Adsorption of Nitrogen on Activated Carbon-Refit of Experimental Data and Derivation of Properties Required for Design of Equipment. Basavaraj S. Akkimaradi, Madhu Prasad, Pradip Dutta, Bidyut Baran Saha, and Kandadai Srinivasan* — *J. Chem. Eng. Data* **2009,** *54,* 2291–2295.

In the above publication, regrettably there was a mistake in eq 17, and the consequences carried through. The qualitative conclusions remain the same, and the corrected data are given below.

Equation 17 should read as follows:

$$\Delta h_{st} = 2RT + E\left[\left(\ln\frac{W_0}{Cv_a}\right)^{1/n}\left\{1 + \frac{\alpha T_b/n}{\ln\dfrac{W_0}{Cv_a}}\right\}\right] \quad (17)$$

In the numerator of the last term on the right hand side (RHS), T should have a subscript b.

Accordingly, eq 19 should now read as follows:

$$\underset{C\to C_0}{\mathrm{Lt}}\left[\left(\ln\frac{W_0}{Cv_a}\right)^{1/n}\left\{1 + \frac{\alpha T_b/n}{\ln\dfrac{W_0}{Cv_a}}\right\}\right] = \frac{\Delta h_{st0} - 2RT}{E} \quad (19)$$

Figures 6 to 9 and Tables 5 and 6 and will undergo changes as a consequence. The RHS of eq 19 is now almost independent of temperature for both specimens (Fluka and Sarabhai) and has a value of 0.619 with a standard deviation of 0.035.

The corrected tables and figures are given below.

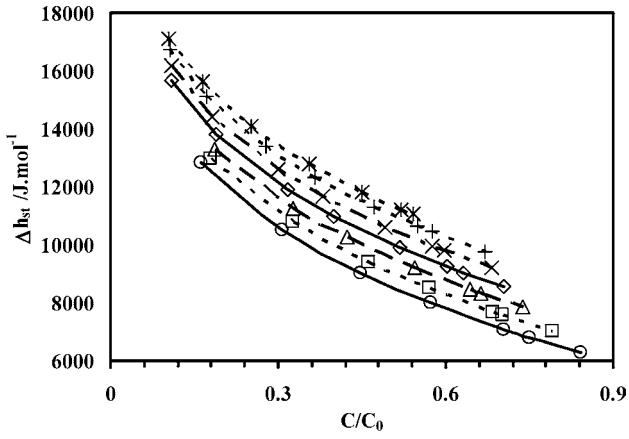

Figure 6. Concentration dependence of isosteric heat of adsorption for the Sarabhai specimen. ○, 150 K; □, 180 K; Δ, 210 K; ◇, 240 K; ×, 270 K; +, 300 K; *, 320 K.

Table 5. Coefficients of Temperature Functions of Δh_{st0} and x in Equation 20

specimen	A/J·mol^{-1}·K^{-1}	B/J·mol^{-1}	a	b
Fluka	16.61	5034	$0.90\cdot10^{-3}$	0.628
Sarabhai	20.12	3018	$1.00\cdot10^{-3}$	0.586

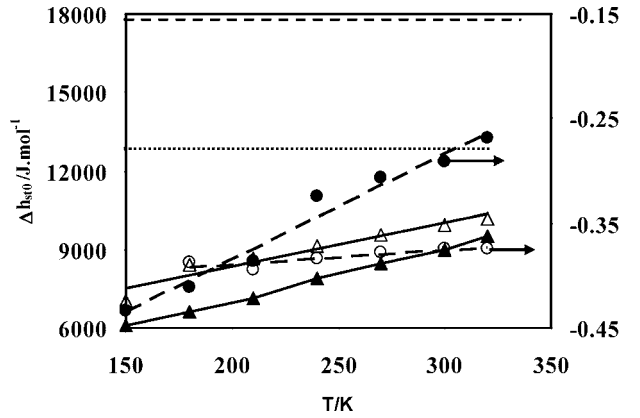

Figure 7. Temperature dependence of Δh_{st0} and index x. Δ, Δh_{st0} (Fluka) left ordinate; ▲, Δh_{st0} (Sarabhai) left ordinate; ○, index x (Fluka) right ordinate; ●, index x (Sarabhai) right ordinate. The two horizontal lines indicate Δh_{ads} values in the Toth equation.

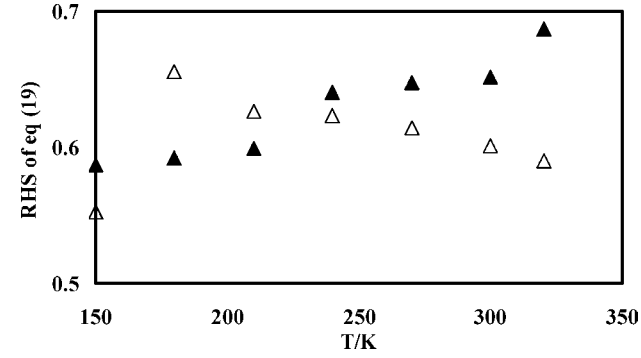

Figure 8. Temperature dependence of RHS of eq 19. Δ, Fluka; ▲, Sarabhai.

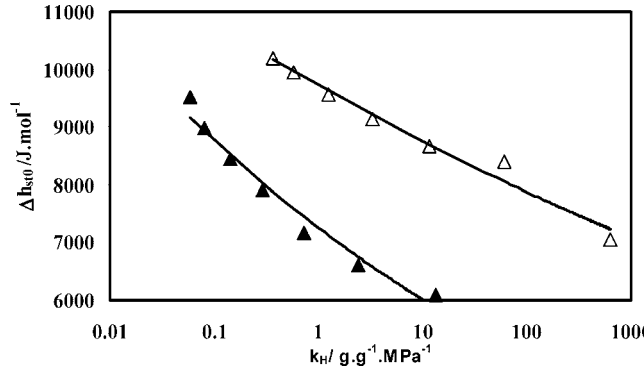

Figure 9. Relation between isosteric heats of adsorption at limiting loading from the D−A equation and Henry's law coefficients. Δ, Fluka; ▲, Sarabhai.

Table 6. Coefficients in Equation 22

specimen	Δh^*_{st}/J·mol^{-1}	q
Fluka	9727	0.0459
Sarabhai	7257	0.0819

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