCort-Tranchepain, B. Barbe,
D. Ficheux and B.P. Roques

Tetrahedron: Asymmetry **1992**, *3*, 637



C₁₁H₁₄N₂O₄

p-N-Hydroxycarboxamidomethylphenylalanine

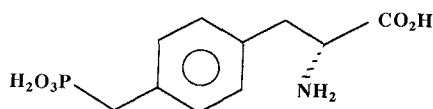
E.e. > 98% (based on chiral HPLC
of a precursor)

$[\alpha]_D^{25} = - 13.8$ (c1, H₂O)

Source of chirality : enantioselective
enzymatic hydrolysis of a precursor.
Absolute configuration 2S (L series).

C. Garbay-Jaureguiberry, I. McCort-Tranchepain, B. Barbe,
D. Ficheux and B.P. Roques

Tetrahedron: Asymmetry **1992**, *3*, 637



C₁₀H₁₄NO₅P

p-Phosphonomethylphenylalanine

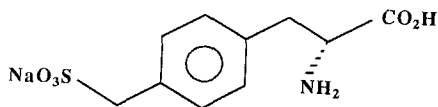
E.e. > 98% (based on chiral HPLC
of a precursor)

$[\alpha]_D^{25} = + 11$ (c1, HCl 1N)

Source of chirality : enantioselective
enzymatic hydrolysis of a precursor.
Absolute configuration 2R (D series).

C. Garbay-Jaureguiberry, I. McCort-Tranchepain, B. Barbe,
D. Ficheux and B.P. Roques

Tetrahedron: Asymmetry **1992**, *3*, 637



C₁₀H₁₂NNaO₅S

p-Sulfomethylphenylalanine

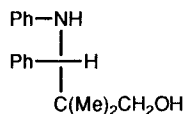
E.e. > 98% (based on chiral HPLC
of a precursor)

$[\alpha]_D^{25} = + 15.8$ (c1, H₂O)

Source of chirality : enantioselective
enzymatic hydrolysis of a precursor.
Absolute configuration 2R (D series).

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651

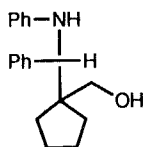


$[\alpha]_D = +42.1$ ($c=0.35$, CHCl_3)
 $\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 297(+2.81), 253(+4.92), 225(-1.1)
225(-1.1), 213(+4.2), 202(-6.8)
Source of chirality: optically active precursor
Absolute configuration: S

$\text{C}_{17}\text{H}_{21}\text{NO}$
2,2-Dimethyl-3-phenyl-3-phenylamino-1-propanol

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651

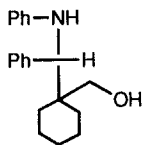


$[\alpha]_D = +51.5$ ($c=0.32$, CHCl_3)
 $\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 299(+3.00), 256(+5.02), 226(-1.1)
214(+6.5), 203sh(-10.5), 190(-83.7)
Source of chirality: optically active precursor
Absolute configuration: S

$\text{C}_{19}\text{H}_{23}\text{NO}$
3-Phenyl-3-phenylamino-2,2-tetramethylene-1-propanol

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651

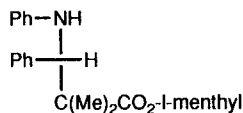


$[\alpha]_D = +47.3$ ($c=0.22$, CHCl_3)
 $\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 299(+2.53), 257(-5.20), 226(-1.2)
214(+8.0), 204sh(-8.8), 192(-65)
Source of chirality: optically active precursor
Absolute configuration: S

$\text{C}_{20}\text{H}_{25}\text{NO}$
2,2-Pentamethylene-3-phenyl-3-phenylamino-1-propanol

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651

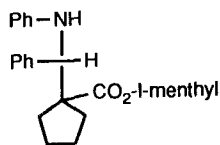


$[\alpha]_D = -51.1$ ($c=0.68$, CHCl_3)
 $\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 294(+3.30), 249(+5.47), 222(-2.1),
213(+4.1), 202(-6.5)
Source of chirality: asymm. synthesis with natural menthol
as a starting material
Absolute configuration: 3S from X-Ray

$\text{C}_{27}\text{H}_{37}\text{NO}_2$
(-)-Menthyl-2,2-dimethyl-3-phenyl-3-phenylaminopropanoate

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651



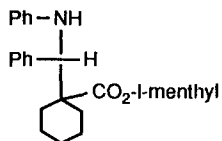
$[\alpha]_D = -52.1$ ($c=0.19$, CHCl_3)
 $\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 295(+2.94), 249(+5.52), 223(-2.2),
213(+4.2), 201sh(-13.4), 190(-84)
Source of chirality: asymm. synthesis with natural menthol
as a starting material
Absolute configuration: 3S

$\text{C}_{29}\text{H}_{39}\text{NO}_2$

(-)-Menthyl-3-phenyl-3-phenylamino-2,2-tetramethylenepropanoate

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651



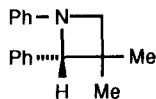
$[\alpha]_D = -66.6$ ($c=0.22$, CHCl_3)
 $\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 296(+3.31), 269(-0.44), 250(+4.9),
224(-2.7), 215(+6.1), 202sh(-15.7),
191(-80)
Source of chirality: asymm. synthesis with natural menthol
as a starting material
Absolute configuration: 3S

$\text{C}_{30}\text{H}_{41}\text{NO}_2$

(-)-Menthyl-2,2-pentamethylene-3-phenyl-3-phenylaminopropanoate

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651



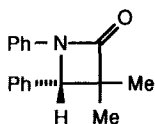
$[\alpha]_D = +234.0$ ($c=0.27$, CHCl_3)
 $\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 295sh(+0.50), 274sh(+0.68), 252(+6.7),
217(+3.7), 202(-1.2), 197(+2), negative
at shorter wavelengths
Source of chirality: optically active precursor
Absolute configuration: S

$\text{C}_{17}\text{H}_{19}\text{N}$

3,3-Dimethyl-1,4-diphenylazetididine

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651



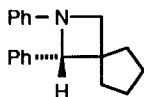
$[\alpha]_D = +157.0$ ($c=0.29$, CHCl_3)
 $\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 290sh(+0.71), 252(+8.2), 217(+5.9),
204(-7.1), 195(+19), negative at shorter
wavelengths
Source of chirality: optically active precursor
Absolute configuration: S

$\text{C}_{17}\text{H}_{17}\text{NO}$

3,3-Dimethyl-1,4-diphenyl-2-azetidinone

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, 3, 651



$[\alpha]_D = +182.0$ ($c=0.20$, CHCl_3)

$\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 282 (-0.44), 277sh (-0.28), 268sh (+1.52),
245 (+9.7), 223sh (+2.9), 209 (-4.9),
199 (+2.0), 192 (-11)

Source of chirality: optically active precursor

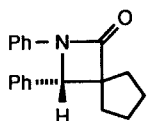
Absolute configuration: S

$\text{C}_{19}\text{H}_{21}\text{N}$

1,2-Diphenyl-2-azaspiro [3,4] octane

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, 3, 651



$[\alpha]_D = +120.0$ ($c=0.27$, CHCl_3)

$\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 284 (-0.29), 270sh (+2.68), 245 (+11.5),
209 (-7.1), 191 (-47)

Source of chirality: optically active precursor

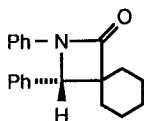
Absolute configuration: S

$\text{C}_{19}\text{H}_{19}\text{NO}$

2,3-Diphenyl-2-azaspiro [3,4] octane-1-one

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, 3, 651



$[\alpha]_D = +119.7$ ($c=0.15$, CHCl_3)

$\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 284 (-0.26), 269sh (+1.89), 245 (+11.0),
210 (-10.8), 192 (-50)

Source of chirality: optically active precursor

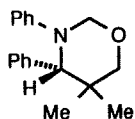
Absolute configuration: S

$\text{C}_{20}\text{H}_{21}\text{NO}$

2,3-Diphenyl-2-azaspiro [3,4] nonane-1-one

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, 3, 651



$[\alpha]_D = -172.0$ ($c=0.25$, CHCl_3)

$\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 291 (+0.17), 248 (-11.9), 222 (+2.9),
209sh (-13.2), 197 (-30)

Source of chirality: optically active precursor

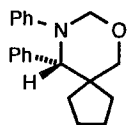
Absolute configuration: S

$\text{C}_{18}\text{H}_{21}\text{NO}$

5,5-Dimethyl-3,4-diphenyl-tetrahydro-1,3-oxazine

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651



$[\alpha]_D = -6.8$ ($c=0.20$, CHCl_3)

$\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 300sh(+2.13), 288(+3.32), 273sh(-4.90),
245(-9.9), 213sh(-24.7),
196(-117), positive at shorter
wavelengths

Source of chirality: optically active precursor

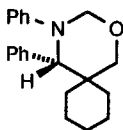
Absolute configuration: S

$\text{C}_{20}\text{H}_{23}\text{NO}$

9,10-Diphenyl-7,9-oxaspiro [4,5] decane

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651



$[\alpha]_D = -86.4$ ($c=0.28$, CHCl_3)

$\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 300sh(+0.32), 291(+0.36), 268sh(-2.10),
244(-9.1), 209sh(-17.5), 196(-63)

Source of chirality: optically active precursor

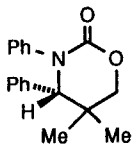
Absolute configuration: S

$\text{C}_{21}\text{H}_{25}\text{NO}$

4,5-Diphenyl-2,4-oxaspiro [5,5] undecane

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651



$[\alpha]_D = +38.5$ ($c=0.21$, CHCl_3)

$\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 272(-0.29), 265(+0.17), 260(-0.14),
226(-8.2), 222sh(-7.8), 213(-8.1),
194(+7), negative at shorter wavelengths

Source of chirality: optically active precursor

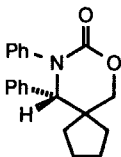
Absolute configuration: S

$\text{C}_{18}\text{H}_{19}\text{NO}_2$

5,5-Dimethyl-3,4-diphenyl-tetrahydro-1,3-oxazine-2-one

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651



$[\alpha]_D = +6.4$ ($c=0.15$, CHCl_3)

$\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 273(+0.37), 265(+0.23), 261(-0.18),
227(-12.2), 214(-13.2), 192(+109),
negative at shorter wavelengths

Source of chirality: optically active precursor

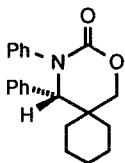
Absolute configuration: S

$\text{C}_{20}\text{H}_{21}\text{NO}_2$

9,10-Diphenyl-7,9-oxaspiro [4,5] decane-8-one

N. Berova, S. Christoskova, P. Ivanov, B. Kurtev,
E. Simova and G. Snatzke

Tetrahedron: Asymmetry **1992**, *3*, 651



$[\alpha]_D = -15.1$ ($c=0.22$, CHCl_3)

$\text{CD}[\lambda_{\text{max}}(\Delta\epsilon)]$ (MeCN): 273 (+0.34), 266 (+0.22), 261 (-0.15),
227 (-10.8), 214 (-10.6), 191 (+103),
negative at shorter wavelengths

Source of chirality: optically active precursor

Absolute configuration: S

$\text{C}_{21}\text{H}_{23}\text{NO}_2$

4,5-Diphenyl-2,4-oxazaspiro [5,5] undecane-3-one