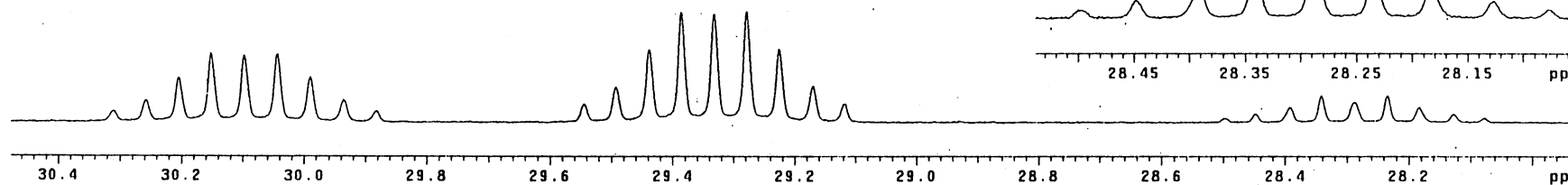
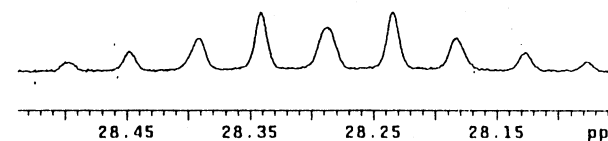
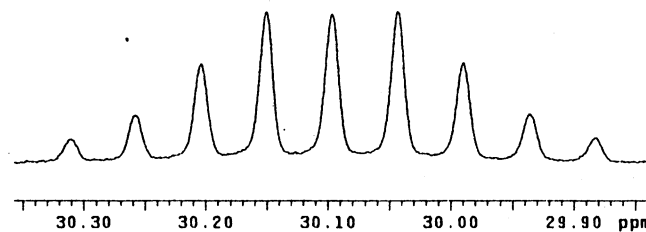
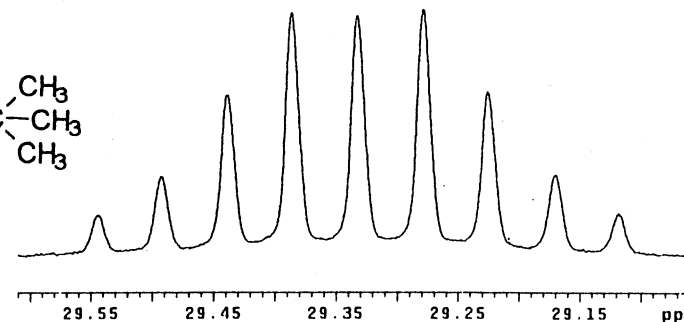
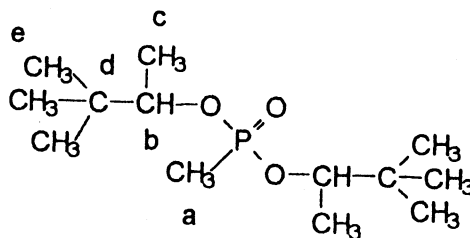


31P-NMR p1109c dm-vyn  
 dipinacolylmethylphosphonate  
 in ca 0.7ml CDCl3  
 214195126.006 Jrn.342;133/200  
 Solvent: CDCl3  
 Temp: 30.0 C / 303.1 K  
 User: pm1  
 File: p1109c  
 VXR-400S "pmlvkr"  
 PULSE SEQUENCE  
 Relax. delay 0.400 sec  
 Pulse 60.0 degrees  
 Acq. time 4.932 sec  
 Width 415.2 Hz  
 32 repetitions  
 OBSERVE P31, 161.9047090 MHz  
 DECOUPLE H1, 399.9571985 MHz  
 Power 44 dB  
 off during acquisition  
 on during delay  
 WALTZ-16 modulated  
 DATA PROCESSING  
 Line broadening 0.1 Hz  
 FT size 16384  
 Total time 3 minutes

SPECTRAL LINES for th=3.2  
 rfi= 229.5 rfp= 4749.0  
 res. 29.3ppm:2.1Hz

nr	Hz	ppm	intensity
1	4899.07	30.258	6.3
2	4890.30	30.204	12.9
3	4881.68	30.151	19.7
4	4872.91	30.097	19.4
5	4864.24	30.043	19.7
6	4855.63	29.990	13.1
7	4846.86	29.936	6.5
8	4838.24	29.882	3.3
9	4783.49	29.544	5.3
10	4775.02	29.492	10.3
11	4766.20	29.437	20.9
12	4757.68	29.385	31.6
13	4748.97	29.331	31.2
14	4740.30	29.277	31.9
15	4731.63	29.225	21.1
16	4722.91	29.170	10.5
17	4714.54	29.116	5.5
18	4596.73	28.391	4.3
19	4588.72	28.341	7.8
20	4579.95	28.287	5.9
21	4571.33	28.234	7.8
22	4563.02	28.183	4.4



Bis(1,2,2-trimethylpropyl) methylphosphonate  
 CAS 7040-58-6

Nucleus :

<sup>31</sup>P

Frequency : 161.9 MHz

Concentration : ca. 200 mg/0.7 ml CDCl<sub>3</sub>

Reference H<sub>3</sub>PO<sub>4</sub> external. Res. : 2.1 Hz (29.3 ppm)

Instrument : Varian VXR 400S

Temperature : 30 °C

Spectral width : 415.2 Hz

Data point (FID) : 4 K

Pulse angle : 10.4 μs (60°)

Number of pulses : 128

Repetition time : 5.3 s

Line broadening : 0.1 Hz

Data points (spec) : 8 K

three isomers

P I: 29.3 ppm

P II: 30.1 ppm

P III: 28.3 ppm