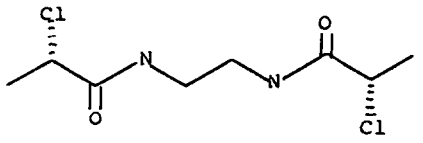
V.Gotor, M.J.García, and F. Rebolledo.

Tetrahedron Asymmetry **1990**, *1*, 277



$C_8H_{14}N_2O_2Cl_2$

N,N'-Ethylene-bis(2-chloropropanecarboxamide)

E.e.= 98 %

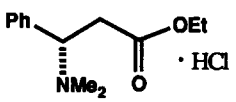
$|\alpha|_D^{24}$ = -20.0 (c 0.3, $CHCl_3$),
-32.0 (c 0.3, EtOH).

Source of chirality Made from ethylenediamine and S-(-)-Methyl 2-chloropropionate purchased from Aldrich-Chemie.

Absolute Configuration (S,S)

S G Davies, J Dupont and R.J C Easton

Tetrahedron Asymmetry **1990**, *1*, 279



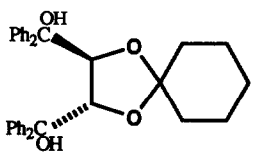
$C_{13}H_{19}NO_2$

Ethyl 3-dimethylamino-3-phenyl propionate

E.e = >99 5% [by n m r with (-)-2,2,2-trifluoro-1-(9-anthryl)ethanol]
$[\alpha]_D^{20}$ = +10 2 , $[\alpha]_{436}^{20}$ = +23 1 (c 0 5, $CHCl_3$)
Source of chirality asymmetric synthesis
Absolute configuration 3S (assigned by synthesis)

K Mori and F Toda

Tetrahedron Asymmetry **1990**, *1*, 281



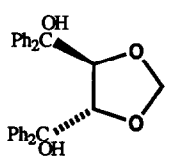
$C_{34}H_{34}O_4$

trans-2,3-Bis(hydroxydiphenylmethyl)-1,4-dioxaspiro[5 4]decane

E e =100% [prepared from optically pure tartaric acid]
$[\alpha]_D^{19}$ +71 0 (c 1 06, $CHCl_3$)
Absolute configuration *R,R*

K Mori and F Toda

Tetrahedron Asymmetry **1990**, *1*, 281



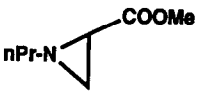
$C_{33}H_{32}O_4$

trans-2,3-Bis(hydroxydiphenylmethyl)-1,4-dioxaspiro[4 4]nonane

E e =100% [prepared from optically pure tartaric acid]
$[\alpha]_D^{20}$ -35 2 (c 1 0, $CHCl_3$)
Absolute configuration *R,R*

K Mori and F Toda

Tetrahedron Asymmetry **1990,** *1*, 281



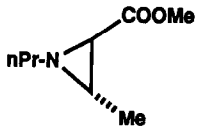
$C_7H_{13}NO_2$

N-Propyl-2-methoxycarbonylaziridine

E e =100% [by ^{1}H NMR with Eu(hfc)$_3$]
$[\alpha]_D^{25}$ -121 3 (c 0 5, $CHCl_3$)
Source of chirality optical resolution
Absolute configuration unknown

K Mori and F Toda

Tetrahedron Asymmetry **1990,** *1*, 281



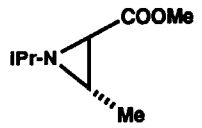
$C_8H_{15}NO_2$

trans-N-Propyl-2-methyl-3-methoxycarbonylaziridine

E e =100% [by ^{1}H NMR with Eu(hfc)$_3$]
$[\alpha]_D^{25}$ -78 7 (c 0 5, $CHCl_3$)
Source of chirality optical resolution
Absolute configuration unknown

K Mori and F Toda

Tetrahedron Asymmetry **1990,** *1*, 281



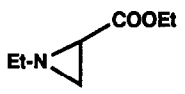
$C_8H_{15}NO_2$

trans-N-Isopropyl-2-methyl-3-methoxycarbonylaziridine

E e =100% [by ^{1}H NMR with Eu(hfc)$_3$]
$[\alpha]_D^{25}$ -60 (c 0 5, $CHCl_3$)
Source of chirality optical resolution
Absolute configuration unknown

K Mori and F Toda

Tetrahedron Asymmetry **1990,** *1*, 281



$C_7H_{13}O_2N$

N-Ethyl-2-ethoxycarbonylaziridine

E e =100% [by ^{1}H NMR with Eu(hfc)$_3$]
$[\alpha]_D^{25}$ -92 3 (c 0 5, $CHCl_3$)
Source of chirality optical resolution
Absolute configuration unknown

K. Mori and F Toda

Tetrahedron Asymmetry **1990,** *1*, 281

$C_6H_{11}NO_2$

N-Ethyl-2-methoxycarbonylaziridine

E e =64% [by ^{1}H NMR with Eu(hfc)$_3$]
$[\alpha]_D^{25}$ +92 1 (c 0 5, $CHCl_3$)
Source of chirality optical resolution
Absolute configuration: unknown

K Mori and F Toda

Tetrahedron Asymmetry **1990,** *1*, 281

$C_7H_{14}N_2O$

N-Ethyl-1-ethylaziridine-2-carboxamide

E e =not determined but probably 100% because the
$[\alpha]_D$ value does not change by further resolution
$[\alpha]_D^{25}$ -103 9 (c 0.5, $CHCl_3$)
Source of chirality optical resolution
Absolute configuration unknown

K Mori and F. Toda

Tetrahedron Asymmetry **1990,** *1*, 281

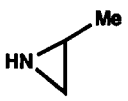
$C_9H_{18}N_2O$

N-Propyl-1-ethylaziridine-2-carboxamide

E e =not determined but probably 100% because the
$[\alpha]_D$ value does not change by further resolution
$[\alpha]_D^{25}$ +31 2 (c 0 5, $CHCl_3$)
Source of chirality optical resolution
Absolute configuration unknown

K Mori and F Toda

Tetrahedron Asymmetry **1990,** *1*, 281



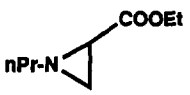
C_3H_7N

N-Ethyl-2-methylaziridine

E e =not determined but probably 100% because the
$[\alpha]_D$ value does not change by further resolution
$[\alpha]_D^{25}$ +4.2 (c 0 5, $CHCl_3$)
Source of chirality optical resolution
Absolute configuration unknown

K Mori and F Toda

Tetrahedron Asymmetry **1990**, *1*, 281



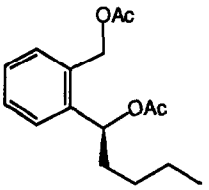
$C_8H_{15}NO_2$

N-Propyl-2-ethoxycarbonylaziridine

E e =not determined but probably 100% because the $[\alpha]_D$ value does not change by further resolution
$[\alpha]_D^{25}$ -122 (c 0 5, $CHCl_3$)
Source of chirality optical resolution
Absolute configuration unknown

A Alexakis, R Sedrani, J F Normant and P Mangeney

Tetrahedron Asymmetry **1990**, *1*, 283



$C_{16}H_{22}O_4$

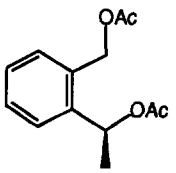
1-(2-Acetoxymethyl-phenyl)-pentyl acetate

E e = 97 % (by NMR with $Eu(hfc)_3$)
$[\alpha]_D^{25} = -2$ (c = 3 5 , Et_2O)

source of chirality (-)-(1S,2S)-bis N-methylamino-1,2-diphenyl ethane
Absolute configuration S

A Alexakis, R Sedrani, J F Normant and P Mangeney

Tetrahedron Asymmetry **1990**, *1*, 283



$C_{13}H_{16}O_4$

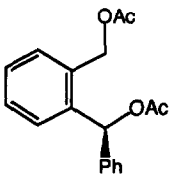
1-(2-Acetoxymethyl-phenyl)-ethyl acetate

E e = 83 % (by NMR with $Eu(hfc)_3$)
$[\alpha]_D^{25} = -5$ (c = 0 9 , Et_2O)

source of chirality (-)-(1S,2S)-bis N-methylamino-1,2-diphenyl ethane
Absolute configuration S

A Alexakis, R Sedrani, J F Normant and P Mangeney

Tetrahedron Asymmetry **1990**, *1*, 283



$C_{18}H_{18}O_4$

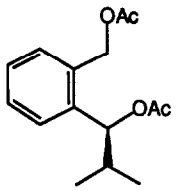
1-(2-Acetoxymethyl-phenyl)-1-phenyl methyl acetate

E e = 92 % (by NMR with $Eu(hfc)_3$)
$[\alpha]_D^{25} = -11\,8$ (c = 3 89 , Et_2O)

source of chirality (-)-(1S,2S)-bis N-methylamino-1,2-diphenyl ethane
Absolute configuration S

M Commerçon, P Mangeney, T Tejero and A Alexakis

Tetrahedron Asymmetry **1990**, *1*, 287



$C_{15}H_{20}O_4$

1-(2-Acetoxymethyl-phenyl)-2-methyl-1-propyl acetate

E e = 28 % (by NMR with Eu(hfc)$_3$)

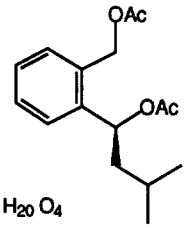
$[\alpha]_D^{25} = -2$ (c = 0 8 , Et_2O)

source of chirality (+)-(1S,2S)-bis N-methylaminocyclohexane

Absolute configuration S

M Commerçon, P Mangeney, T Tejero and A Alexakis

Tetrahedron Asymmetry **1990**, *1*, 287



$C_{16}H_{20}O_4$

1-(2-Acetoxymethyl-phenyl)-2-methyl-1-butyl acetate

E e = 98 % (by NMR with Eu(hfc)$_3$)

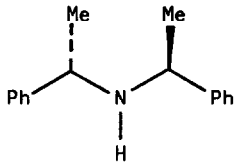
$[\alpha]_D^{25} = -12$ (c = 0 9 , Et_2O)

source of chirality (+)-(1S,2S)-bis N-methylaminocyclohexane

Absolute configuration S

C Boga, D. Savoia and A. Umani-Ronchi

Tetrahedron Asymmetry **1990**, *1*, 291



$C_{16}H_{19}N$

(-)-Di-(1-phenylethyl)amine

D.e.= 88 % (by GC)

$[\alpha]_D^{20}$ = -157 (c 2.4, EtOH) for pure diastereoisomer

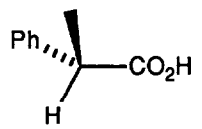
Source of chirality alkylation of (S)-N-benzylidene-

-1-phenylethylamine by MeCu-BF_3-LiJ

Absolute configuration S,S

D R Coghlan, D P G Hamon, R A Massy-Westropp and D Slobedman

Tetrahedron Asymmetry **1990**, *1*, 299



$C_9H_{10}O_2$

2-phenylpropanoic acid

E ε = ~ 100% (by optical rotation)

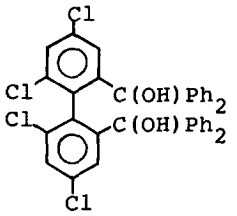
$[\alpha]_D$ = +76 3 (C 0 81, CH_2Cl_2)

Source of chirality asymmetric synth (Sharpless)

Absolute configuration S (literature assignment)

F. Toda, R. Toyotaka, and H. Fukuda

Tetrahedron Asymmetry **1990**, *1*, 303

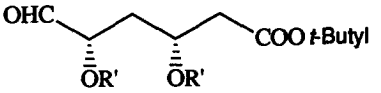


$C_{38}H_{26}O_2Cl_4$

Name: 4,4'6,6'-Tetrachloro-2,2'-bis(hydroxydiphenylmethyl)biphenyl
E.e.=100%[by HPLC of Chiralcel OC]
$[\alpha]_D^{20}$ = +110 and -110 (*c* 0.1, $CHCl_3$)
Source of chirality: prepared from optically pure 4,4',6,6'-tetrachlorobiphenyl-2,2'-dicarboxylic acid

K. Prasad, K-M Chen, O. Repic and G. E Hardtmann

Tetrahedron Asymmetry **1990**, *1*, 307



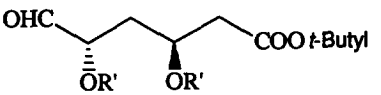
R' = *t*-Butyldiphenylsilyl

$[\alpha]_D^{25}$ = +5 21 (c 1 66, CH_2Cl_2)
Source of chirality *S*-Malic acid as starting material
Absolute configuration· 3*R*, 5*S*

$C_{42}H_{54}O_5Si_2$, mp 81-82°C
(3*R*, 5*S*)-bis[(1,1-dimethylethyl)diphenylsilyloxy]-6-oxohexanoic acid 1,1-dimethyl ethyl ester

K. Prasad, K-M Chen, O. Repic and G E Hardtmann

Tetrahedron Asymmetry **1990**, *1*, 307



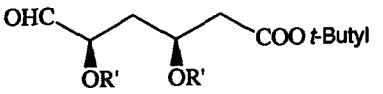
R' = *t*-Butyldiphenylsilyl

$[\alpha]_D^{25}$ = +10.42 (c 0 48, CH_2Cl_2)
Source of chirality· *S*-Malic acid as starting material
Absolute configuration 3*S*, 5*S*

$C_{42}H_{54}O_5Si_2$, oil
(3*S*, 5*S*)-bis[(1,1-dimethylethyl)diphenylsilyloxy]-6-oxohexanoic acid 1,1-dimethyl ethyl ester

K Prasad, K-M Chen, O. Repic and G. E Hardtmann

Tetrahedron Asymmetry **1990**, *1*, 307



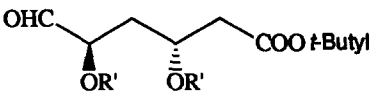
R' = *t*-Butyldiphenylsilyl

$[\alpha]_D^{25}$ = -4 (c 5, CH_2Cl_2)
Source of chirality *R*-Malic acid as starting material
Absolute configuration 3*S*, 5*R*

$C_{42}H_{54}O_5Si_2$, mp 75-76°C
(3*S*, 5*R*)-bis[(1,1-dimethylethyl)diphenylsilyloxy]-6-oxohexanoic acid 1,1-dimethyl ethyl ester

K Prasad, K-M Chen, O. Repic and G. E. Hardtmann

Tetrahedron Asymmetry **1990**, *1*, 307



R' = *t*-Butyldiphenylsilyl

$[\alpha]_D^{25}$ = -9 4 (c 0 48, CH_2Cl_2)
Source of chirality: *R*-Malic acid as starting material
Absolute configuration: 3*R*, 5*R*

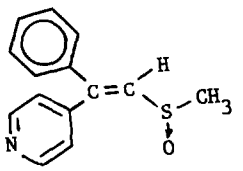
$C_{42}H_{54}O_5Si_2$, oil

(3*R*, 5*R*)-bis[(1,1-dimethylethyl)diphenylsilyloxy]-6-oxohexanoic acid 1,1-dimethyl ethyl ester

---

M. Madesclaire, A. Fauve, J. Metin and A. Carpy

Tetrahedron Asymmetry **1990**, *1*, 311



$C_{14}H_{13}NOS$

(Z)-(R)-methyl 2-phenyl-2-(pyrid-4-yl) vinyl sulfoxide

E e = 95 % [by ^{1}H NMR with (R)-(-)-N-(3,5-dinitrobenzoyl)-α-phenylethylamine]

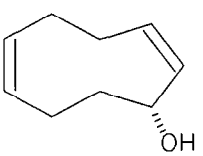
$[\alpha]_J^{20}$ = +78 (c, 0.15, $CHCl_3$)

Source of chirality : enantioselective microbiological sulfoxidation of the sulfide by *Mortierella isabellina*.

Absolute configuration : 1Z,R_S (X-ray)

E Q Morales, J T Vázquez and J D. Martín

Tetrahedron Asymmetry **1990**, *1*, 319



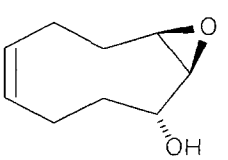
$C_9H_{14}O$

(Z,Z)-1(R)-Hydroxy-cyclonona-2,6-diene

E e = >99% [by GLC of Mosher's ester derivative]
$[\alpha]_D^{25}$ = -145 6 (c 0 6, $CHCl_3$)
Source of chirality: enantioselective epoxidation
Absolute configuration 1R
(assigned by CD)

E Q Morales, J. T Vázquez and J. D Martín

Tetrahedron Asymmetry **1990**, *1*, 319



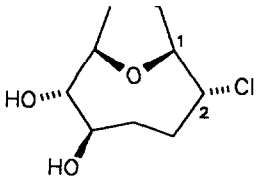
$C_9H_{14}O_2$

(Z)-*threo*-1(R)-Hydroxy-2(S),3(R)-epoxy-6-cyclononene

E e = >99%
$[\alpha]_D^{25}$ = -93.0 (c 0.9, $CHCl_3$)
Source of chirality enantioselective epoxidation of a precursor
Absolute configuration 1R,2S,3R
(assigned by CD)

E Q Morales, J T Vázquez and J D Martín

Tetrahedron· Asymmetry **1990,** *1*, 319



E.e = >99%
$[\alpha]_D^{25}$ = +32.5 (c 0 2, $CHCl_3$)
Source of chirality. enantioselective epoxidation of a precursor
Absolute configuration. 1R,2R,5R,6S,7S
(assigned by CD of its di-*p*-bromobenzoyl derivative)

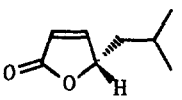
$C_9H_{15}O_3Cl$

endo-2-Chloro-*exo*-5,*endo*-6-dihydroxy-10-oxabicyclo [5 2 1] decane

---

M.Beckmann, H.Hildebrandt, and E.Winterfeldt

Tetrahedron Asymmetry **1990,** *1*, 335



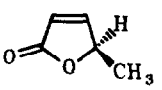
E.e. = 100% (NMR, heptafluoro-camphorato-europium)
$[\alpha]_D^{20}$ = +82.5 (1% in CH_3OH)

Absolute configuration assigned by analogy

$C_8H_{12}O_2$
S-γ -Isobutyl-butenolide

M.Beckmann, H.Hildebrandt, and E.Winterfeldt

Tetrahedron Asymmetry **1990,** *1*, 335



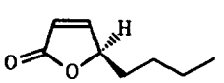
E.e. = 100% (NMR, heptafluoro-camphorato-europium)
$[\alpha]_D^{20}$ = -96 (1% in CH_3OH)

Absolute configuration assigned in comparison to angelica lactone from S-lactate

$C_5H_6O_2$
R-Angelica lactone

M.Beckmann, H.Hildebradt, and E.Winterfeldt

Tetrahedron Asymmetry **1990,** *1*, 335



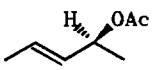
E.e. = 100% (NMR, heptafluoro-camphorato-europium)
$[\alpha]_D^{20}$ = -98 (1% in CH_3OH)

Absolute configuration assigned according to lit.(J. Org. Chem. 1987, 52, 4603)

$C_8H_{12}O_2$
R-γ -Butyl-butenolide

Tetrahedron Asymmetry **1990**, *1*, 335

M.Beckmann, H.Hildebrandt, and E.Winterfeldt



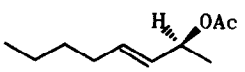
E e = 98% (NMR, heptafluoro-camphorato-europium)
$[\alpha]_D^{20}$ = -54 (1% in CH_3OH)

Absolute configuration assigned by preparation from S-methyl-lactate

$C_7H_{12}O_2$
(2S)-2-Acetoxy-pentene-3

Tetrahedron Asymmetry **1990**, *1*, 335

M.Beckmann, H Hildebrandt, and E.Winterfeldt



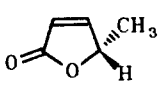
E.e. = 98% (NMR, heptafluoro-camphorato-europium)
$[\alpha]_D^{20}$ = -64 (1% in CH_3OH)

Absolute configuration assigned by preparation from S-methyl-lactate

$C_{10}H_{18}O_2$
(2S)-2-Acetoxy-octene-3

Tetrahedron Asymmetry **1990**, *1*, 335

M.Beckmann, H Hildebrandt, and E.Winterfeldt



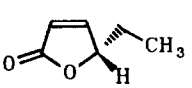
E e = 100% (NMR, heptafluoro-camphorato-europium)
$[\alpha]_D^{20}$ = +95 (1% in CH_3OH)

Absolute configuration assigned by preparation from S-methyl-lactate

$C_5H_6O_2$
S-Angelica lactone

Tetrahedron Asymmetry **1990**, *1*, 335

M.Beckmann, H.Hildebrandt, and E.Winterfeldt



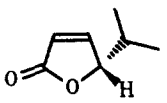
E e. = 100% (NMR, heptafluoro-camphorato-europium)
$[\alpha]_D^{20}$ = +95 (1% in CH_3OH)

Absolute configuration assigned according to lit (Helv.Chim. Acta, 1987, 70, 1569)

$C_6H_8O_2$
S-γ-Ethyl-butenolide

M.Beckmann, H.Hildebrandt, and E.Winterfeldt

Tetrahedron Asymmetry **1990**, *1*, 335



E.e. = 100% (NMR, heptafluoro-camphorato-europium)

$[\alpha]_D^{20}$ = +94 (1% in CH_3OH)

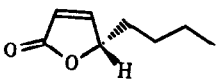
Absolute configuration assigned according to lit. (Angew. Chem., 1985, 97, 995)

$C_7H_{10}O_2$

S-γ-Isopropyl-butenolide

M.Beckmann, H.Hildebrandt, and E Winterfeldt

Tetrahedron Asymmetry **1990**, *1*, 335



E.e = 100% (NMR, heptafluoro-camphorato-europium)

$[\alpha]_D^{20}$ = +105 (1% in CH_3OH)

Absolute configuration assigned according to lit. (J. Org. Chem., 1987, 52, 4603)

$C_8H_{12}O_2$

S-γ-butyl-butenolide