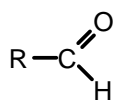


Wichtige funktionelle Gruppen in organischen Molekülen

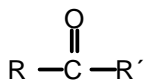
$R-Hal$ Hal = F, Cl, Br, I Halogenide

$R-OH$ Alkohole

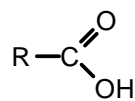
$R-O-R'$ Ether



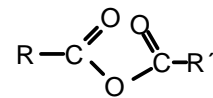
Aldehyde



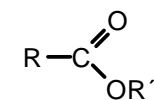
Ketone



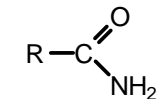
Carbonsäuren



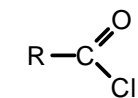
Carbonsäureanhydride



Carbonsäureester



Carbonsäureamide



Carbonsäurechloride

$R-C \equiv N$ Nitrile

$R-NH_2$ primäre Amine

$R-NH-R'$ sekundäre Amine

$R-NR'-R''$ tertiäre Amine

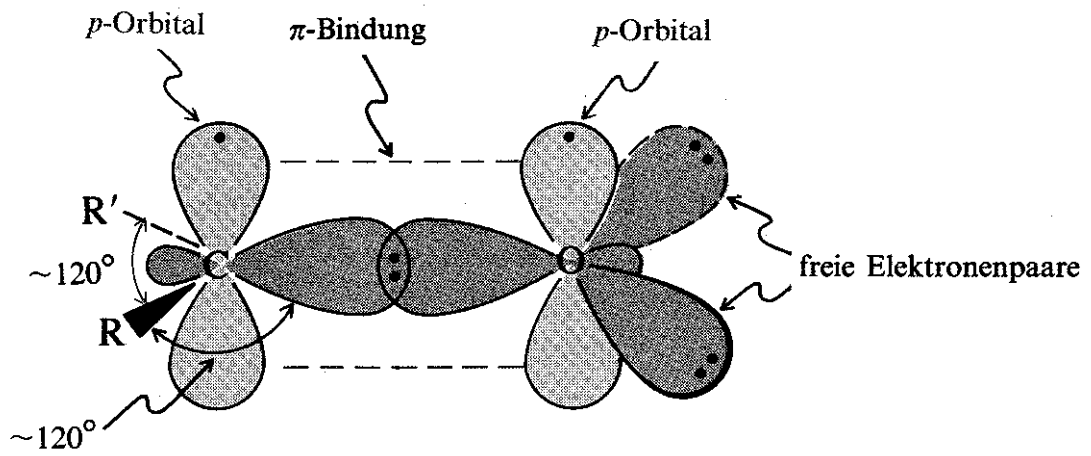
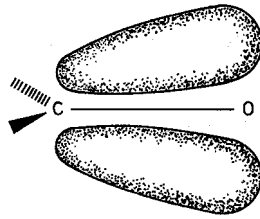
$R-NO_2$ Nitroverbindungen

$R-Me$ Me = Metallrest,
metallorganische Verbindungen,
z.B. Me = MgX oder Li

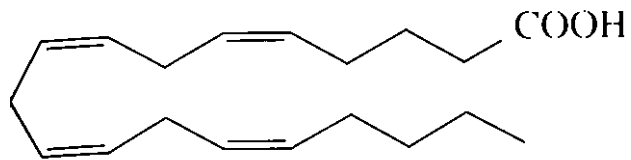
Siedepunkte einiger Alkane und Alkohole

Sdp.		Sdp.	
Methan	−161.5 °C	Methanol	+64.7 °C
Ethan	−88.6 °C	Ethanol	+78.4 °C
Propan	−44.2 °C	<i>n</i> -Propanol	+97.2 °C
<i>n</i> -Pentan	+36.1 °C	<i>n</i> -Pentanol	+138.0 °C

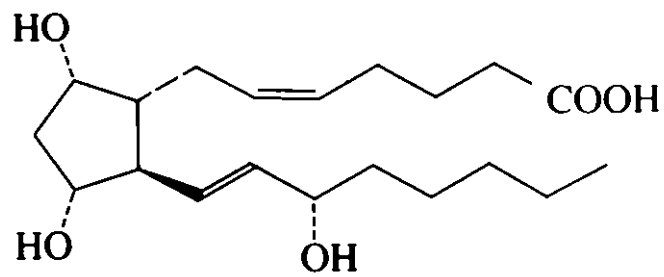
Struktur der Carbonylgruppe



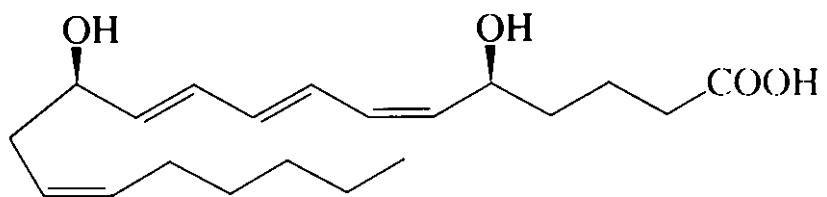
Die Arachidonsäure und einige ihrer Derivate



Arachidonsäure

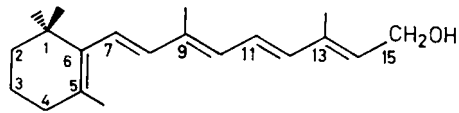


Prostaglandin F_{2d}

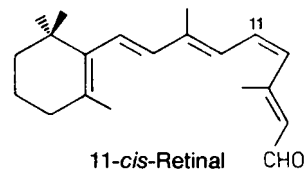


Leukotrien B₄

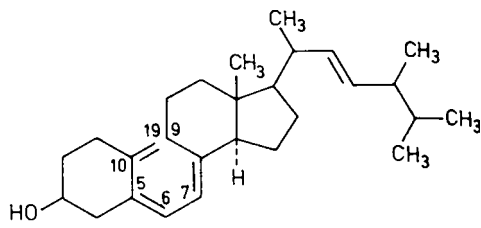
Einige Vitamine



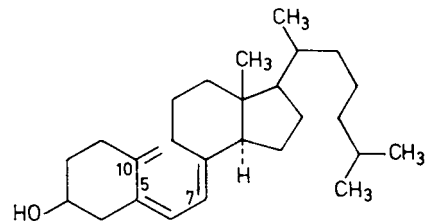
Vitamin A (Retinol)



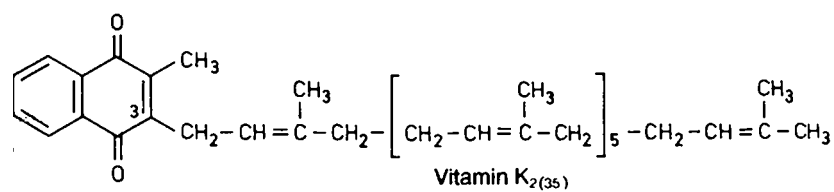
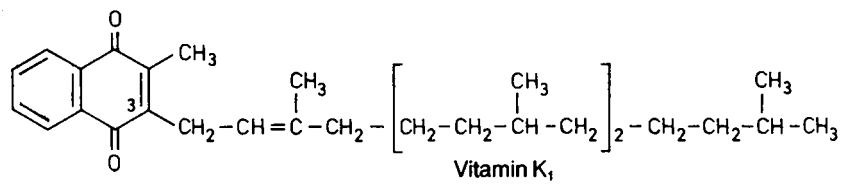
11-*cis*-Retinal



Vitamin D₂

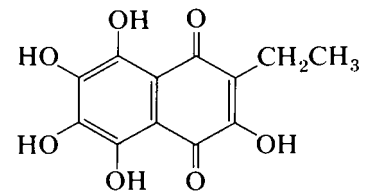
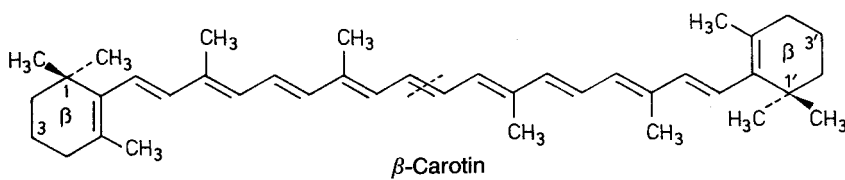


Vitamin D₃

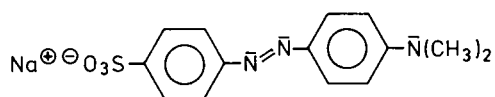


Farbe und Farbstoffe

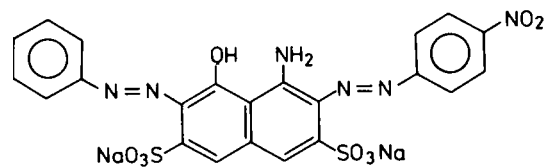
Absorbiertes Licht		Farbe der Verbindung
Wellenlänge (nm)	Farbe	
400–440	violett	gelbgrün
440–480	blau	gelb
480–490	grünblau	orange
490–500	blaugrün	rot
500–560	grün	purpur
560–580	gelbgrün	violett
580–595	gelb	blau
595–605	orange	grünblau
605–750	rot	blaugrün
750–800	purpur	grün



Echinocrom

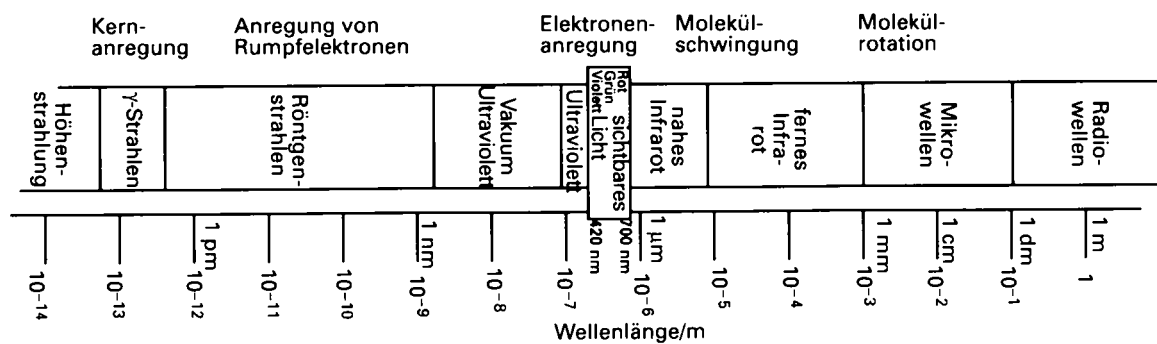


Methylorange

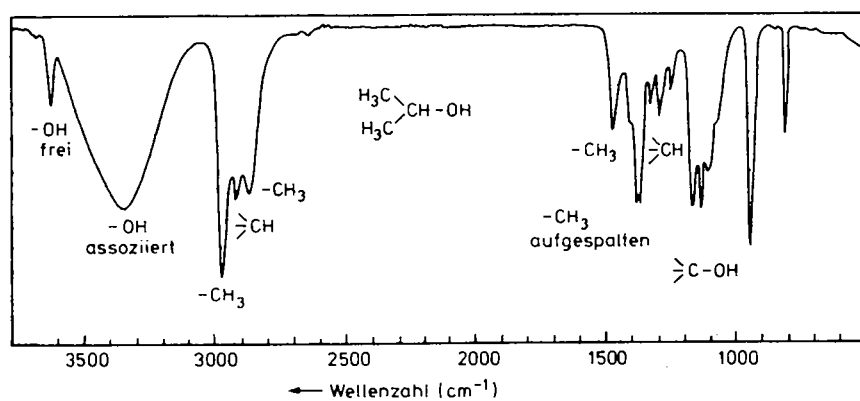
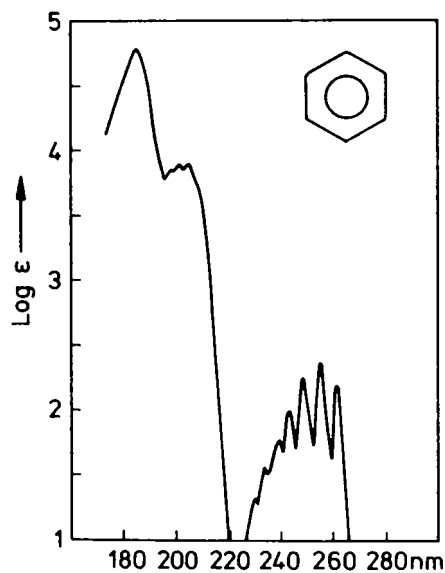


Naphtholblauschwarz 6B

Strukturaufklärung organischer Verbindungen, Teil I



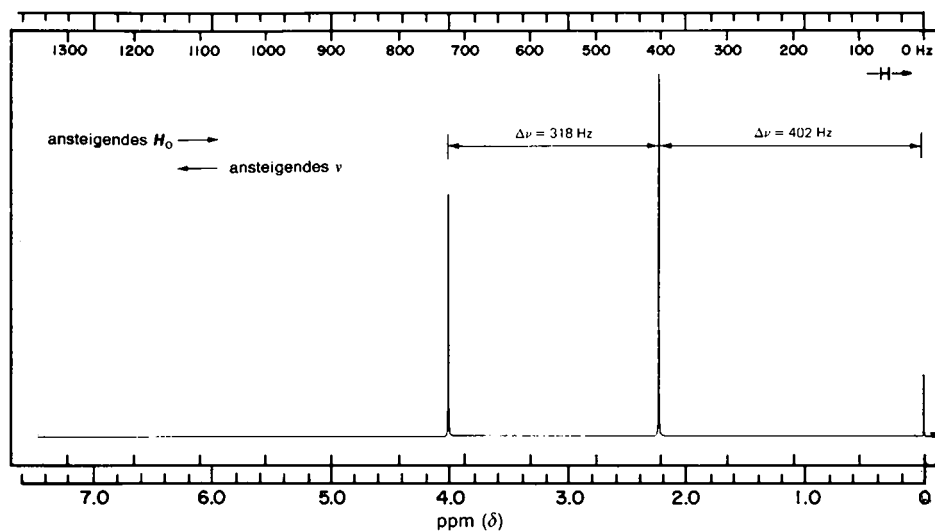
Das elektromagnetische Spektrum



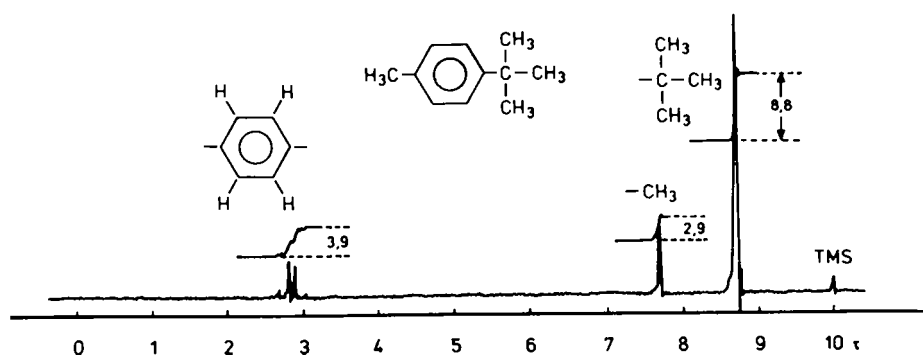
Infrarotspektrum von Isopropanol

Ultraviolettpektrum von Benzol

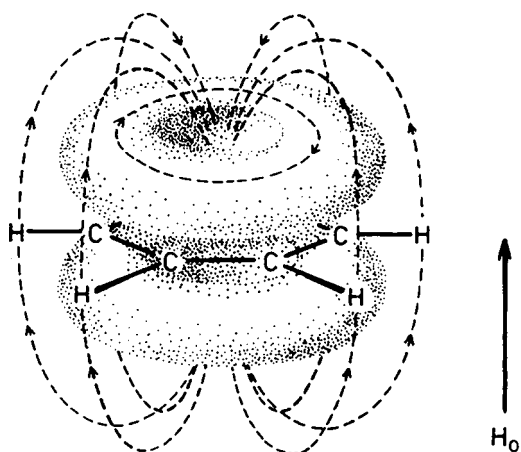
Strukturaufklärung organischer Verbindungen, Teil II



^1H -NMR-Spektrum von 1,2,2-Trichlorpropan

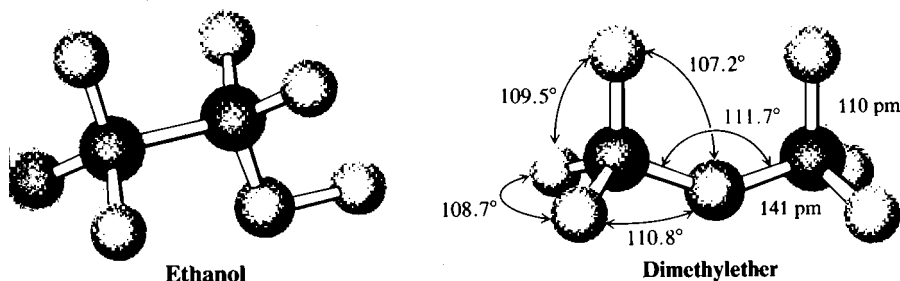


^1H -NMR-Spektrum von 4-*tert*-Butyltoluol

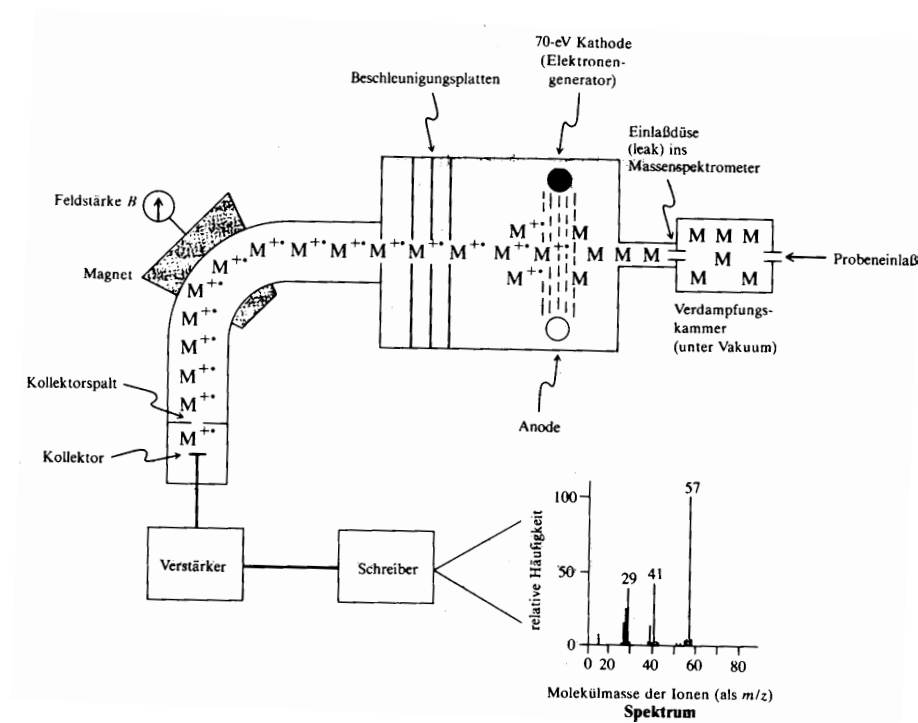


Ringstrom im Benzol

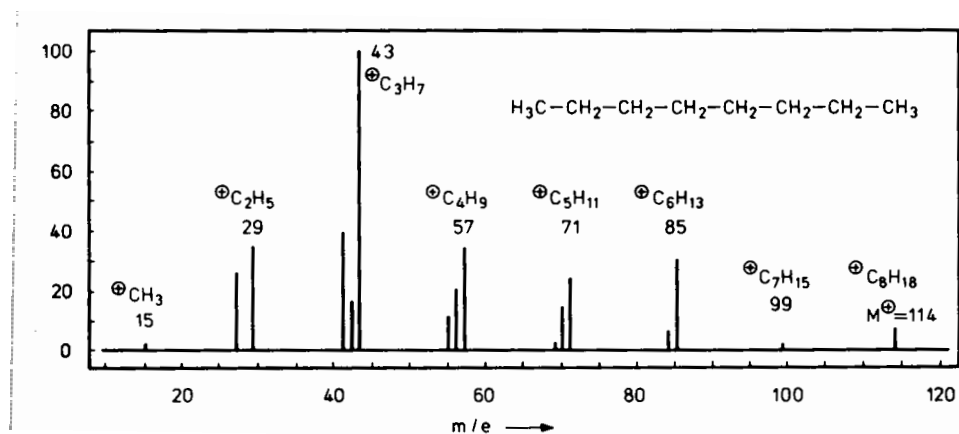
Strukturaufklärung organischer Verbindungen, Teil III



Ergebnisse von Röntgenkristallstrukturanalysen



Aufbau eines Massenspektrometers



Massenspektrum von *n*-Octan