

SINTESIS MAKROMOLEKUL KALIKS[4]RESORSINARENA ALKILAMINO DAN PERBANDINGAN KAPASITAS EKSTRAKSINYA TERHADAP LOGAM Pb(II)

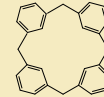
Oleh:

Ratnaningsih E. Sardjono, Jumina, Hardjono Sastrohamidjojo,
Sri Juara Santosa

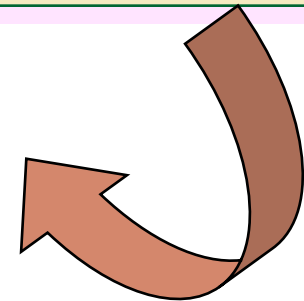
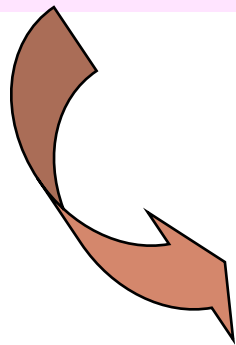
LATAR BELAKANG

KANDUNGAN
SIGNIFIKAN
LOGAM BERAT
Pb(II) DI
PERAIRAN
BERBAHAYA BAGI
LINGKUNGAN

TETRAMER SIKLIK
KALIKSARENA
BERPOTENSI
SEBAGAI
ADSORBEN

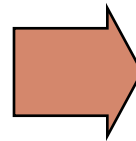
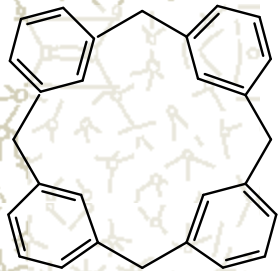


PERLU TEKNOLOGI
UNTUK
MENGURANGI
KANDUNGAN
LOGAM BERAT:
EKSTRAKSI

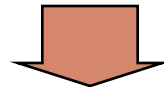


KALIKSARENA

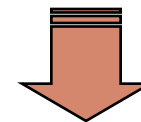
KALIKSARENA ADALAH OLIGOMER SIKLIS YANG TERSUSUN DARI SATUAN-SATUAN AROMATIS YANG DIHUBUNGKAN OLEH SUATU JEMBATAN.



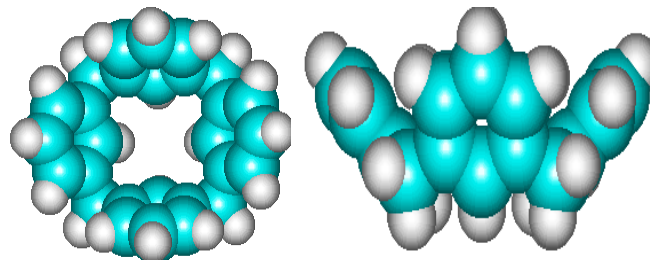
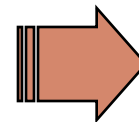
DAPAT DIMODIFIKASI SECARA LUAS



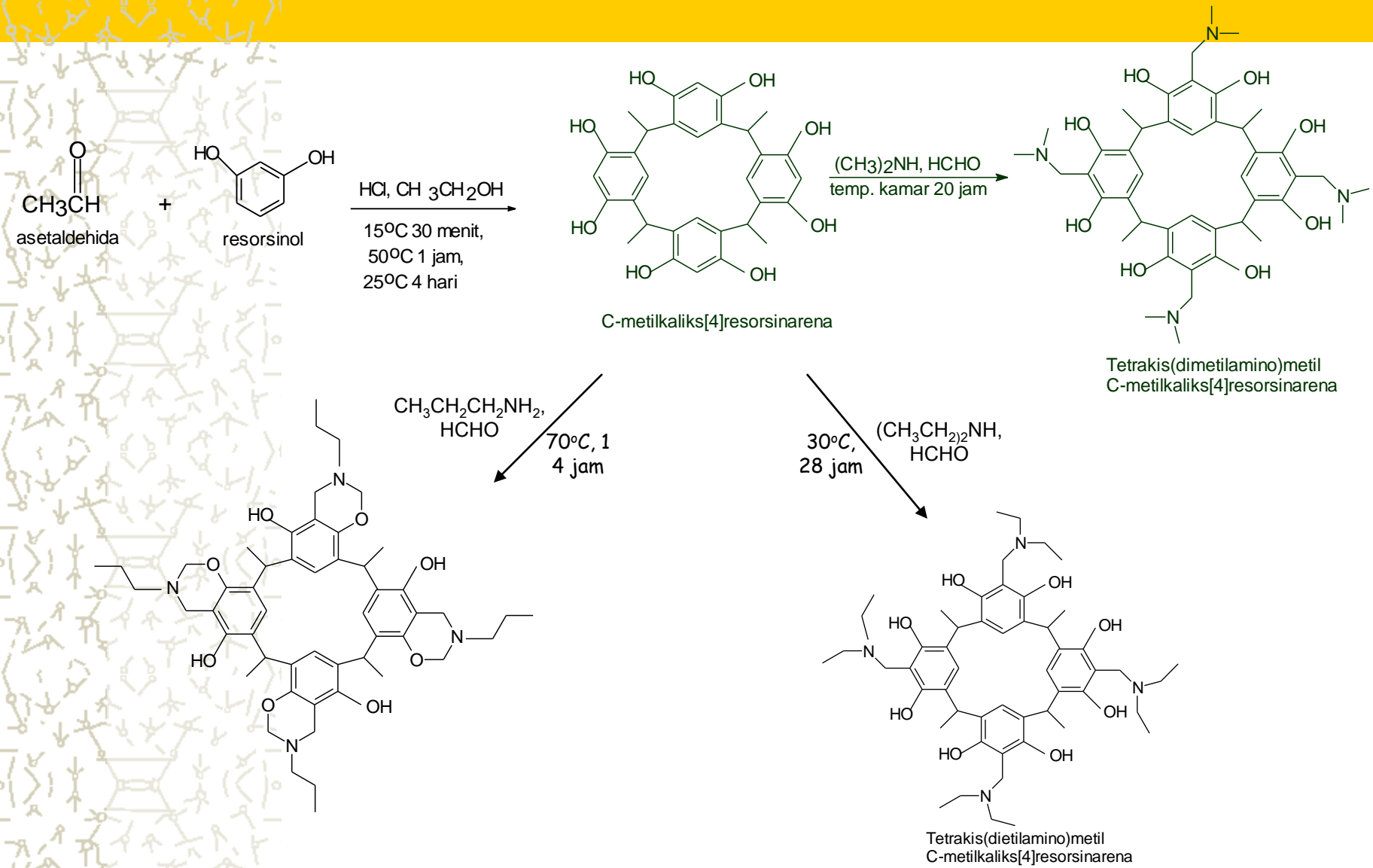
MEMPUNYAI GEOMETRI MOLEKUL UNIK, BERBENTUK KERANJANG DAN BERONGGA.



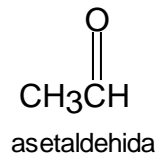
TELAH DIGUNAKAN UNTUK BERBAGAI KEPERLUAN: EKSTRAKSI (Sonoda dkk, 1999), SENSOR (Mc Mahon dkk, 2001), MEMBRAN (Lim dkk, 2005), SURFAKTAN dan KATALIS (Shinkai, 1986), FASA DIAM KROMATOGRAFI (Suh dkk, 2001)



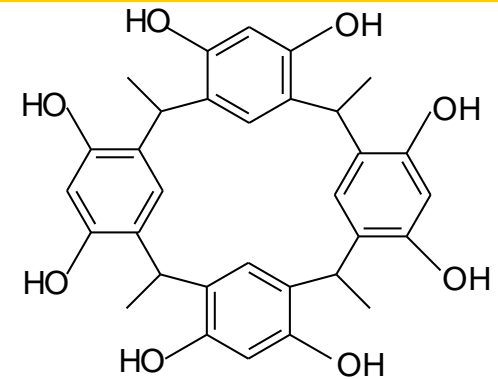
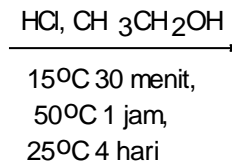
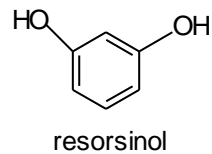
SKEMA SINTESIS



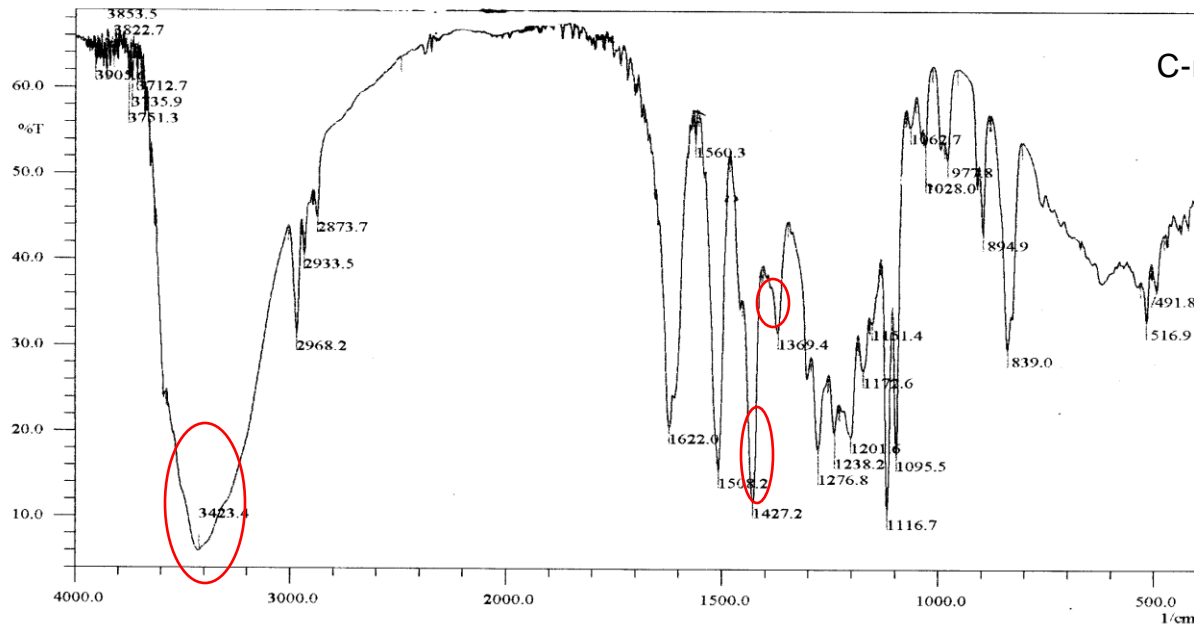
SINTESIS C-METILKALIKS[4]RESORSINARENA



+

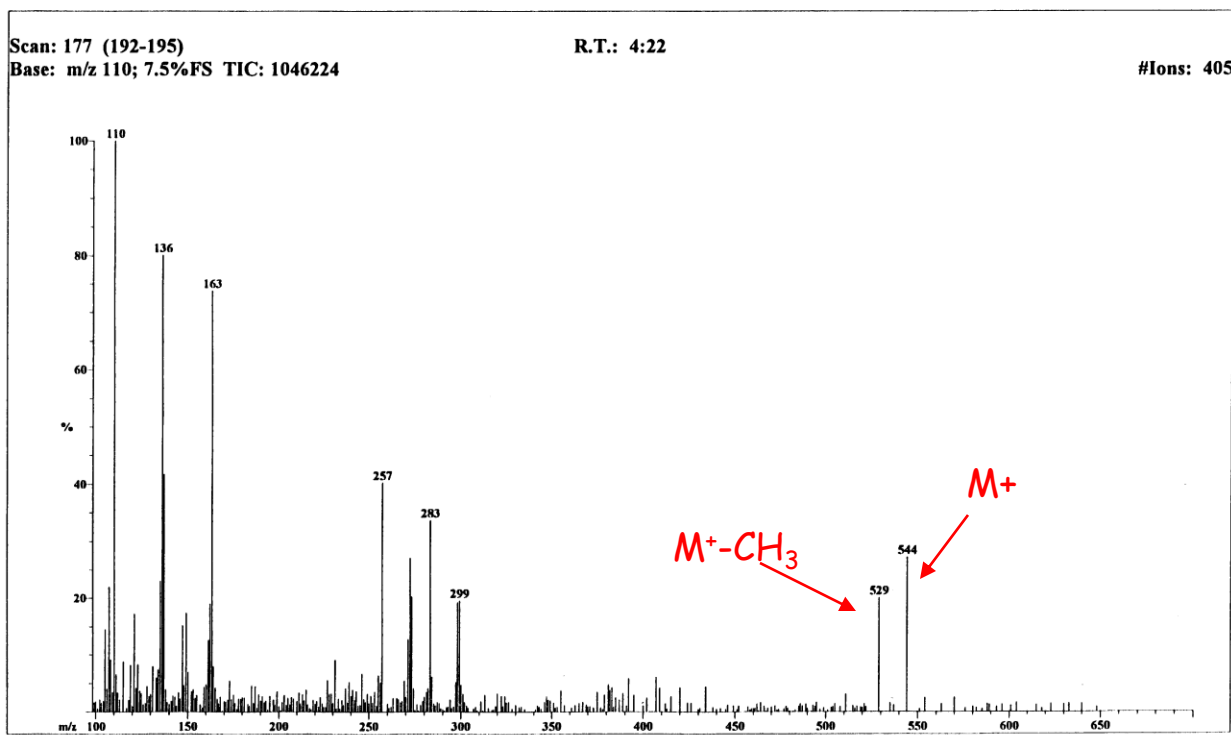


Spektrum IR

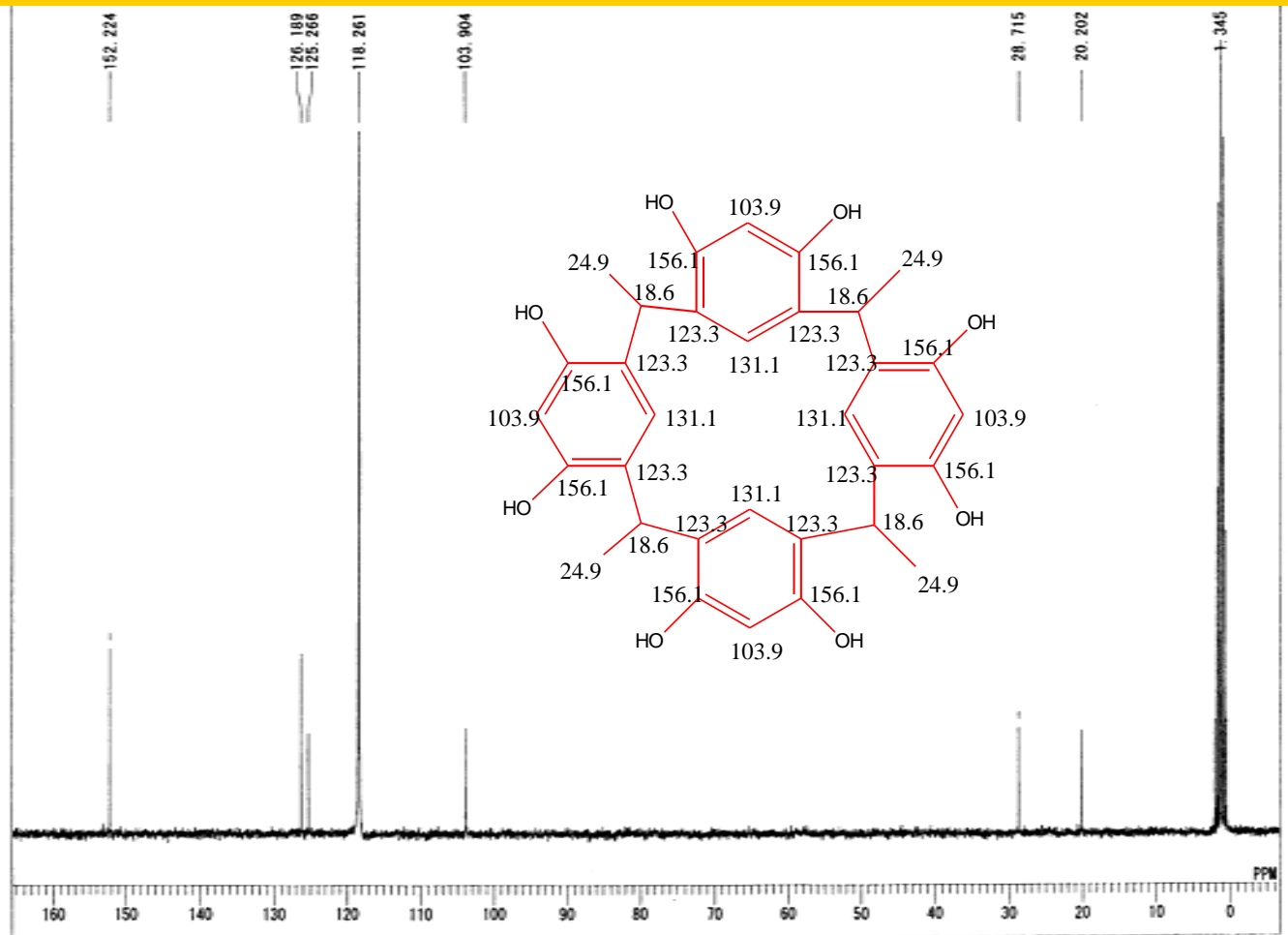


C-metil kaliks[4]resorsinarena
padatan putih
t.l > 390°C
70-85%

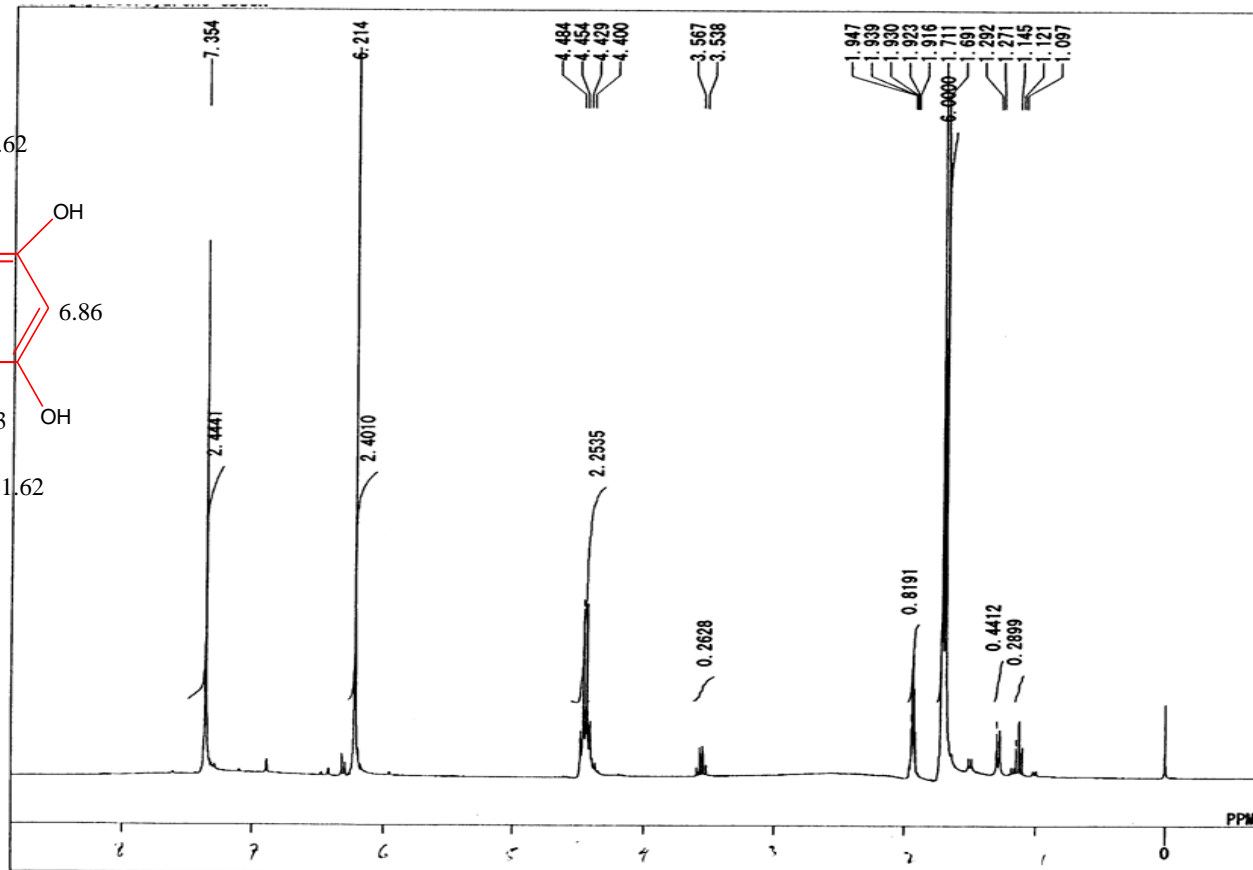
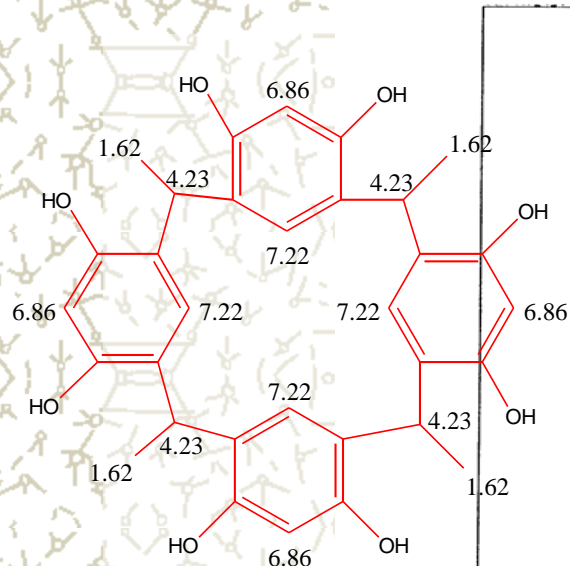
Spektrum MS C-MetilKaliks[4]resorsinarena



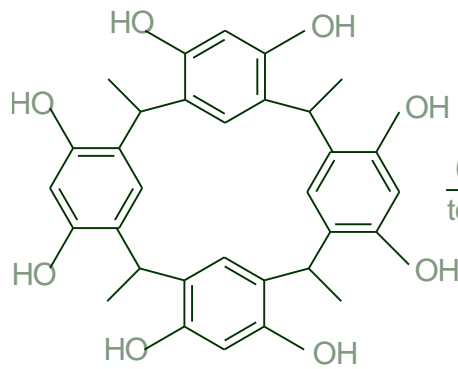
Spektrum ^{13}C NMR C-Metil Kaliksresorsinarena



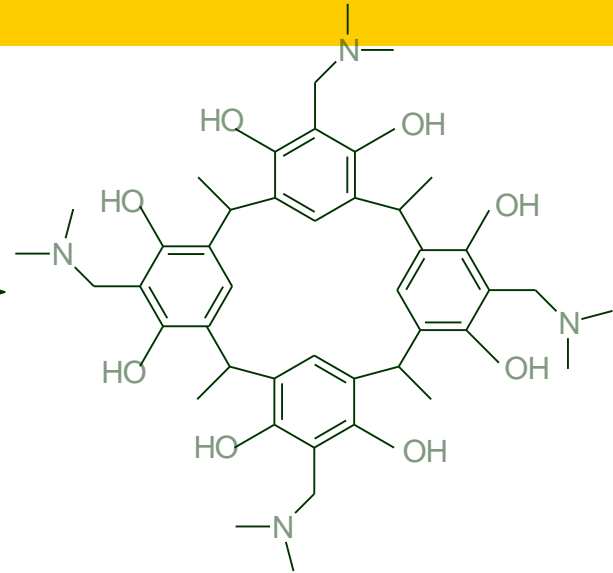
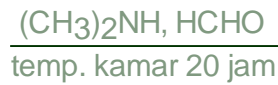
Spektrum ^1H NMR C-MetilKaliks[4]resorsinarena



SINTESIS TETRAKIS(DIMETILAMINO)METIL C-METILKALIKS[4]RESORSINARENA (TDEACMKR)

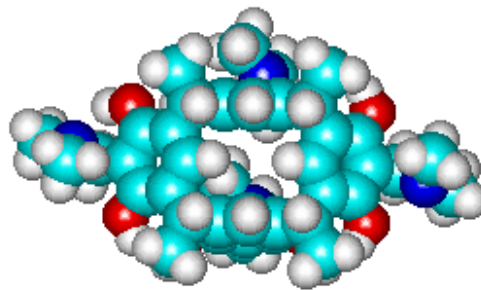
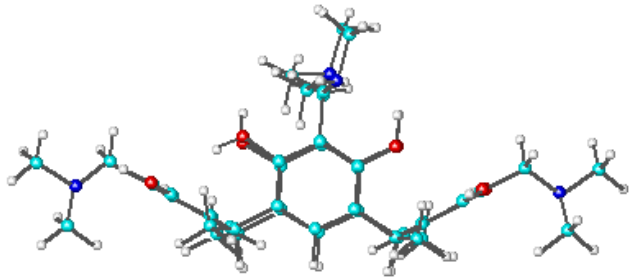


C-metilkaliks[4]resorsinarena

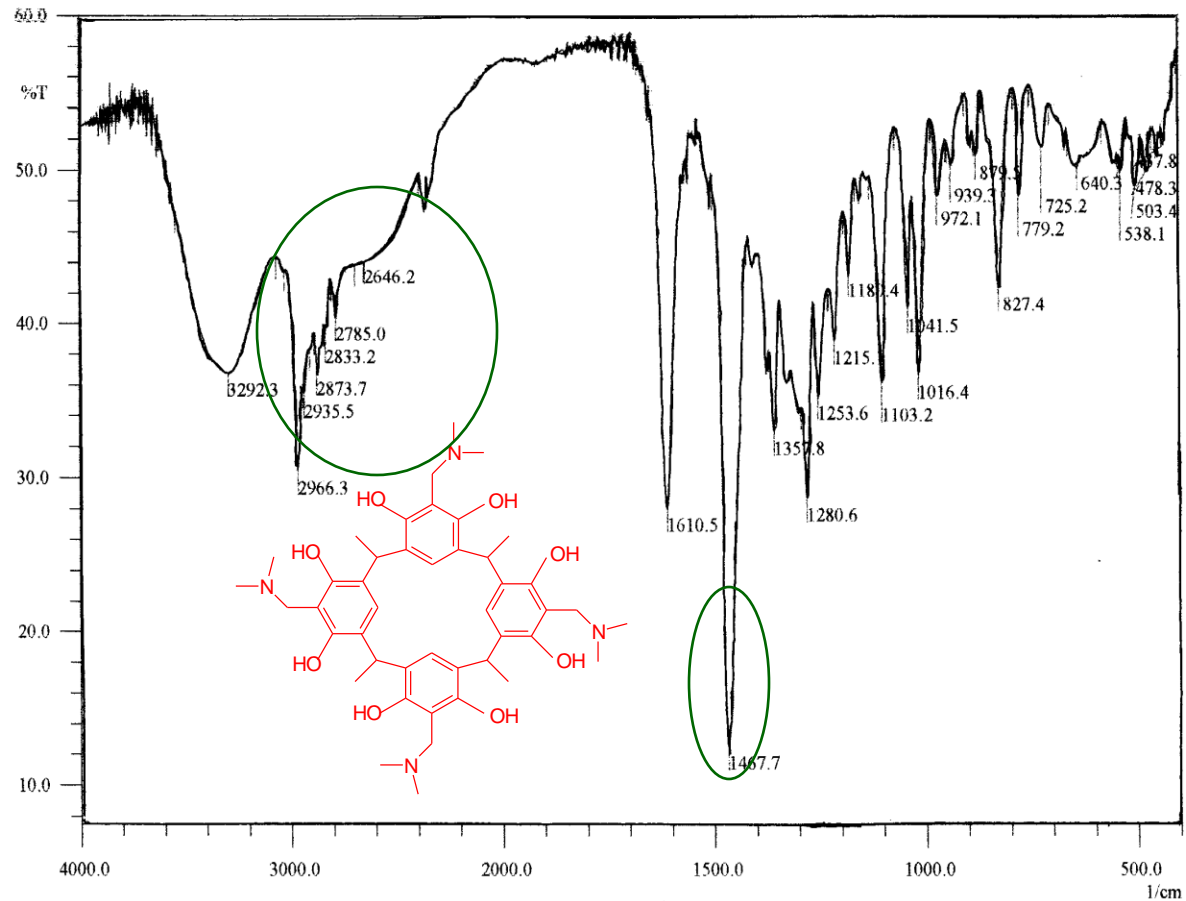
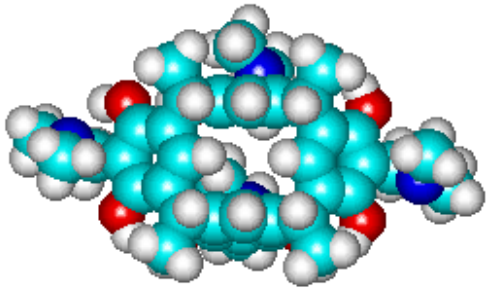


Tetrakis(dimetilamino)metil
C-metilkaliks[4]resorsinarena

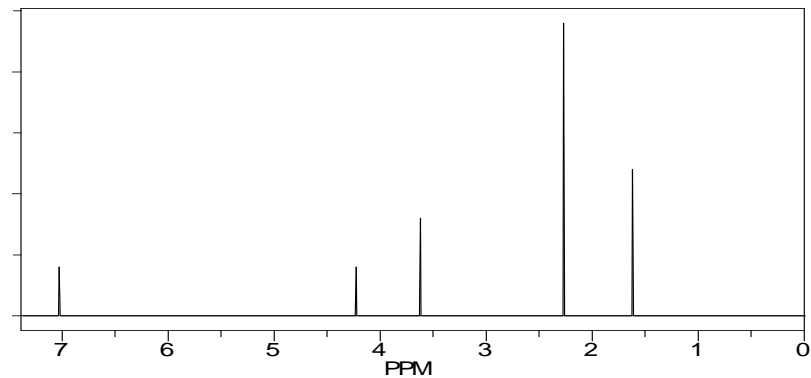
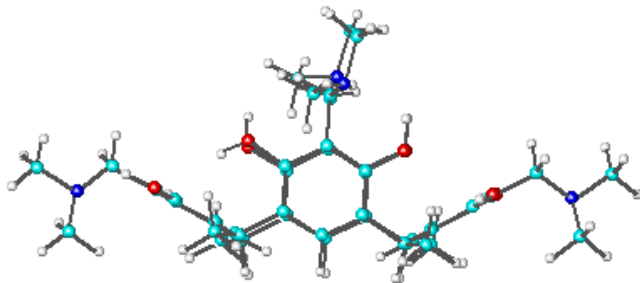
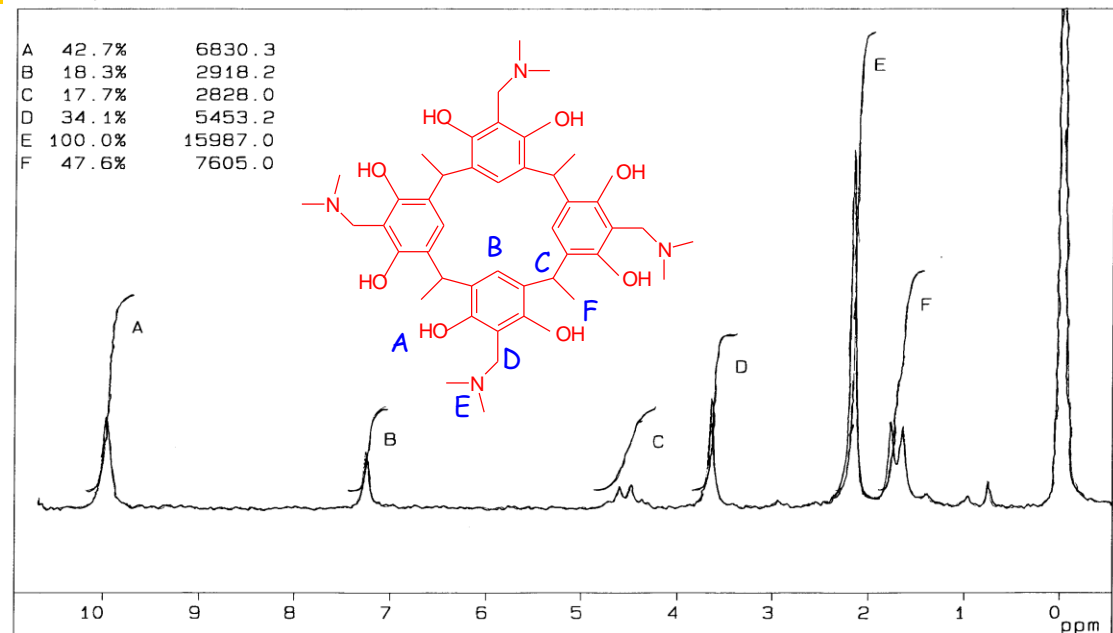
Padatan putih kemerahan
35,26%



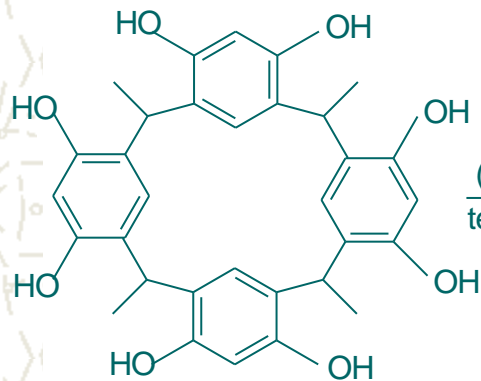
SPEKTRUM IR TETRAKIS(DIMETILAMINO)METIL C-METILKALIKS[4]RESORSINARENA



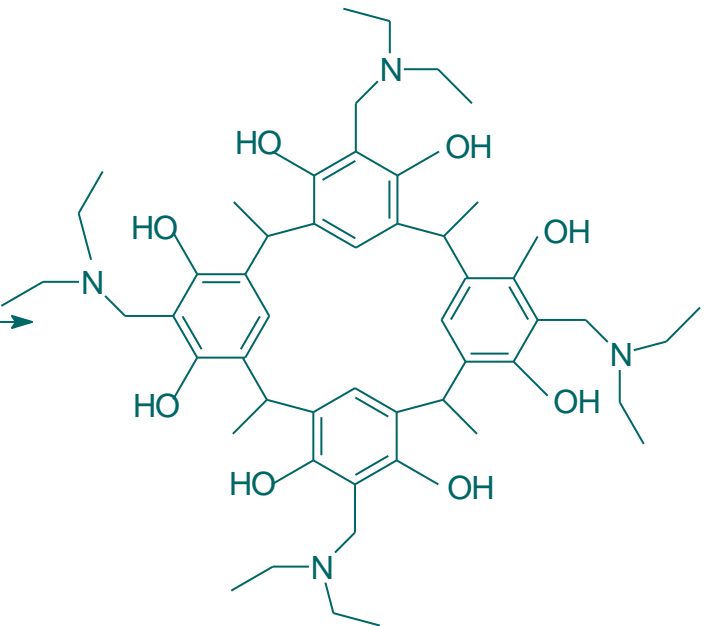
Spektrum HNMR Tetrakis (Dimetilamino)metil C-metilkaliks[4]arena



SINTESIS TETRAKIS (DIETILAMIN)METIL C-METIL KALIKS[4]RESORSINARENA



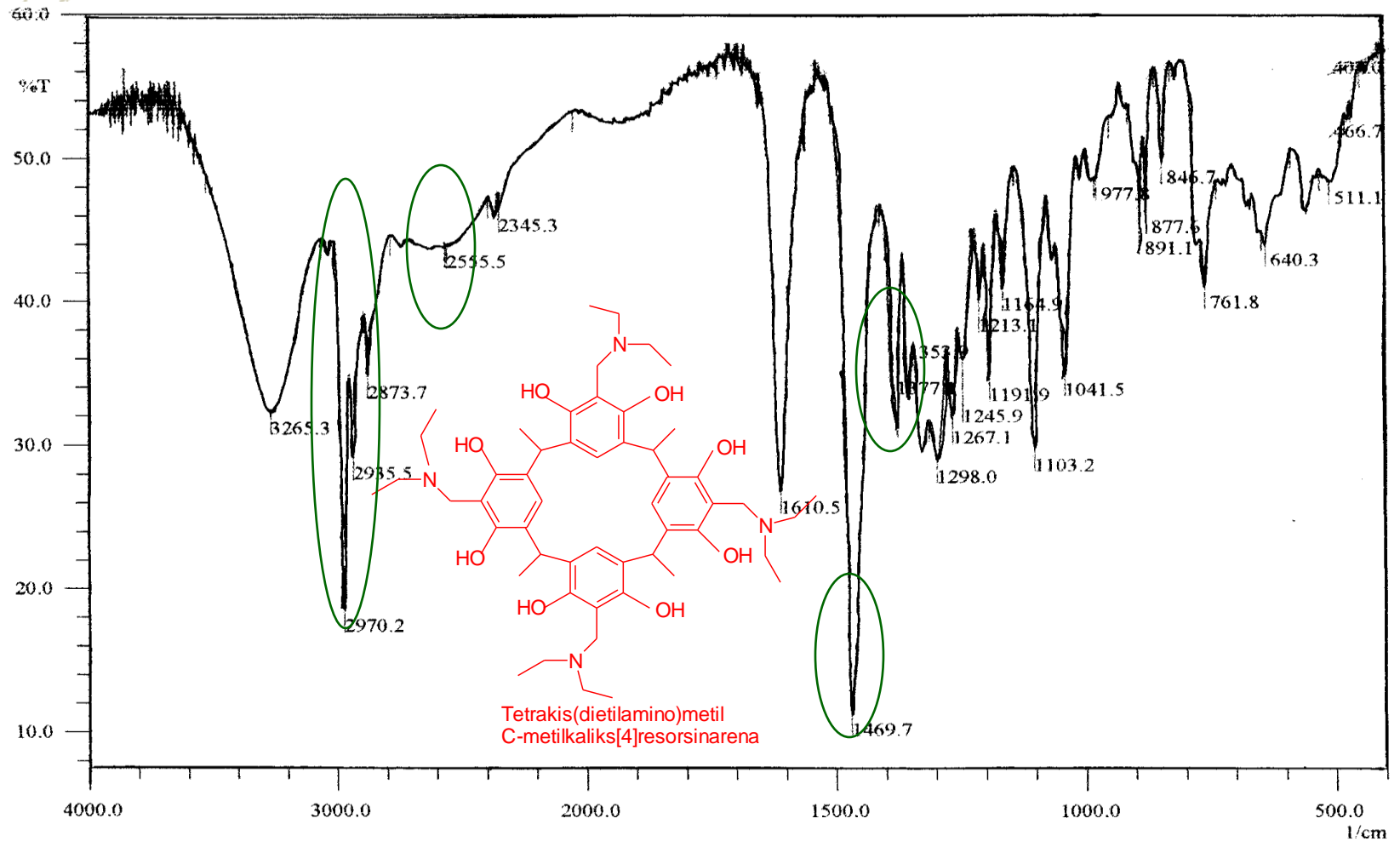
C-metilkaliks[4]resorsinarena



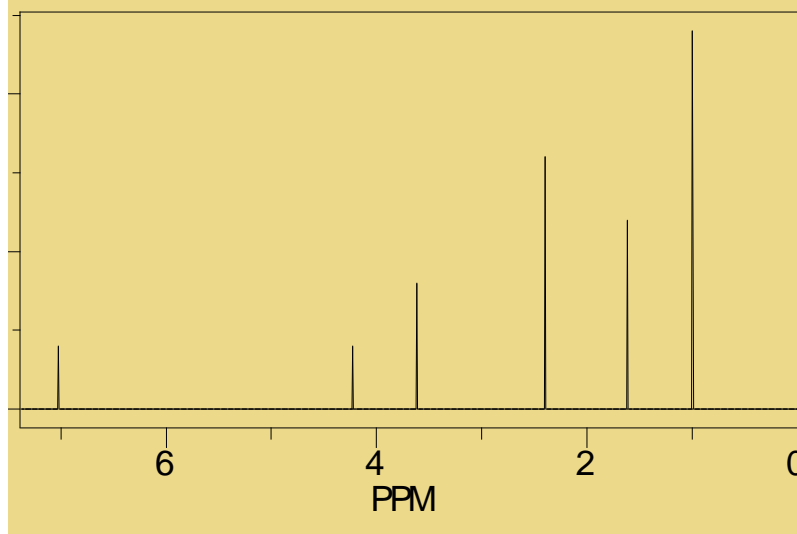
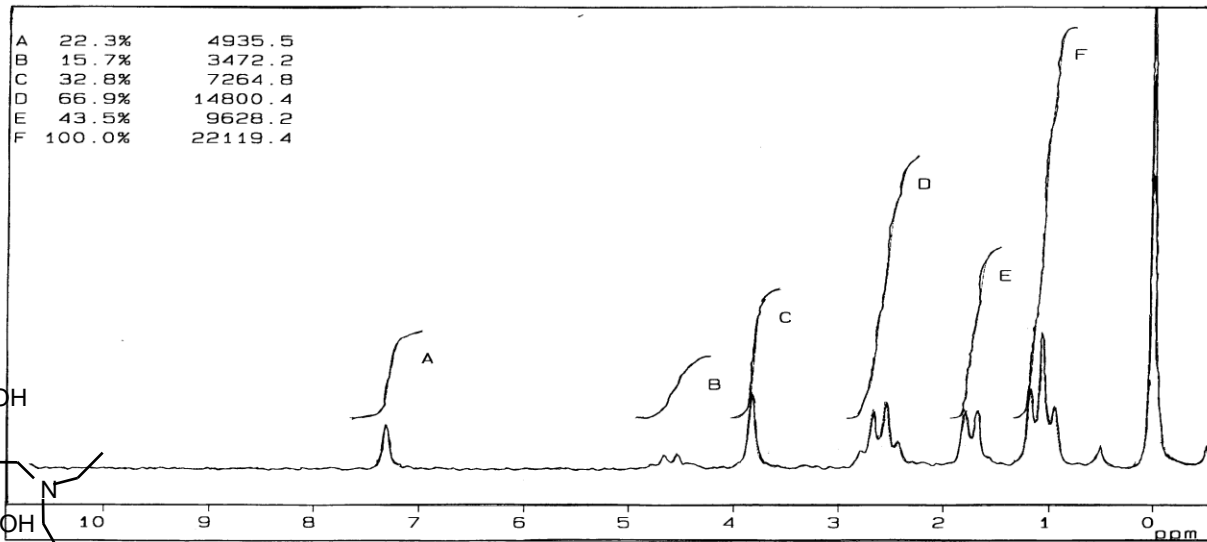
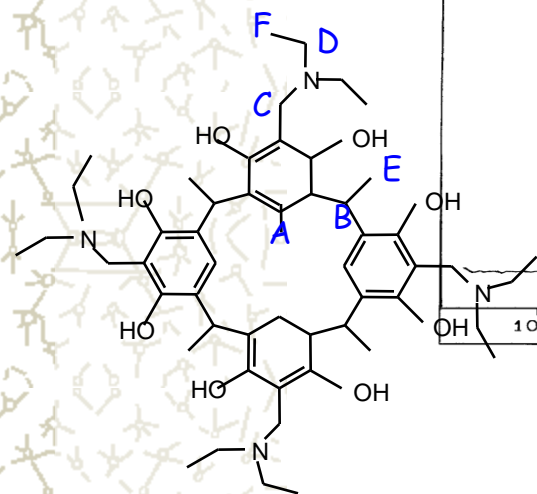
Tetrakis(diethylamino)metil
C-metilkaliks[4]resorsinarena

Padatan putih kemerahan
88,23%

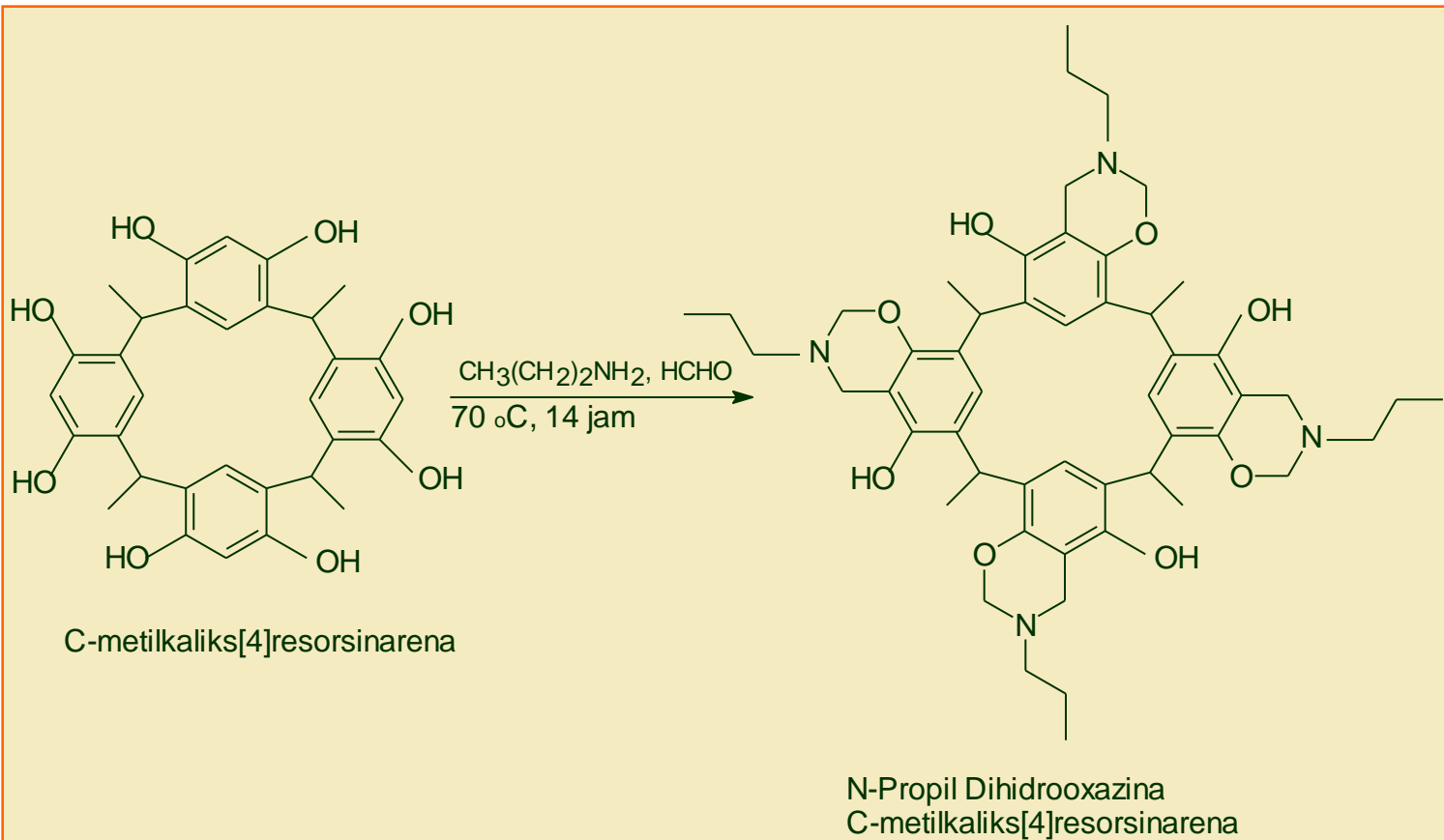
SPEKTRUM IR TETRAKIS (DIETILAMIN)METIL C-METIL KALIKS[4]RESORSINARENA



Spektrum H NMR Tetrakis (Dietilamin)metil C-metil Kaliks[4]resorsinarena

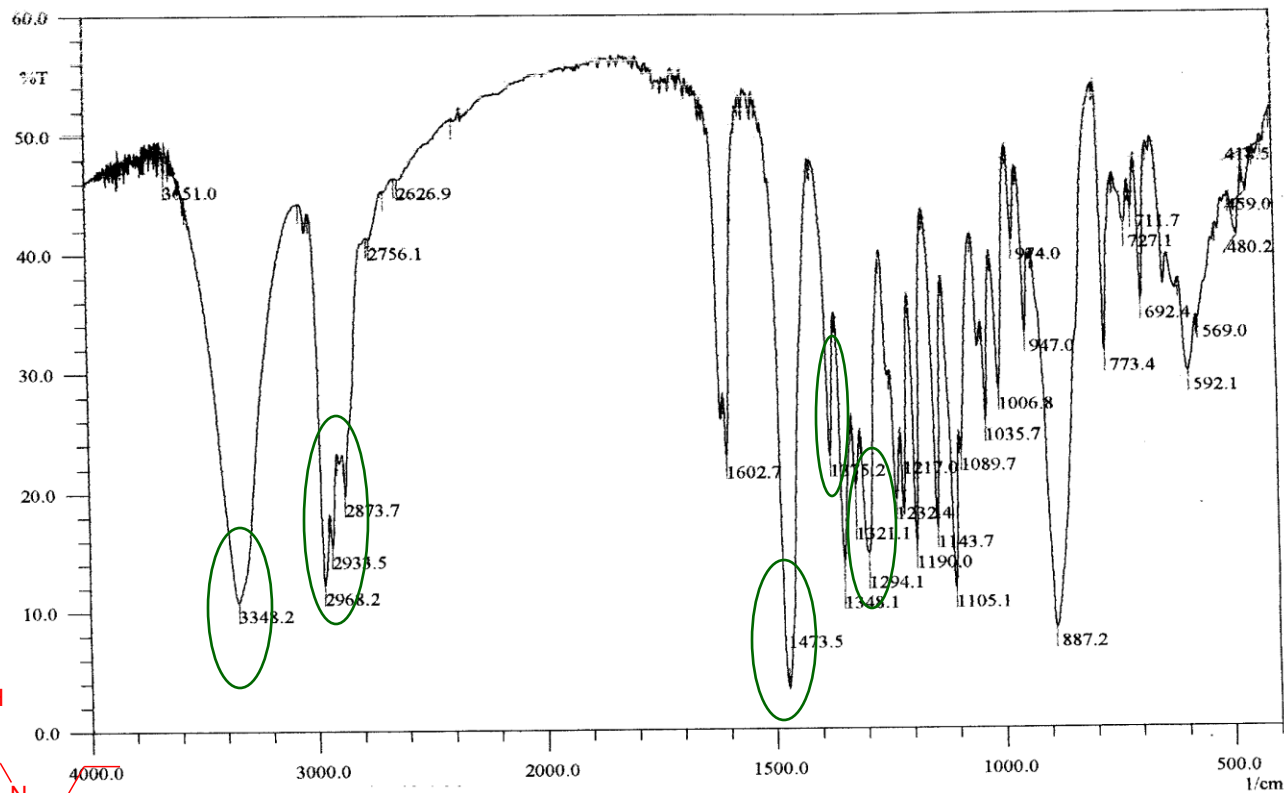
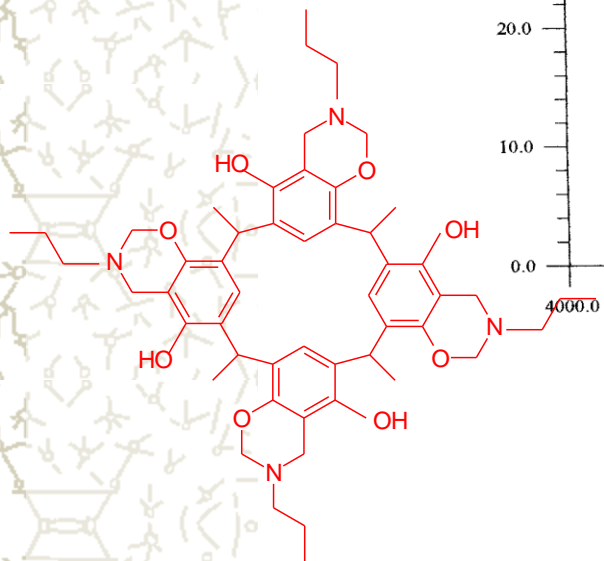


SINTESIS N-PROPIl DIHIDROOXAZINA C-METIL KALIKS[4]RESORSINARENA

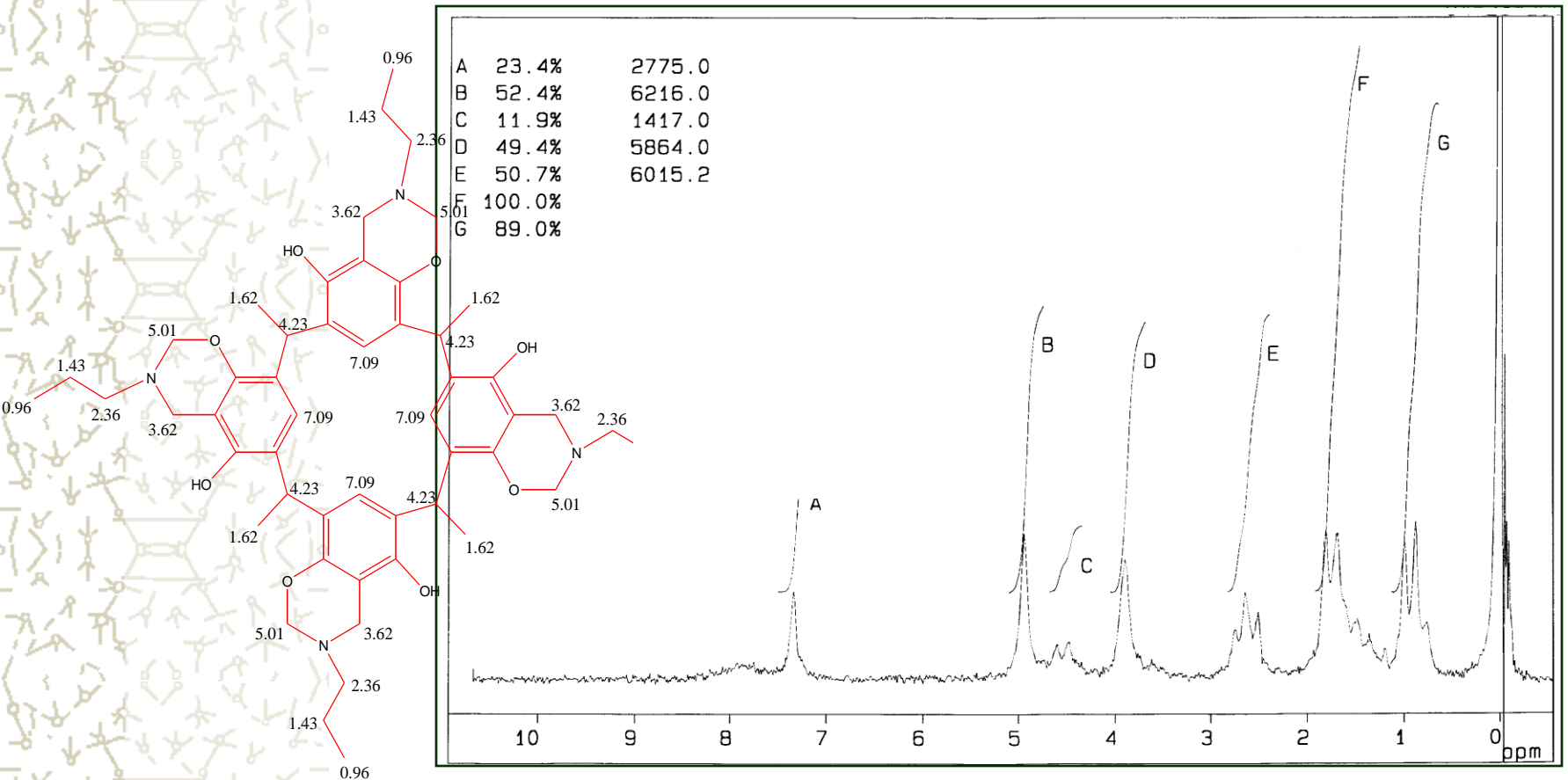


Padatan putih kekuningan
42,46%

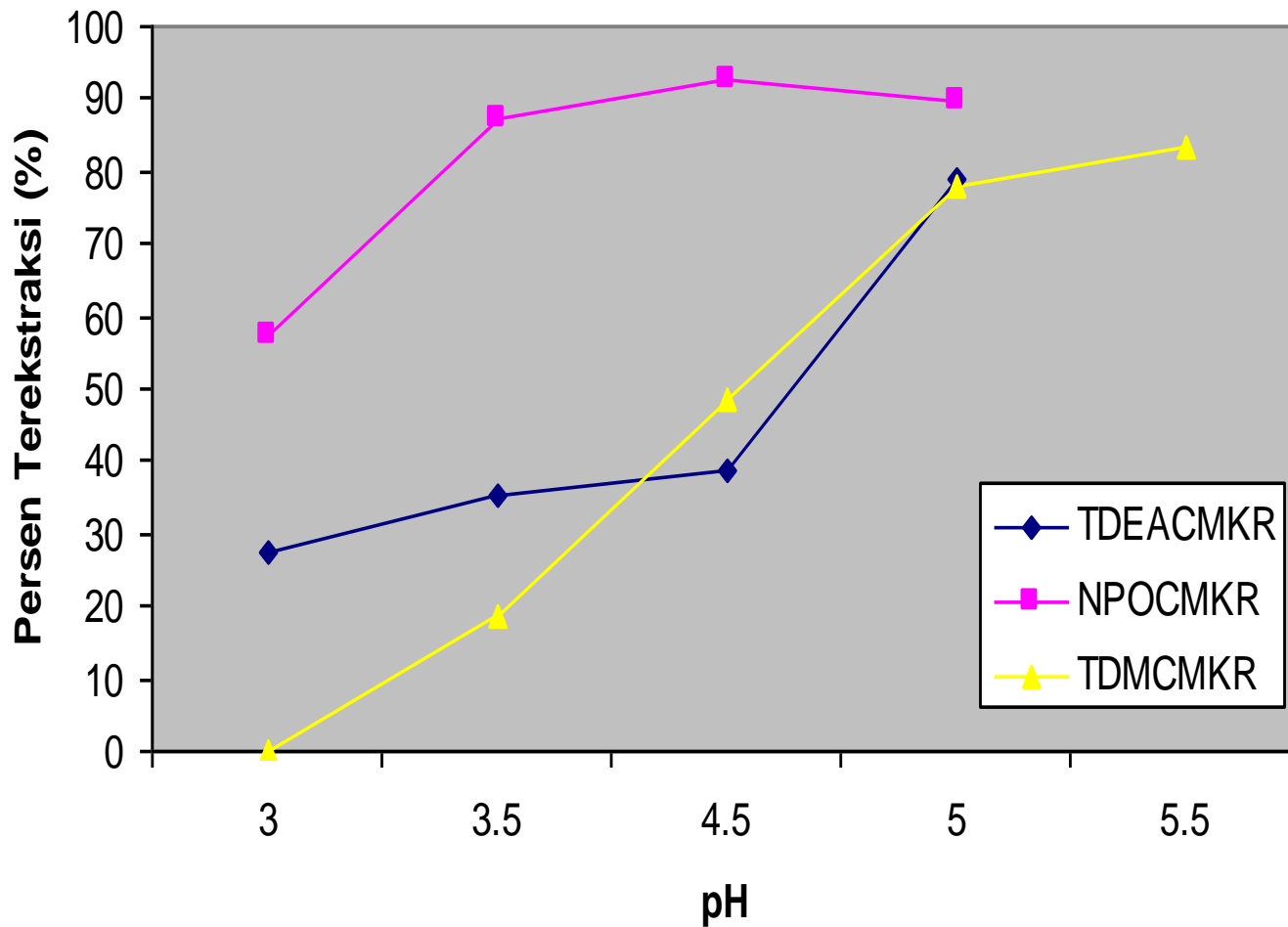
SPEKTRUM IR N-PROPIL DIHIDROOXAZINA C-METIL KALIKS[4]RESORSINARENA



SPEKTRUM HNMR N-PROPIL DIHIDROOXAZINA C-METIL KALIKS[4]RESORSINARENA



KAPASITAS EKSTRAKSI



URUTAN
KAPASITAS
ADSORPSI:
NPOCMKR(93%) >
TDMCMKR
(83%) > TDEACMKR
(79%)