

When this exponential stage is reached, the extrusion is considered as achieved and the assumption is made that the change in volume of the cell is proportional to the piston displacement. On the other hand, the pressures which are generated inside the cell are related the overall compressibility of its components through a law, which can be shown empirically to be close to an exponential with a good approximation within the range of experimentation. (23). From these considerations an expression of the calibration curve follow :

$$P = - A \log (B + \exp - F/k)$$

A, B and C are constants which can be evaluated knowing accurately at least three experimental values. They will be chosen among the best known transition points ($B_i 1 - 2, T_1, B_a$). It is obvious that when the load F is increased indefinitely the pressure P must go to a limiting value, which is the case with the above expression provided that B is positive. It also gives curves whose concavity is towards increasing load as expected.

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IV- DISCUSSION.

1° - LINEAR EXTRAPOLATION.

As the true calibration curve must go to an asymptotic value when F goes to infinity, the linear extrapolation gives excess pressures. The lowest among those are gathered in table 4 together with the corresponding values of the four chosen scales A, B, C and D.

- TABLE 4 -

- LINEAR EXTRAPOLATION -

Pressures in kbar.

SCALES		A	B	C	D	Alined Values
Bi 3→5	Nominal Values	89	81	76,5	89,3	
	Extrapolated Values	77,7	77,7	75,3	78	$\leq 78 \pm 2$
Sn 4→2	Nominal Values	115	107	92	(115)	
	Extrapolated values	118	108	118	118	$\leq 104 \pm 5$
Fe 4→6	Nominal Values	133	133	118	(133)	
	Extrapolated Values	182	170	144	182	$\leq 170 \pm 17$