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K. Br[illegible], A. [illegible], S. [illegible]z-M[illegible], A. L[illegible] K. [illegible]

Faculty of Chemistry, University of Gdańsk, Sobieskiego 18, PL-80-952 Gdańsk, Poland

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1988 [illegible] *et al.* 1,2 [illegible]

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d d b bi i 3.5 Å d - i b. i l6i l6 l6
b d 16 i , l6i l6 l6 d i ibi 5 .
l6 l6 i b b i l6 d i d -
id b i b d b d b il6 6 8 , l6i l6 i l6 d
d i d l6 i d i i , bb i l6
i d R b i bi- i b ibi i l6 id
d i d . l6 i , l6 l6 i b l6 bi l6 id
-2 i d , l6 l6 i i i d l6 ^{3} α
i i b bi l6 b i b b d . i bb,
l6 d d l6 i bb b b d b i d i l6
l6 l6 i b d i b b . l6 i b b
b i d l6 i b b d i i b il6 . i -
i l6i l6i i b i b d i l6 bi id .
l6 b i d ibb d il6 l6 i b bil6 d .

R A

P t s t ss: id l6 i d l6 bd - l6 l6 d i l6 i d
i id l6 i A bi d Bi 430A. D ib l6 l6 d bi d bil6 d
i b 9 . C bi i l6 bi d d i b -1- b - i -
bdi - l6 l6 i l6 b l6 l6 (B) i d i l6 b id . C b i
d b i b b R (ibC$_8$, 4.6 × 250 , 5 µ).
NMR m s r m ts: l6 id i 3 . l6 R i -
d i i 500 b , i 500 . Abb
d d 295 l6 i i l6 l6 i b l6i , l6i l6 -
d l6 id l6 l6 l6 295 318 . l6 S i S
l6 S l6 i b l6i bil6 d l6 S 2D , C S ,
R , ig6 l6 i i i bi d : 150 d 300 , 200 d 250 S R S 70
C . Add i i b A i C bi ibb C i i C (AC - -C)
S0 d d . Abd d i l6 R 4.3 (i ,
A). S
V c o g o st ts: l6 ^{3} α bi d l6 AC - -C

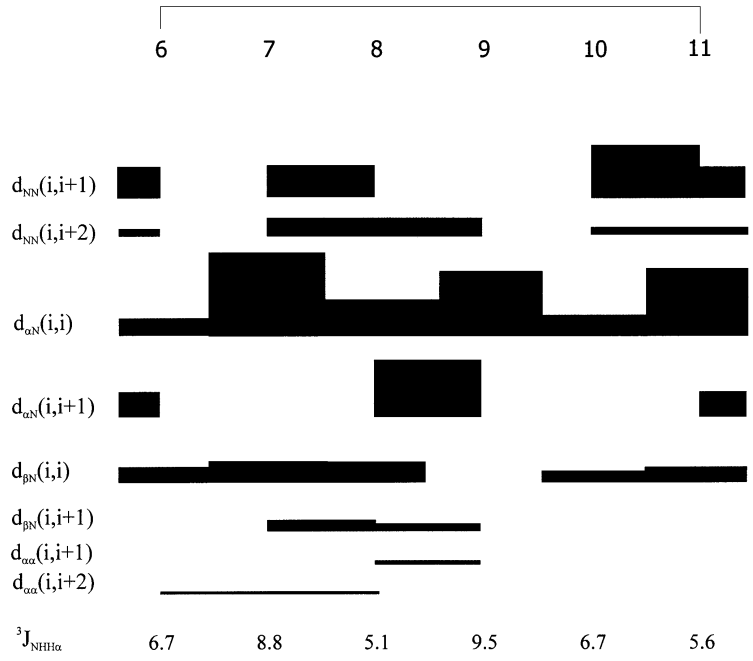
T m r r t r t o t c m c s tso t NH o to s: l6 b $\Delta\delta/\Delta$ b-
b d l6 1D d d 295 , 303 , 308 , 313 d 318 . S
T NOE cts: l6 - id d i d l6 (300)

St c r c t o : l6 l6 l6 i b l6 id i d
l6 b i bb -d i C b l6 d (D C) 11 . C i b b d
i l6 C /3 (i i bC i b id) i il 12 , l6i l6 -
i id b . A d i l6 Rd , l6 l6 id d i d
trans. l6 l6i bS bbαC i d . l6 i ii i bd d l6 d i i i , l6i l6
b b d i l6 R - b i l6 d ib *et al.* 13 il6 i i b . Ad i-
b i $\varepsilon = 2$ d i l6 b b i , d i l6 d i l6 l6 l6
C /3 i il 12 . l6 i D C i b i 1000 , l6i l6 -
d d b 20 30%. l6 d l6 C A b b
i b b i 14,15 . i bb , 2500 - i i i d i i
i d . l6 i d S i b d (i l6 i i - i b il6 16).
l6 d i i (R D) l6 i b i i

$$\overline{V_i} = V_0 \sum_{j=1}^{NC} x_j v_{ji} \quad i = 1,2,...,NP; \qquad \bar{J}_i = \sum_{j=1}^{NC} x_j J_{ji} \quad i = 1,2,...,NQ; \qquad with \quad \sum_{i=1}^{NC} x_i = 1$$

T 1. lб lб i б lб§¶ ( ) d lб i i Δδ/Δ (/) б -2 i i D d 6 295 .

d	Cl6 i б lбi					Δδ/Δ /
	α-C	β-C	γ-C	δ-C	lб	
б 6	7.77	3.91	1.78	1.95	ε- 2 ( ) 6.82; ( ) 7.16	0.96
7	7.95	4.20	3.02		(1) 10.81; 2 7.02; 7 7.30	2.62
lб 8	8.13	4.21	3.02; 2.99	2,6 7.02	3,5 7.12; 4 7.46	3.10
б 9	8.24	3.59				3.10
10	8.33	4.11	1.52	1.49 0.88; 0.79		3.65
11	8.11	4.11	2.00; 1.98	2.45; 2.39		3.30



F r 1. lб i бi i i -d i б i б i б -2 i .

lб -2 i d i d , 6 б - i lб i i б i lб lбi lб lб 3%. lб б б d i i б i lб d i i i б d б (β- d γ-)d d i lб i б d i i б 2. B d lб б i i б i lб (30%) lб i i d d i . lб lб б d i ibi d β- 7- lб 8 d γ- d 7. lб - d , β- d : d ′ d , 11- б 6 d б 6- 7, - i б . lб i d б lб i i lб d б d lб lб i б d б .

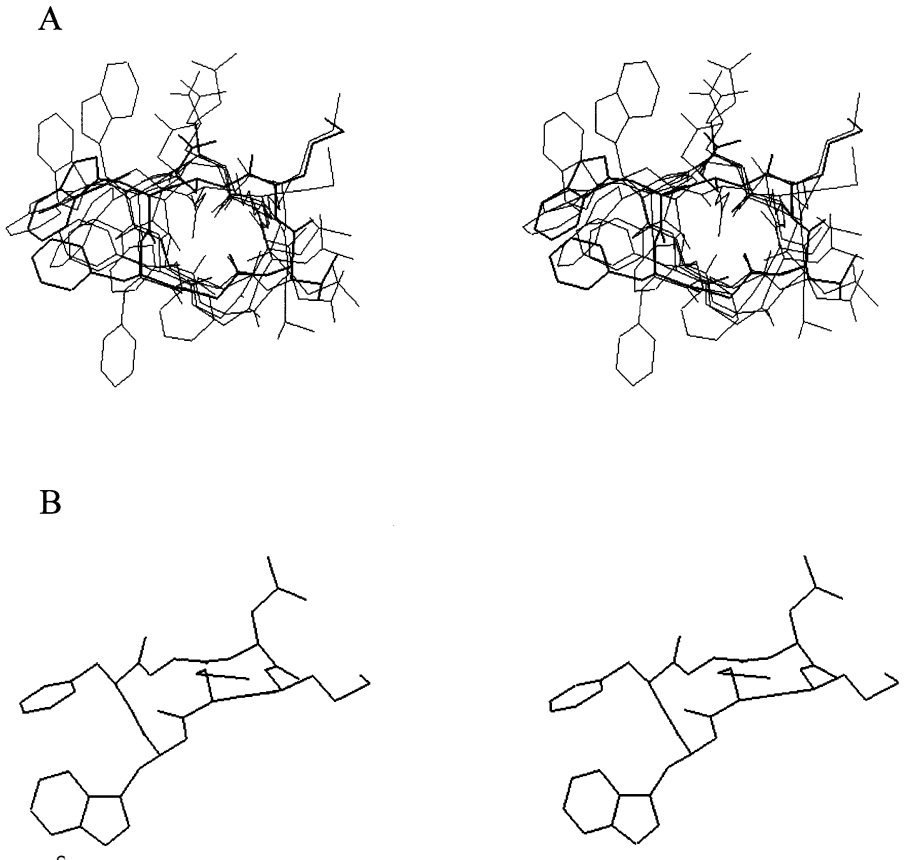
i Hb , l6 b b i d -b 6 d Hb il6 l6 d d - α- id -b 6 d b -b 9 d i l6 i il6 l6 l6il6 i i b il6 . D i l6 d i S¶ Hb - i i d , l6 l6 i i S¶ ib . i i αC Hb i b d (i . 2 S¶ R D = 0.84 Å, d l6 l6i i -b 6- - l6 --b 9 (R D = 0.73 Å). Hb i l6 id - l6 i d l6 b . l6 b d i (i . 2), l6 id - l6 i -b 6, l6 8, 10 d 11 i d l6 id l6 b b , l6 l6 i d b 7 l6 i . ddi i , l6 i 7 d l6 8 b d i b b i d l6 id .

T 2. S¶ i i b il6 , i i i b d b ,l6 d d d i b i d i S¶ b d b b d b i i b b .

β*- γ- d i i b	d l6 d i	i l6 i %	i - id	b.	.
7- l6 8 W	6 → C 9	32.0	6	6.3	6.7
7 γ	8 → C 6		7	9.3	8.8
			8	5.4	5.1
11 --b 6	10 → C 8	31.0	9	9.0	9.5
b 6- 7 ,	8 → C 11		10	6.8	6.7
			11	5.5	5.6
b 6- 7		12.9			
b 6- 7		9.9			
7- l6 8 ,					
7- l6 8	6 → C 10 9 → C 7	6.1			
b 6- 11	10 → C 8	3.5			
b 6- 7 , 7 γ	8 → C 6				

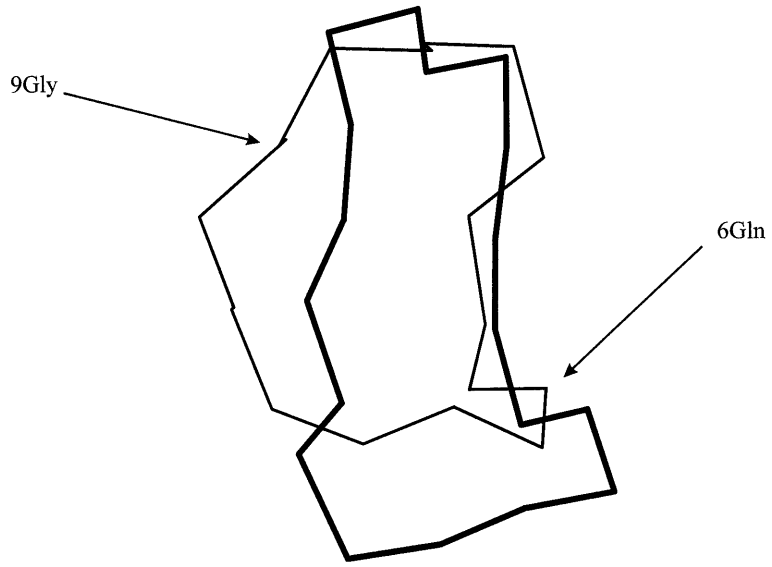
* β- d i d d l6 d l6 d b b (Φ d Ψ) b i id id i i i+1 d i+2 21 .

l6 i b d i d l6 il6 i b d 3 5 bd i ib i i l6 bi l6 d i 4 . l6 b i i d i d l6 l6 il6i d (W ′) β- d 7- l6 8S¶ d 10- 11. l6 b d i b i i b b d . - i i αC i d l6 d l6 d b - b i i 4 d l6 il6 l6 l6i l6 i i b i l6 (i . 3) i d iS¶ l6 l6 l6i i b 9- - --b 6. l6 d i R D b i 0.42 Å. i , l6 b i i i 7 d l6 8 d i l6 S¶ i il6 l6 l6i l6 i i b i l6 i i ib l6 - d bi 4,5 . i l6 d 4 d l6 l6i i i d l6 b i



F r 2. i l6 i i i il6 i i b i l6 l6i l6 l6 3% - b -2 i (A), d l6 b d i (B).

id l6 i 10 l6 i b b l6 i i id d -2 l6 i i . b d i 5 l6 l6 i i - i i b i b i b i i . l6 b d l6 l6 i d β- b6 l6 i i l6 id l6 i 7 d l6 8 d i ib l6 d i d - d R d b - i i b -2 i 1027 b ([1]-A [2]- [3]- l6 [4]-D [5]- [6]) b (2β-5β) 22 . l6, bd d b i , d β- d il6 [3]- l6 [4] d [6]- [1]i i+1 d i+2, i b 23 . b b bd i ib i i l6 b il6 d i b id d i d l6 3,5 . l6 b i β- i - i b d i 5 d ′i l6 : - -b - d b - - l6 - b . d ′β- b d i l6 b i 3 , i id d l6 l6 i b l6 i i i l6 id d i d . B l6 b d l6 bγ- . b l6 d 7 d i i .



F r 3. i i i -2 i . : - i ilб lбi lб i i Ь i lб i d i lбi d . lбi Ьi : i - i d i lб d 4 . lб 9 6 i i lб Ьi . D = 0.42 Å.

C C

lб i Ьi -2 i Ь i i d Ь- ilб ilб lб Ь Ь d iЬi i Ь i Ь lб, lб i di- d i , Ь Ь i d i lб d lб lб d d i d lб . Ьb lб i Ь d Ьd lбi lбd i i- Ь i , Ь lб lб d d lб d i d lб Ь lб i i Ь i lб i Ь d ,d i lб i Ь iЬi i lб id d i d . lбi i i i i lб i Ь Ь i Ь i Ь id d i i id d lб lб iЬi i d .

A Ьd

lбi d lб i i S dń (D /8290-4-0129-1). lб Ь Ь- i id i lб A d i C C (AS)i dń , Ь d, d d i i Ь C lб S Ь d Ьi (C)i , Ь d. . . i i Ьb lбi lб d i Ьlб i .

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