

## Addendum

Volume 31, No. 1 (1969), in the article, "Surface Chemistry of Active Carbon: Specific Adsorption of Phenols," by J. S. Mattson, H. B. Mark, Jr., M. D. Malbin, W. J. Weber, Jr., and J. C. Crittenden, pp. 116-130:

An error was made in the original manuscript which was recently brought to our attention by Dr. S. Parkash of Alberta Research. On page 121 of the published paper, the first sentence reads, "Assuming an average surface area of about  $45 \text{ \AA}^2$ , . . . , a surface concentration of 2 mmole/gm occupies only about  $140 \text{ m}^2/\text{gm}$ ." The value of  $140 \text{ m}^2/\text{gm}$  should have been  $540 \text{ m}^2/\text{gm}$ . We had stated that the activated carbon employed in the study had an  $\text{N}_2$ -BET surface area of  $1000 \text{ m}^2/\text{gm}$ , and thus noted that the *p*-nitrophenol covered only 14% of the  $\text{N}_2$ -BET surface at its adsorption maximum. The impression this gave was that a major portion of the measured  $\text{N}_2$ -BET surface area of activated carbons is inaccessible to even small organic molecules. Correcting the 14% coverage figure to 54% of the total  $\text{N}_2$ -BET measured area changes the picture significantly.

In addition, when one examines the pore size distributions obtained by nitrogen adsorption, with large fractions [i.e.,  $>80\%$ —see, for example, Mattson, J. S., *Ind. Eng. Chem., Prod. Res. Devel.* 12, 312 (1973)] of the total surface area existing in sub-20 Å diam pores, the corrected figure for *p*-nitrophenol adsorption gives rise to a need to reevaluate the meaning of pore size-surface area distributions.

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