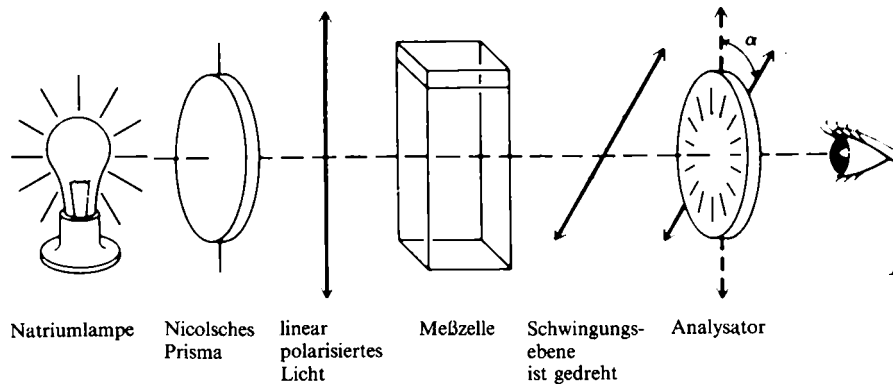
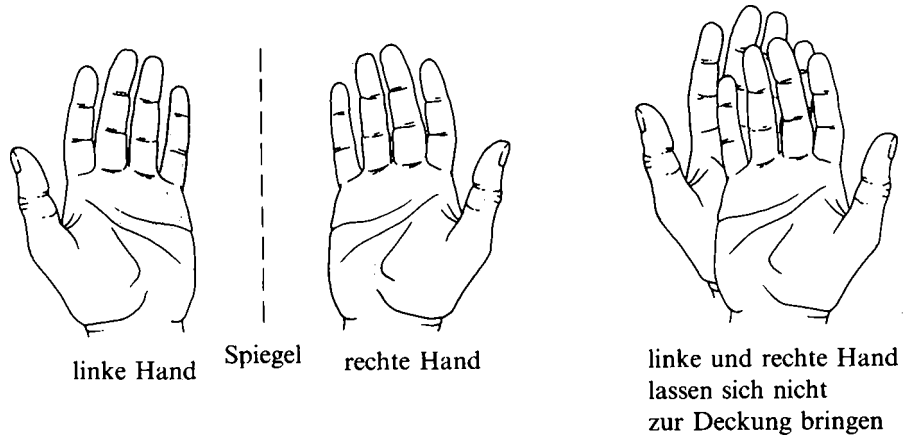


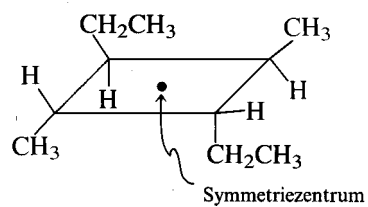
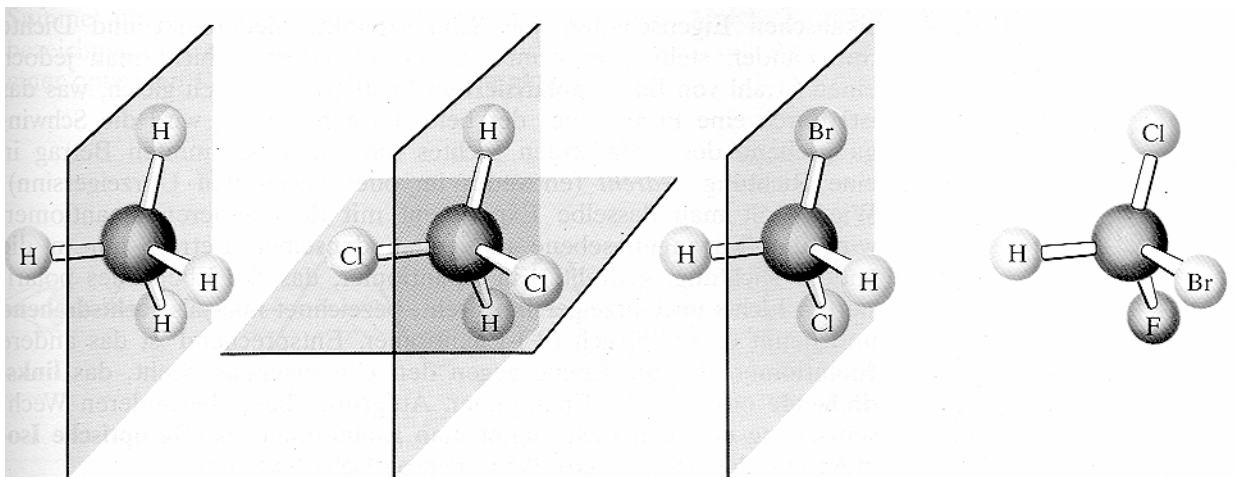
Chiralität I

(S)	 bitter	Asparagin	 süß	(R)
(+)	 östrogene Hormonwirkung	Östron	 keine	(-)
(R)	 narkotisch	Barbitursäure-Derivate	 Krampfanfall auslösend	(S)
(-)	 stark analgetisch nicht süchtig machend	Benzomorphan-Derivate	 schwach analgetisch süchtigmachend	(+)
(R)	 toxisch	Chloropropanediol	 Antifertilitäts-Wirkung	(S)
(+)	 stark carcinogen	Benz[a]pyren-Metabolite	 nicht carcinogen	(-)
(S)	 stark teratogen	Contergan	 keine Mißbildungen	(R)
(S)	 Zitronenduft	Limonen	 Orangenduft	(R)

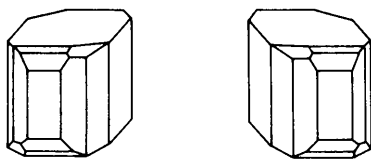
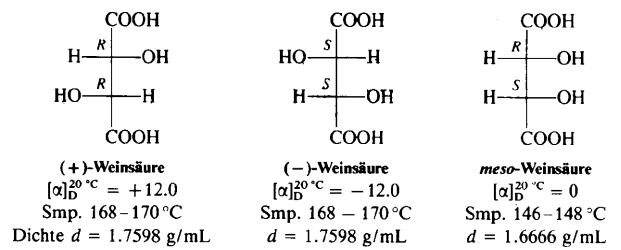
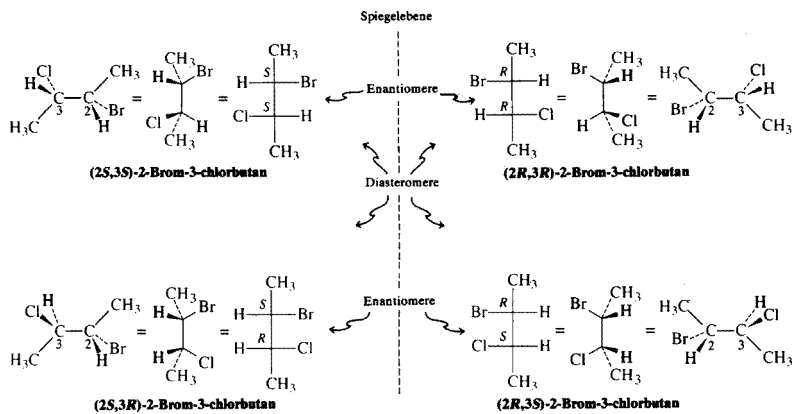
Chiralität II



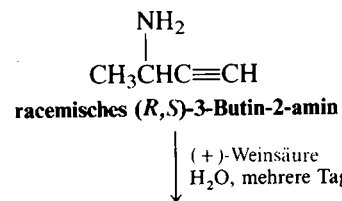
Aufbau eines Polarimeters



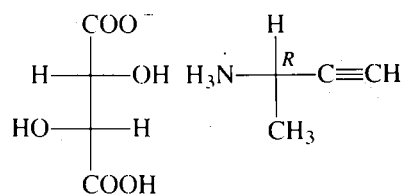
Chiralität III



Tartratkristalle

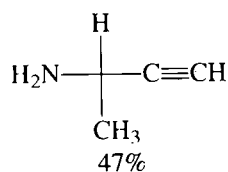


(+)-Weinsäure
 H_2O , mehrere Tage

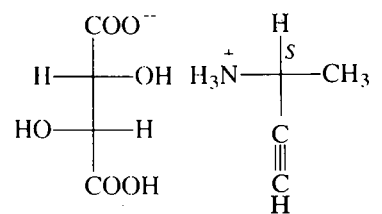


(+)-Tartratsalz
 $[\alpha]_D^{22} = +24.4^\circ$
 Kristallisiert aus der
 Lösung aus

$\downarrow \text{K}_2\text{CO}_3, \text{H}_2\text{O}$

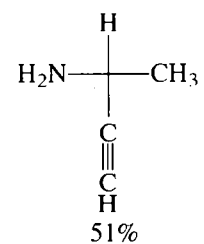


(+)-(R)-3-Butin-2-amin
 $[\alpha]_D^{22} = +53.2$
 Sdp. 82–84 °C



(-)-Tartratsalz
 $[\alpha]_D^{22} = -24.4^\circ$
 verbleibt in der
 Mutterlauge

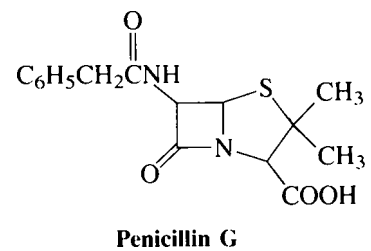
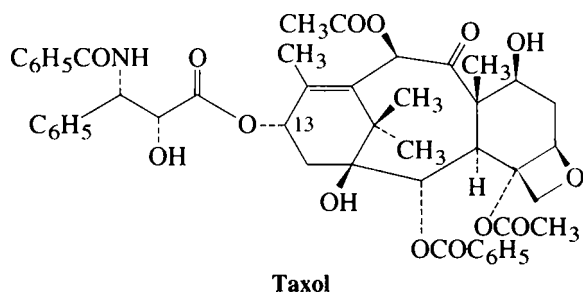
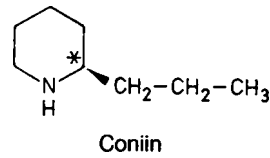
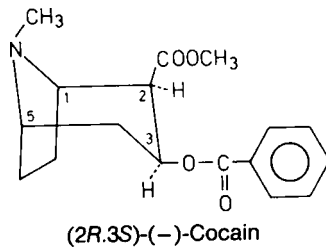
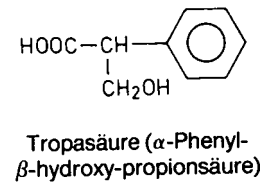
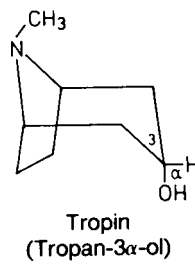
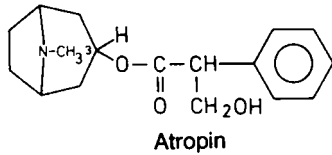
$\downarrow \text{K}_2\text{CO}_3, \text{H}_2\text{O}$



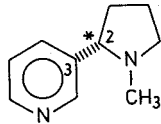
(-)-(S)-3-Butin-2-amin
 $[\alpha]_D^{20} = -52.7$
 Sdp. 82–84 °C

Heterocyclen I

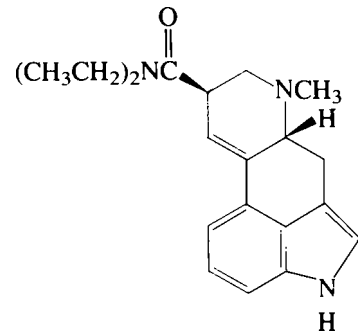
Ringgröße	ungesättigt	gesättigt
3-Ring	-iren, -irin (N)	-iran, -iridin (N)
4-Ring	-et	-etan, -etidin (N)
5-Ring	-ol	-olan, -olidin (N)
6-Ring	-in, inin (B, P, X)	-an, -inan (N, B, P, X)
7-Ring	-epin	-epan



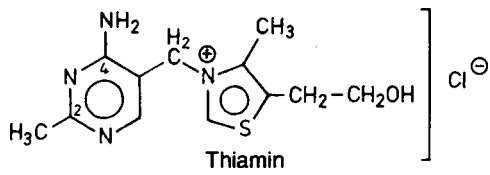
Heterocyclen II



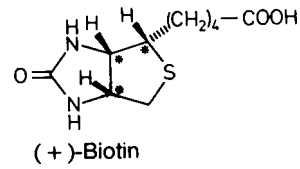
Nicotin = 3-[N-Methyl-2-tetrahydropyrrolyl]-pyridin



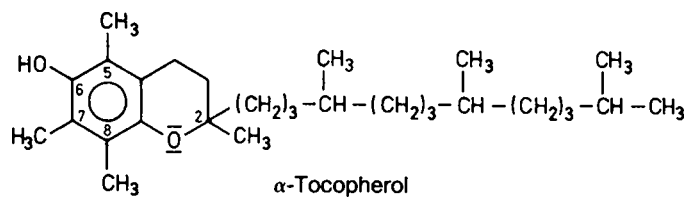
Lysergsäurediethylamid (LSD)



Thiamin

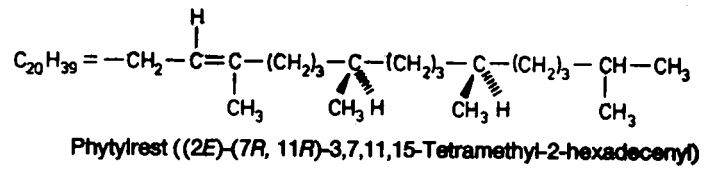
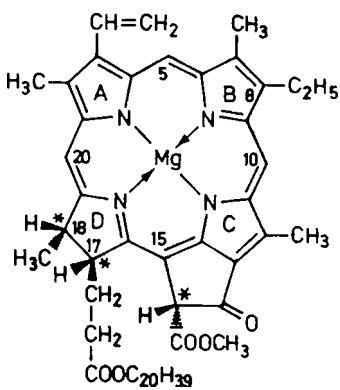
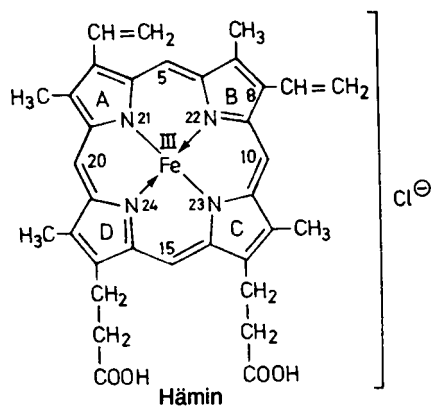
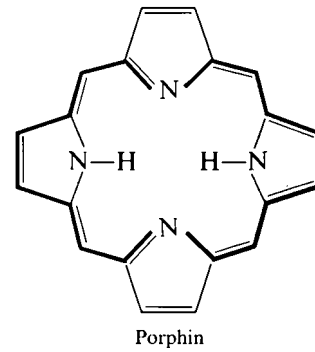
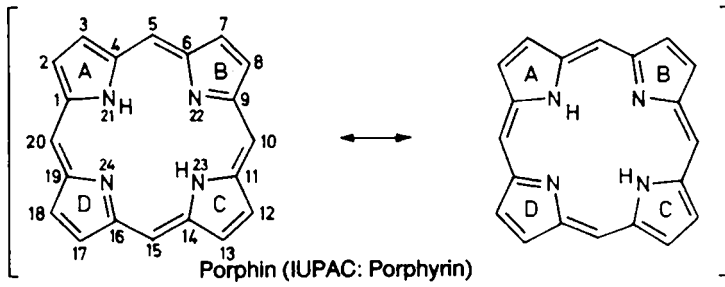


(+)-Biotin



α -Tocopherol

Heterocyclen III



Heterocyclen IV

