

The following remarks can be made :

a) + For the Bi 3 - 5 transition all these ^{extrapolated} ~~excess~~ values are below the corresponding values of the scales. It is a striking case of inconsistency, at least for the scales A, B and D. This results from the fact that the calibration curve of the present apparatus is nearly linear up to about 100 kbar.

The scale C is the more coherent.

b) - For the Sn transition the linear extrapolation does not reveal any inconsistency even if this extrapolation uses the scale value of the pressure transition of Bi 3 - 5.

c) - For the Fe transition the linear extrapolation gives a result which is very far off, even if the scale value of the pressure transition of Sn is used.

If a linear extrapolation is made through all the range the pressure transitions are found to be 78 ± 2 kbar for Bi 3 - 5, 104 ± 5 kbar for Sn, and 170 ± 17 kbar for Fe which is certainly very far for the true value.

2° - EXPONENTIAL EXTRAPOLATION.

The exponential extrapolation hopefully should give a better estimate of the transition pressures. Table 5 gives the calculated values.

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- TABLE 5 -

- EXPONENTIAL EXTRAPOLATION. -

Pressures in kbar.

SCALES		A - D	B	C
Sn 1 → 2	Nominal Values	115	107	92
	Extrapolated Values	110	101,8	97,7
Fe α → β → ε	Nominal Values	133	133	118
	Extrapolated Values	-	150	106

The accuracy given next to each value takes into account the uncertainty of the pressure transition of Bi 1 -2 (25.4 ± 0.1 kbar) of Tl 2 - 3 (36.7 ± 0.1 kbar) and of Ea using the latest value given by Kennedy (29) (55 ± 0.5 kbar) which fits better than others.

For the present apparatus it turns out that by using the following transition pressures the calibration curve is nearly linear.

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