

ERRATUM

Volume 139, Number 2 (1993), in the article "Methanol and 2-Methyl-1-Propanol (Isobutanol) Coupling to Ethers and Dehydration over Nafion H: Selectivity, Kinetics, and Mechanism," by John G. Nunan, Kamil Klier, and Richard G. Herman, pages 406–420: The correct Eqs. (4) and (7) in Table 1 are the following:

TABLE 1
Kinetic Laws for Dehydration Reactions of Methanol and 2-Methyl-1-Propanol

Reaction	Rate law	Linear form of rate law
(4)	$v_{\text{DME}} = k_1 \theta_M^2 = \frac{k_1 K_M^2 p_M^2}{(1 + K_M p_M + K_B p_B)^2}$	$\sqrt{\frac{1}{v_{\text{DME}}}} = \sqrt{\frac{1}{k_1}} \left[\frac{(1 + K_B p_B)}{K_M p_M} + 1 \right]$
(7)	$v_{\text{DIBE}} = k_2 \theta_B^2 = \frac{k_2 K_B^2 p_B^2}{(1 + K_B p_B + K_M p_M)^2}$	$\sqrt{\frac{1}{v_{\text{DIBE}}}} = \sqrt{\frac{1}{k_2}} \left[\frac{(1 + K_M p_M)}{K_B p_B} + 1 \right]$

Following from Eq. (4), the intercept of Fig. 8 is $1/\sqrt{k_1}$, not $2/\sqrt{k_1}$ as given in the last sentence of text on page 414.

The following corrected kinetic and equilibrium constants, corresponding to the formation of dimethylether (k_1), diisobutylether (k_2), and butenes (k_3), should be substituted in the indicated figure captions:

- Fig. 2 $k_1 = 0.23$
- Fig. 8 $k_1 = 0.23$
- Fig. 9 $k_2 = 0.10, K_B = 0.05$
- Fig. 10 $k_3 = 1.10, K_B = 0.08.$

These constants should also be changed in the text on page 415. The data points and drawn curves in the figures are correct as given. We thank Dr. John Moffat for pointing out these needed corrections to us.