

In his Commentary, Professor Olah argues that the new system for naming reaction mechanisms recommended by IUPAC is too detailed and, for his purposes, is unnecessary. This is a defensible position, and one that may be taken by many.

He also makes the point that, in many cases, the information necessary to specify the mechanism of a reaction is not available. Again, this is certainly true. One cannot name an undetermined mechanism. One can, however, name the possibilities and thus clarify the task of finding a correct assignment. In any event, this problem would not constitute an excuse for endorsing names that disguise one's uncertainty.

It is true that identification of the transformation type—substitution, elimination, addition, etc.—is not done as directly as in the Ingold system, but it would not seem a major inconvenience to simply locate the upper-case-subscripted terms as described in the second paragraph of p 346 of the Account.<sup>1</sup> For example, an  $A_n D_E D_N$  mechanism clearly refers to an elimination transformation, because upper-case subscripts modify two "D" terms (both representing bond breaking). If one "A" (bond making) and one "D" term were so modified, as in the case of  $A_e + D_N + A_N$ , the mechanism would apply to substitution, and so on.

My greatest disagreement with Professor Olah has to do with his claim that the new system will be a source of confusion to students. I would suggest that, before making up his mind finally on this point, he experiment with using the new system to explain the difference between " $S_N1$ " and " $S_N2$ " or between "E1" and "E1cB" to some beginners. Because the new terminology is more directly related to the definitive distinctions between the mechanisms, learning is reinforced:  $D_N + A_N$  ( $S_N1$ ) represents bond making and bond breaking occurring separately, and  $A_N D_N$  ( $S_N2$ ) shows them in the same reaction step;  $D_N + A_n D_E$  (E1) shows the nucleofugic group leaving first whereas for  $A_n D_E + D_N$  (E1cB) the electrofugic group is removed first. In my experience, "the miraculous world of chemistry" is revealed sooner and with much greater clarity.

(1) Guthrie, R. D.; Jencks, W. P. *Acc. Chem. Res.* 1989, 22, 343-349.

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