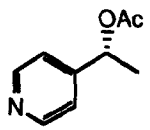
R. Seemayer and M.P. Schneider

Tetrahedron: Asymmetry **1992**, *3*, 827



$C_8H_{11}NO_2$
(4-Pyridyl)-1-ethylacetat

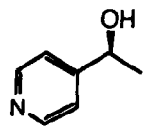
E.e. = ≥ 95% [after saponification by ^{1}H-NMR of the (*R*)-"Mosher"ester]
$[\alpha]_D^{20}$ = + 81.0 (c = 1.01, $CHCl_3$)

Source of chirality: enzymatic esterification

Absolute configuration: (*R*)-
(assigned by optical rotation, see lit. 6)

R. Seemayer and M.P. Schneider

Tetrahedron: Asymmetry **1992**, *3*, 827



C_6H_9NO
(4-Pyridyl)-1-ethanol

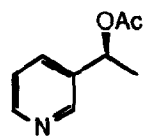
E.e. = ≥ 95% [by ^{1}H-NMR of the (*R*)-"Mosher"ester]
$[\alpha]_D^{20}$ = - 43.0 (c = 1.24, methanol)

Source of chirality: enzymatic esterification

Absolute configuration: (*S*)-
(assigned by optical rotation, see lit. 5)

R. Seemayer and M.P. Schneider

Tetrahedron: Asymmetry **1992**, *3*, 827



$C_8H_{11}NO_2$
(3-Pyridyl)-1-ethylacetat

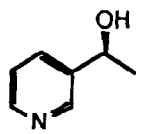
E.e. = ≥ 95% [after saponification by ^{1}H-NMR of the (*R*)-"Mosher"ester]
$[\alpha]_D^{20}$ = - 101.9 (c = 1.21, $CHCl_3$)

Source of chirality: enzymatic hydrolysis

Absolute configuration: (*S*)-
(assigned by optical rotation after saponification, see lit. 9)

R. Seemayer and M.P. Schneider

Tetrahedron: Asymmetry **1992**, *3*, 827



C_6H_9NO
(3-Pyridyl)-1-ethanol

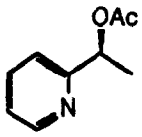
E.e. = ≥ 95% [by ^{1}H-NMR of the (*R*)-"Mosher"ester]
$[\alpha]_D^{20}$ = - 53.5 (c = 1.09, $CHCl_3$)

Source of chirality: enzymatic esterification

Absolute configuration: (*S*)-
(assigned by optical rotation, see lit. 9)

R. Seemayer and M.P. Schneider

Tetrahedron: Asymmetry **1992**, *3*, 827



$C_8H_{11}NO_2$
(2-Pyridyl)-1-ethylacetat

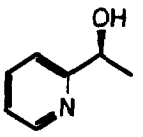
E.e. = ≥ 95% [after saponification by ^{1}H-NMR of the (*R*)-"Mosher"ester]
$[\alpha]_D^{20}$ = - 102.3 (c = 1.09, $CHCl_3$)

Source of chirality: enzymatic hydrolysis

Absolute configuration: (*S*)-
(assigned by optical rotation, see lit. 9)

R. Seemayer and M.P. Schneider

Tetrahedron: Asymmetry **1992**, *3*, 827



C_6H_9NO
(2-Pyridyl)-1-ethanol

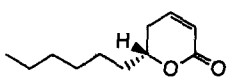
E.e. = ≥ 95% [by ^{1}H-NMR of the (*R*)-"Mosher"ester]
$[\alpha]_D^{20}$ = - 26.4 (c = 1.36, $CHCl_3$)

Source of chirality: enzymatic esterification

Absolute configuration: (*S*)-
(assigned by optical rotation, see lit. 9)

Tetrahedron: Asymmetry **1992**, *3*, 831

U. Goergens and M.P. Schneider



$C_{11}H_{18}O_2$
6-Hexyl-5,6-dihydro-2*H*-pyran-2-one

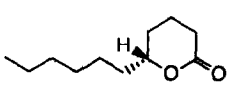
E.e. = 96.9 % [by GC using Lipodex E]
$[\alpha]_D^{20}$= -109.4 (c = 0.97, $CHCl_3$)

Source of chirality: enzymatic resolution of a precursor

Absolute configuration *R*
(assigned by chemical correlation to (*R*)- 1,2-Epoxyoctane)

Tetrahedron: Asymmetry **1992**, *3*, 831

U. Goergens and M. P. Schneider



$C_{11}H_{20}O_2$
6-Hexyl-tetrahaydro-pyran-2-one

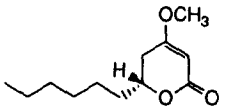
E.e. = 98.3 % [by GC using Lipodex E]
$[\alpha]_D^{20}$ = +46.1 (c = 0.61, $CHCl_3$)

Source of chirality: enzymatic resolution of a precursor

Absolute configuration *R*
(assigned on the basis of α_D)

Tetrahedron: Asymmetry **1992,** *3*, 831

U. Goergens and M. P. Schneider



$C_{12}H_{20}O_3$
6-Hexyl-4-methoxy-5,6-dihydro-2*H* -pyran-2one

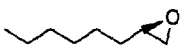
E.e. = >99 % [by GC using Lipodex E]
$[\alpha]_D^{20}$ = +103.5 (c = 0.24, $CHCl_3$)

Source of chirality: enzymatic resolution of a precursor

Absolute configuration: *R*
(Assigned by chemical correlation to (*R*)- 1,2-Epoxyoctane)

Tetrahedron: Asymmetry **1992,** *3*, 831

U. Goergens and M. P. Schneider



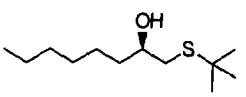
$C_8H_{16}O$
1,2-Epoxyoctane

E.e. = >96 % [^{1}H-NMR in presence of chiral shift reagence]
$[\alpha]_D^{20}$ = +14.2 (c = 2.48, EtOH)

Source of chirality: enzymatic resolution of a precursor
Absolute configuration *R*
(assigned on the basis of α_D)

Tetrahedron: Asymmetry **1992,** *3*, 831

U. Goergens and M. P. Schneider



$C_{12}H_{26}OS$
1-tert.-butylthio-2-octanol

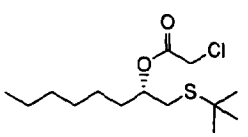
E.e. = >96 % [by ^{1}H-NMR of the MTPA-Ester]
$[\alpha]^{20;D}$ = -23.9 (c = 0.82, $CHCl_3$)

Source of chirality: enzymatic hydrolysis

Absolute configuration *R*
(assigned by chemical correlation to (*R*)- 1,2-Epoxyoctane)

U. Goergens and M. P. Schneider

Tetrahedron: Asymmetry **1992,** *3*, 831



$C_{14}H_{27}O_2S$
1-(tert.-Butylthiomethyl)-heptylchloracetate

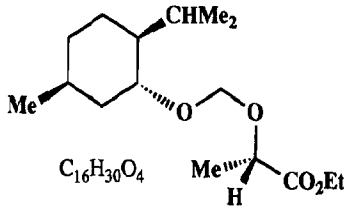
E.e. = >95 % [by ^{1}H-NMR of the MTPA-Ester after saponification to the corresponding alcohol)]
$[\alpha]_D^{20}$ = -35.2 (c = 1.03, $CHCl_3$)

Source of chirality: enzymatic hydrolysis

Absolute configuration: *S*
(assigned by chemical correlation to (*S*)- 1,2-Epoxyoctane)

Tetrahedron: Asymmetry **1992,** *3*, 833

D.A. Dawkins and P.R. Jenkins



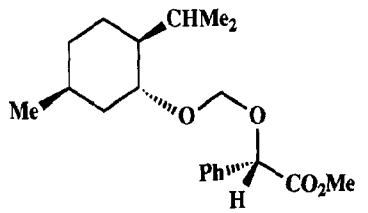
$C_{16}H_{30}O_4$

(2S)-Ethyl-2-[(1R)-menthoxymethyl]lactate

de = 100% (by ^{1}H-NMR)
$[\alpha]_D^{20} = -142.0$ (c = 4, CH_2Cl_2)
Prepared from homochiral ethyl (S)-(-)-lactate and chloromethyl-(1R)-menthyl ether.

Tetrahedron: Asymmetry **1992,** *3*, 833

D.A. Dawkins and P.R. Jenkins

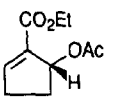


(2S)-Methyl-2-[(1R)-menthoxymethyl]mandelate

de = 100% (by ^{1}H-NMR)
$[\alpha]_D^{20} = +4.1$ (c = 4, CH_2Cl_2)
Prepared from homochiral methyl-(S)-(+)-mandelate and chloromethyl-(1R)-menthyl ether.

Tetrahedron: Asymmetry **1992,** *3*, 837

Seiichi Takano,* Takahiro Yamane, Michiyasu Takahashi, and Kunio Ogasawara



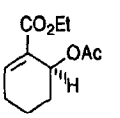
$C_{10}H_{14}O_4$

(*R*)-3-Acetoxy-2-carbethoxycyclopentene

Absolute configuration 3*R*
$[\alpha]_D^{29}$ +2.6 (*c* 1.03, $CHCl_3$)
Source of chirality: enzymatic resolution
E. e.=~100% (by hplc)

Tetrahedron: Asymmetry **1992,** *3*, 837

Seiichi Takano,* Takahiro Yamane, Michiyasu Takahashi, and Kunio Ogasawara



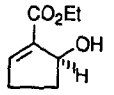
$C_{11}H_{16}O_4$

(*S*)-3-Acetoxy-2-carbethoxycyclohexene

Absolute configuration 3*S*
$[\alpha]_D^{28}$ –134.0 (*c* 0.97, $CHCl_3$)
Source of chirality: enzymatic resolution
E. e.=~100% (by hplc)

Tetrahedron: Asymmetry **1992,** *3*, 837

Seiichi Takano,* Takahiro Yamane, Michiyasu Takahashi, and Kunio Ogasawara



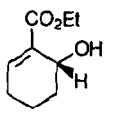
$C_8H_{12}O_3$

(*S*)-2-Carbethoxy-2-cyclopenten-1-ol

Absolute configuration 1*S*
$[\alpha]_D^{31}$ –34.5 (*c* 1.10, $CHCl_3$)
Source of chirality: enzymatic resolution
E. e.=~100% (by hplc)

Tetrahedron: Asymmetry **1992,** *3*, 837

Seiichi Takano,* Takahiro Yamane, Michiyasu Takahashi, and Kunio Ogasawara



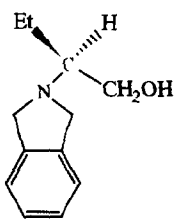
$C_9H_{14}O_3$

(*R*)-2-Carbethoxy-2-cyclohexen-1-ol

Absolute configuration 1*R*
$[\alpha]_D^{28}$ +57.6 (*c* 0.59, $CHCl_3$)
Source of chirality: enzymatic resolution
E. e.=~100% (by hplc)

E. Brown, A. Lézé and J. Touet

Tetrahedron: Asymmetry **1992,** *3*, 841



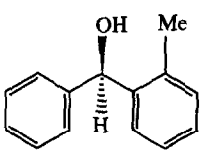
$C_{12}H_{17}NO$

(S)-(+)-2-[2-iso-indolinyl]butan-1-ol

m.p. 61-62°C
$[\alpha]_D$ +19.4 (c 3.3, EtOH)
Ee = 100%
Chiral source :
(S)-(+)-2-aminobutan-1-ol
Absolute configuration : S

E. Brown, A. Lézé and J. Touet

Tetrahedron: Asymmetry **1992,** *3*, 841



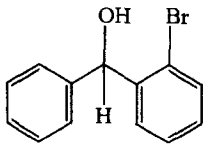
$C_{14}H_{14}O$

(R)-(-)-2-Methylbenzhydrol

m.p. 59.5-61°C
$[\alpha]_D$ -7.5 (c 5.1, EtOH)
Ee > 95% [^{1}H NMR ;
shift reagent : Eu(hfc)$_3$]
Source of chirality:
(R)-(-)-2-aminobutan-1-ol
Absolute configuration : R

E. Brown, A. Lézé and J. Touet

Tetrahedron: Asymmetry **1992**, *3*, 841

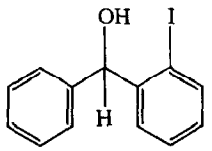


$C_{13}H_{11}BrO$
(+)-2-Bromobenzhydrol

$[\alpha]_D$ +46.6 (c 1.3, Me_2CO)
Ee>95% [^{1}H NMR ; shift reagent : Eu(hfc)$_3$]
Source of chirality:
(R)-(-)-2-aminobutan-1-ol
Absolute configuration : unknown

E. Brown, A. Lézé and J. Touet

Tetrahedron: Asymmetry **1992**, *3*, 841

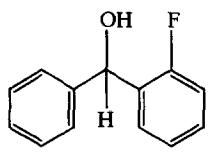


$C_{13}H_{11}IO$
(+)-2-Iodobenzhydrol

$[\alpha]_D$ +68.2 (c 1.5, Me_2CO)
Ee>95% [^{1}H NMR ; shift reagent : Eu(hfc)$_3$]
Source of chirality:
(R)-(-)-2-aminobutan-1-ol
Absolute configuration : unknown

E. Brown, A. Lézé and J. Touet

Tetrahedron: Asymmetry **1992**, *3*, 841

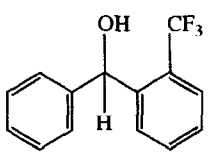


$C_{13}H_{11}FO$
(-)-2-Fluorobenzhydrol

m.p. 47-48°C
$[\alpha]_D$ -9.2 (c 3.0, Me_2CO)
Ee = 88% [^{1}H NMR ; shift reagent : Eu(hfc)$_3$]
Source of chirality:
(R)-(-)-2-aminobutan-1-ol
Absolute configuration : unknown

E. Brown, A. Lézé and J. Touet

Tetrahedron: Asymmetry **1992**, *3*, 841

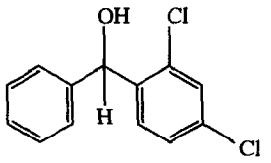


$C_{14}H_{11}F_3O$
(+)-2-Trifluoromethylbenzhydrol

$[\alpha]_D$ +71.5 (c 0.7, Me_2CO)
Ee>95% [^{1}H NMR ; shift reagent : Eu(hfc)$_3$]
Source of chirality:
(R)-(-)-2-aminobutan-1-ol
Absolute configuration : unknown

E. Brown, A. Lézé and J. Touet

Tetrahedron: Asymmetry **1992**, *3*, 841

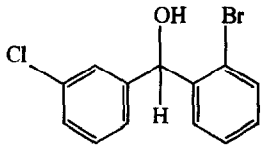


$C_{13}H_{10}Cl_2O$
(+)-2,4-Dichlorobenzhydrol

$[\alpha]_D$ +6.7 (c 5.0, Me_2CO)
Ee = 89% [^{1}H NMR ; shift reagent : Eu(hfc)$_3$]
Source of chirality:
(R)-(-)-2-aminobutan-1-ol
Absolute configuration : unknown

E. Brown, A. Lézé and J. Touet

Tetrahedron: Asymmetry **1992**, *3*, 841

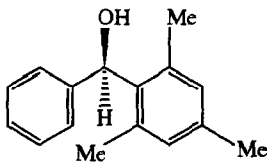


$C_{13}H_{10}BrClO$
(-)-2-Bromo-4'-chlorobenzhydrol

$[\alpha]_D$ +63.0 (c 1.2, Me_2CO)
Ee>95% [^{1}H NMR ; shift reagent : Eu(hfc)$_3$]
Source of chirality:
(R)-(-)-2-aminobutan-1-ol
Absolute configuration : unknown

E. Brown, A. Lézé and J. Touet

Tetrahedron: Asymmetry **1992**, *3*, 841

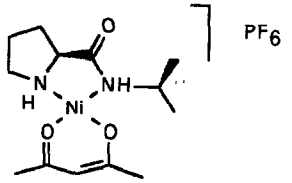


$C_{16}H_{18}O$
(R)-(+)-2,4,6-Trimethylbenzhydrol

$[\alpha]_D$ +38.6 (c 4.2, EtOH)
Ee = 44% [^{1}H NMR ; shift reagent : Eu(hfc)$_3$]
Source of chirality:
(R)-(-)-2-aminobutan-1-ol
Absolute configuration : R

A. CORMA, M. IGLESIAS, M.V. MARTIN, J. RUBIO and F. SANCHEZ

Tetrahedron: Asymmetry **1992**, *3*, 845



$C_{14}H_{25}F_6N_2NiO_3P$

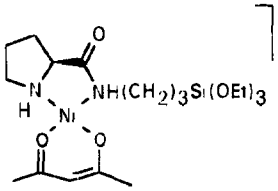
$[\alpha]_D^{25}$ = -22.7 (C1, MeOH)

Source of chirality: Synthesis from (S)-proline

[(S)-2-*t*-Butylaminocarbonylpyrrolidine] (pentan-2,4-dioate) Ni(II) hexafluorophosphate

A. CORMA, M. IGLESIAS, M.V. MARTIN, J. RUBIO and F. SANCHEZ

Tetrahedron: Asymmetry **1992**, *3*, 845



$[\alpha]_D^{25}$ = -40.7 (C1,MeOH)

Source of chirality: Synthesis from (S)-proline

$C_{19}H_{37}F_6N_2NiO_6P$

[(S)-2-(3-Triethoxysilyl)propylaminopyrrolidine] (pentan-2,4-dioate)Ni(II) hexafluorophosphate

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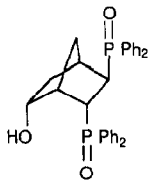
J. Ward, A. Börner, H.B. Kagan

Tetrahedron: Asymmetry **1992**, *3*, 849



Ee ≈ 100%

$[\alpha]_D^{24}$ = -29 (c=1, $CHCl_3$)

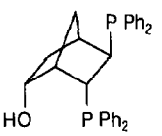
Source of chirality: from chiral norphos dioxide

$C_{31}H_{30}O_3P_2$ (hydroxy norphos dioxide)
6-endo-hydroxy bicyclo[2.2.1]heptane -2,3-diylbis(diphenylphosphane oxide)

Absolute configuration 2R,3R,6R
(assigned from reported configuration of (-)-(2R,3R) norphos dioxide and ^1H, ^{13}C NMR)

J. Ward, A. Börner, H.B. Kagan

Tetrahedron: Asymmetry **1992**, *3*, 849



Ee ≈ 100%

$[\alpha]_D^{24}$ = -43 (c=1, $CHCl_3$)

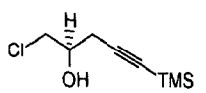
Source of chirality: from chiral norphos oxide

$C_{31}H_{30}OP_2$ (hydroxy norphos)
6-endo-hydroxy bicyclo[2.2.1]heptane -2,3-diylbis(diphenylphosphane)

Absolute configuration 2R,3R,6R
(assigned from reported configuration of (-)-(2R,3R) norphos and ^1H, ^{13}C NMR)

Tetrahedron: Asymmetry **1992**, *3*, 853

Seiichi Takano,* Takashi Kamikubo, Takumichi Sugihara, and Kunio Ogasawara

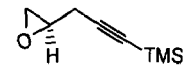


$C_8H_{15}OClSi$
5-Chloro-4-hydroxy-1-trimethylsilyl-1-pentyne

Absolute configuration 4*R*
$[\alpha]_D^{29}$ –12.8 (*c* 1.0, $CHCl_3$)
Source of chirality: (*R*)-epichlorohydrin
E. e.=>96% (based on the starting material)

Tetrahedron: Asymmetry **1992,** *3*, 853

Seiichi Takano,* Takashi Kamikubo, Takumichi Sugihara, and Kunio Ogasawara



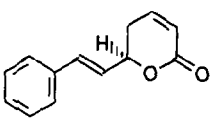
$C_8H_{14}OSi$

4,5-Epoxy-1-trimethylsilyl-1-pentyne

Absolute configuration 4*R*
$[\alpha]_D^{30}$ −30.0 (*c* 1.0, $CHCl_3$)
Source of chirality: (*R*)-epichlorohydrin
E. e.=>96% (based on the starting material)

Tetrahedron: Asymmetry **1992,** *3*, 853

Seiichi Takano,* Takashi Kamikubo, Takumichi Sugihara, and Kunio Ogasawara



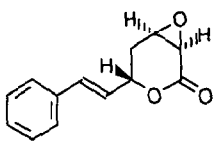
$C_{13}H_{12}O_2$

5-Hydroxy-7-phenylhepta-2,6-dienoic Acid δ-Lactone (goniothalamine)

Absolute configuration 5*R*
$[\alpha]_D^{28}$ +171.3 (*c* 0.49, $CHCl_3$)
Source of chirality: (*R*)-epichlorohydrin
E. e.=≥96% (by hplc: CHIRALCEL OJ)

Tetrahedron: Asymmetry **1992,** *3*, 853

Seiichi Takano,* Takashi Kamikubo, Takumichi Sugihara, and Kunio Ogasawara



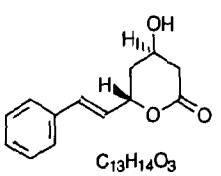
$C_{13}H_{12}O_3$

2,3-Epoxy-5-hydroxy-7-phenylhepta-2,6-dienoic Acid δ-Lactone

Absolute configuration 2*R*,3*R*,5*S*
$[\alpha]_D^{29}$ +52.9 (*c* 1.11, $CHCl_3$)
Source of chirality: (*S*)-epichlorohydrin
E. e.=≥96% (based on the starting material)

Tetrahedron: Asymmetry **1992,** *3*, 853

Seiichi Takano,* Takashi Kamikubo, Takumichi Sugihara, and Kunio Ogasawara



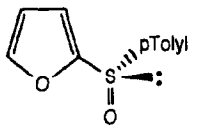
$C_{13}H_{14}O_3$

3,5-Dihydroxy-7-phenylhepta-2,6-dienoic Acid δ-Lactone

Absolute configuration 3*R*,5*S*
$[\alpha]_D^{29}$ +9.86 (*c* 0.80, $CHCl_3$)
Source of chirality: (*S*)-epichlorohydrin
E. e.=≥96% (based on the starting material)

Tetrahedron: Asymmetry **1992**, *3*, 857

L.Girodier, C.Maignan, F.Rouessac



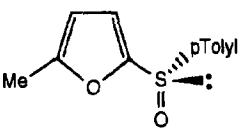
$C_{11}H_{10}O_2S$

Ee =100% [by HPLC using chiralcel OB]
$[\alpha]_D^{24}$ = +106 (c=2.5, acetone)
Source of chirality : from (-) (S) menthyl p-tolylsulfinate

Absolute configuration : S
(assigned from the reaction mechanism)

Tetrahedron: Asymmetry **1992**, *3*, 857

L.Girodier, C.Maignan, F.Rouessac



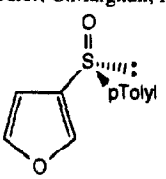
$C_{12}H_{12}O_2S$

Ee =100% [by HPLC using chiralcel OB]
$[\alpha]_D^{24}$ = +165 (c=2.5, acetone)
Source of chirality : from (-) (S) menthyl p-tolylsulfinate

Absolute configuration : S
(assigned from the reaction mechanism)

Tetrahedron: Asymmetry **1992**, *3*, 857

L.Girodier, C.Maignan, F.Rouessac



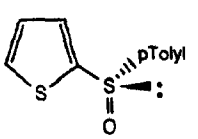
$C_{11}H_{10}O_2S$

Ee =100% [by HPLC using chiralcel OB]
$[\alpha]_D^{24}$ = +31 (c=2.5, acetone)
Source of chirality : from (-) (S) menthyl p-tolylsulfinate

Absolute configuration : S
(assigned from the reaction mechanism)

Tetrahedron: Asymmetry **1992**, *3*, 857

L.Girodier, C.Maignan, F.Rouessac



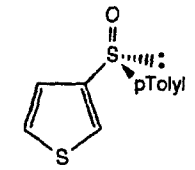
$C_{11}H_{10}OS_2$

Ee =100% [by HPLC using chiralcel OB]
$[\alpha]_D^{24}$ = +110 (c=2.5, acetone)
Source of chirality : from (-) (S) menthyl p-tolylsulfinate

Absolute configuration : S
(assigned from the reaction mechanism)

Tetrahedron: Asymmetry **1992**, *3*, 857

L.Girodier, C.Maignan, F.Rouessac



$C_{11}H_{10}OS_2$

Ee =100% [by HPLC using chiralcel OB]

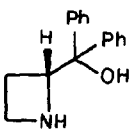
$[\alpha]_D^{24}$ = + 40 (c=2.5, acetone)

Source of chirality : from (-) (S) menthyl p-tolylsulfinate

Absolute configuration : S
(assigned from the reaction mechanism)

Tetrahedron: Asymmetry **1992**, *3*, 859

A V Rama Rao*, M K Gurjar and V Kaiwar



$C_{16}H_{17}NO$

E.e. 100%

$[\alpha]_D$ = +75 (MeOH), M.P. 116°C

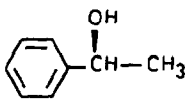
Source of chirality : (R)-2-Azetidine carboxylic acid

Absolute configuration R

(R)-(+)-α,α-Diphenyl-2-Azetidine methanol

Tetrahedron: Asymmetry **1992**, *3*, 859

A V Rama Rao*, M K Gurjar and V Kaiwar



$C_8H_{10}O$

E.e. 95%

$[\alpha]_D$ = +50 (CH_2Cl_2).

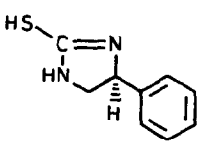
Source of chirality : Enantioselective reduction

Absolute configuration S

(S)-(-)-1-Phenylethanol.

Tetrahedron: Asymmetry **1992**, *3*, 859

A V Rama Rao*, M K Gurjar and V Kaiwar



$C_9H_{10}N_2S$

E.e. 94%

$[\alpha]_D$ = +32.5 (MeOH), M.P. 161.5°C

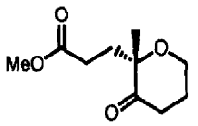
Source of chirality : Enantioselective reduction

Absolute configuration S

(S)-(+)-4(5)-Phenyl-2-mercaptoimidazolidine.

Tetrahedron: Asymmetry **1992,** *3*, 863

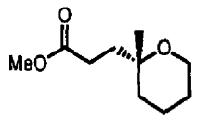
Didier Desmaële, Gilles Pain, Jean d'Angelo



(S)-2-Methyl-3,4,5,6-tetrahydropyran-3-one-2-propionic acid methyl ester
E.e.= 94% (by NMR with $Eu(hfc)_3$)
$[\alpha]_D^{20}$ -4.0 (neat)

Tetrahedron: Asymmetry **1992,** *3*, 863

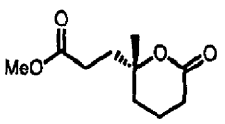
Didier Desmaële, Gilles Pain, Jean d'Angelo



(R)-2-Methyl-3,4,5,6-tetrahydropyran-2-propionic acid methyl ester.
E.e.= 94% (by NMR with $Eu(hfc)_3$)
$[\alpha]_D^{20}$ +8.3 (c = 3, EtOH)

Tetrahedron: Asymmetry **1992,** *3*, 863

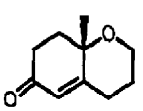
Didier Desmaële, Gilles Pain, Jean d'Angelo



(R)-2-Methyl-3,4,5,6-tetrahydropyran-6-one-2-propionic acid methyl ester.
E.e.= 94% (by NMR with $Eu(hfc)_3$)
$[\alpha]_D^{20}$ +12.0 (c = 1, EtOH)

Tetrahedron: Asymmetry **1992,** *3*, 863

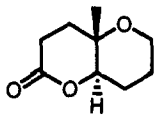
Didier Desmaële, Gilles Pain, Jean d'Angelo



(S)-8a-Methyl-2,3,6,7,8,9-hexahydro-2H-1-benzopyran-6-one.
E.e.= 94% (by NMR with $Eu(hfc)_3$)
$[\alpha]_D^{20}$ +204 (c = 4, EtOH)

Tetrahedron: Asymmetry **1992,** *3*, 867

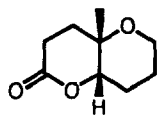
Didier Desmaële, Gilles Pain, Jean d'Angelo



(4aR, 8aS)-8a-Methyl-pyrano[3,2-b]-pyran-one-6.
E.e.= 94% (by NMR with $Eu(hfc)_3$)
$[\alpha]_D^{20}$ +136 (c = 2.5, EtOH)

Tetrahedron: Asymmetry **1992,** *3*, 867

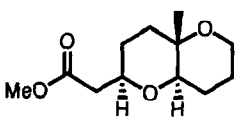
Didier Desmaële, Gilles Pain, Jean d'Angelo



(4aS, 8aS)-8a-Methyl-pyrano[3,2-b]-pyran-one-6.
E.e.= 94% (by NMR with $Eu(hfc)_3$)
$[\alpha]_D^{20}$ +3.6 (c = 4.6, EtOH)

Tetrahedron: Asymmetry **1992,** *3*, 867

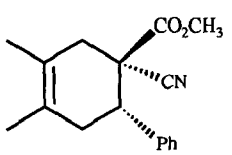
Didier Desmaële, Gilles Pain, Jean d'Angelo



(4aR, 6R, 8aS)-8a-Methyl-pyrano[3,2,b]-pyran-6-acetic acid methyl ester
E.e.= 94% (by NMR with $Eu(hfc)_3$)
$[\alpha]_D^{20}$ +24 (c = 3.5, EtOH)

A. Avenoza, C. Cativiela, J. A. Mayoral, J. M. Peregrina.

Tetrahedron: Asymmetry **1992,** *3*, 913



Absolute configuration: 1R, 6S

Source of chirality: asymmetric cycloaddition

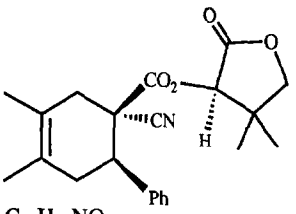
$[\alpha]_D^{25}\left(c = 2.34 \times 10^{-2}\ g/ml, CHCl_3\right) = +63.2 \pm 0.2$

$C_{17}H_{19}NO_2$

Methyl (1R, 6S)-1-cyano-3,4-dimethyl-6-phenyl-3-cyclohexen-1-carboxylate

A. Avenoza, C. Cativiela, J. A. Mayoral, J. M. Peregrina.

Tetrahedron: Asymmetry **1992,** *3*, 913



$C_{22}H_{25}NO_4$

Absolute configuration: 1R, 6S, R

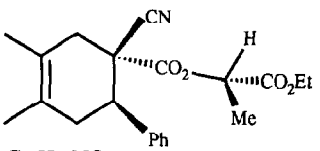
Source of chirality: asymmetric cycloaddition

$[\alpha]_D^{25}(c = 2.07 \times 10^{-2}\,g/ml, CHCl_3) = +22.5 \pm 0.2$

(1R, 6S)-1-cyano-3,4-dimethyl-6-phenyl-3-cyclohexen-1-carboxylate of (R)-pantolactone

A. Avenoza, C. Cativiela, J. A. Mayoral, J. M. Peregrina.

Tetrahedron: Asymmetry **1992,** *3*, 913



$C_{21}H_{25}NO_4$

Absolute configuration: 1S, 6R, S

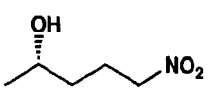
Source of chirality: asymmetric cycloaddition

$[\alpha]_D^{25}(c = 2.33 \times 10^{-2}\,g/ml, CHCl_3) = -34.9 \pm 0.2$

(1S, 6R)-1-cyano-3,4-dimethyl-6-phenyl-3-cyclohexen-1-carboxylate of (S)-ethy lactate

G. Fantin, M. Fogagnolo, M. E. Guerzoni, E. Marotta
A. Medici, and P. Pedrini

Tetrahedron: Asymmetry **1992,** *3*, 947



$C_5H_{11}NO_3$

5-Nitro-2-pentanol

ee = 100% [by GLC analysis on a 25 m permethylated b-cyclodextrine in OV 1701]

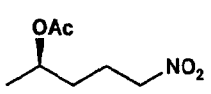
$[\alpha]_D^{25}$ = +17 (c = 2.0, $CHCl_3$)

Source of chirality: microbial reduction

Absolute configuration: S

G. Fantin, M. Fogagnolo, M. E. Guerzoni, E. Marotta
A. Medici, and P. Pedrini

Tetrahedron: Asymmetry **1992,** *3*, 947



$C_7H_{13}NO_4$

5-Nitro-2-O-acetylpentanol

ee = 92% [by GLC analysis on a 25 m permethylated b-cyclodextrine in OV 1701]

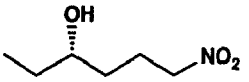
$[\alpha]_D^{25}$ = -4.2 (c = 10.0, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: R

G. Fantin, M. Fogagnolo, M. E. Guerzoni, E. Marotta
A. Medici, and P. Pedrini

Tetrahedron: Asymmetry **1992,** *3*, 947



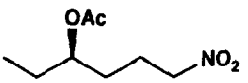
$C_6H_{13}NO_3$

6-Nitro-3-hexanol

ee = 65% [by GLC analysis on a 25 m permethylated b-cyclodextrine in OV 1701]
$[\alpha]_D^{25}$ = 9.3 (c = 3.2, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: S

G. Fantin, M. Fogagnolo, M. E. Guerzoni, E. Marotta
A. Medici, and P. Pedrini

Tetrahedron: Asymmetry **1992,** *3*, 947



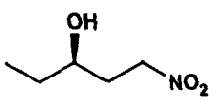
$C_8H_{15}NO_4$

6-Nitro-3-O-acetylhexanol

ee = 100% [by GLC analysis on a 25 m permethylated b-cyclodextrine in OV 1701]
$[\alpha]_D^{25}$ = 4.5 (c = 4.6, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: R

G. Fantin, M. Fogagnolo, M. E. Guerzoni, E. Marotta
A. Medici, and P. Pedrini

Tetrahedron: Asymmetry **1992,** *3*, 947



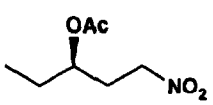
$C_5H_{11}NO_3$

5-Nitro-3-pentanol

ee = 98% [by GLC analysis on a 25 m permethylated b-cyclodextrine in OV 1701]
$[a]_D^{25}$ = -31.5 (c = 0.65, $CHCl_3$)
Source of chirality: enzymatic resolution and hydrolysis
Absolute configuration: R

G. Fantin, M. Fogagnolo, M. E. Guerzoni, E. Marotta
A. Medici, and P. Pedrini

Tetrahedron: Asymmetry **1992,** *3*, 947



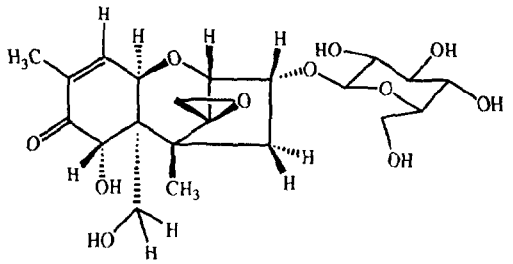
$C_7H_{13}NO_4$

5-Nitro-3-O-acetylpentanol

ee = 98% [by GLC analysis on a 25 m permethylated b-cyclodextrine in OV 1701]
$[\alpha]_D^{25}$ = -1.5 (c = 2.2, $CHCl_3$)
Source of chirality: enzymatic resolution
Absolute configuration: R

Tetrahedron: Asymmetry **1992**, *3*, 953

N. Sewald, J. Lepschy von Gleissenthall, M. Schuster,
G. Müller, and R.T. Aplin



3-β-D-Glucopyranosyl-4-desoxynivalenol

$C_{21}H_{30}O_{11}$

Source of chirality:

Plant Metabolite of 4-Desoxynivalenol