

Our para-azoxyanisole sample was purchased from Eastman Kodak company; we did not make any purification before or during its handling, however the transition temperatures were checked after each measurement: in particular, their values were not changed after experiments up to 3 kbar; this indicates that there is no substantial degradation in the corresponding temperature range.

### 3. Phase Diagram

The effect of pressure on the transition temperatures is shown in Fig. 1; clearly, this is a very large effect: common slopes for the

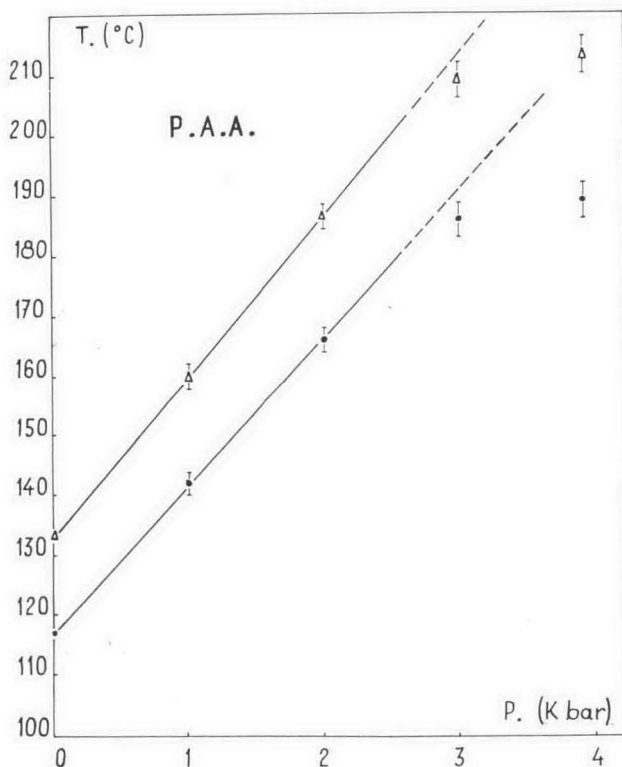


Figure 1. Variation with pressure of the temperatures of the solid-nematic (dots) and nematic-isotropic (triangles) transitions in  $T$ ,  $P$ . The slopes are roughly coherent with other existing thermodynamic data, if one applies the Clausius-Clapeyron equation (see Table 2). The non linearity above 3 kb is due to thermal degradation of the sample: the points at 4 kb are not significant

TABLE 1

	Slope of solid-nematic transition line: $\frac{dT_M}{dP}$	Slope of nematic-isotropic transition line: $\frac{dT_c}{dP}$
G. A. Hulett <sup>(7)</sup>	32°/kbar up to 300 bars	48.6°/kbar up to 300 bars
G. Puschin and W. Grebenschtschikov <sup>(8)</sup>	25.6°/kbar up to 2 kbar	39.4°/kbar up to 1 kbar
J. Robberecht <sup>(9)</sup>	32°/kbar up to 850 bars	48°/kbar up to 935 bars
This work	a) 24.5°/kbar up to 3 kbar b) 23.7°/kbar up to 3 kbar <sup>(10)</sup>	27°/kbar up to 3 kbar 28.7°/kbar up to 3 kbar <sup>(10)</sup>

TABLE 2

	Relative jump in specific volume at melting point $\left(\frac{\Delta V}{V}\right)_M$	Relative jump in specific volume at clearing point $\left(\frac{\Delta V}{V}\right)_c$
W. Maier and A. Saupe <sup>(18)</sup>		0.30% 0.35% "extrapolated" value
E. McLaughlin, A. Shakespeare and R. Ubbelohde <sup>(11)</sup>	11.03%	0.36%
	Latent heat at melting point: $(\Delta H)_M$	Latent heat at clearing point: $(\Delta H)_c$
R. Schenck <sup>(12)</sup>		735 joules/mole
C. Kreutzer and W. Kast <sup>(13)</sup>		1730 joules/mole
H. Arnold <sup>(14)</sup>		600 joules/mole
I. G. Chistyakov <sup>(15)</sup>	29.570 joules/mole	574 joules/mole
E. M. Barral, R. S. Porter and J. F. Johnson <sup>(16)</sup>	30.200 joules/mole	735 joules/mole
L. C. Chow and D. E. Martire <sup>(29)</sup>		760 joules/mole
This work, from Clausius-Clapeyron equation	a) 35.000 joules/mole b) 36.000 joules/mole <sup>(10)</sup>	1.080 joules/mole 1.000 joules/mole <sup>(10)</sup>