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## Letter

Sir,

Recently, you have published a Letter by Dr. W. A. Dukes<sup>1</sup> in connection with my Letter in which I had suggested the term "Adherate" to describe materials which adhere to an adherend.<sup>2</sup>

I have sifted very carefully the comments made by Dr. Dukes, and I do not concur with his arguments, except for his comment "We are, colloquially, stuck with the grammar".

My purpose of suggesting the term "adherate" was not to compound confusion or to coin an unnecessary and unwanted neologism, rather it was suggested to facilitate communication, as there was no general term available to represent materials which adhere to an adherend.

Let me catalog below my comments to Dr. Dukes' Letter.

1) His suggestion of using "adherent" as the proper term for materials which stick to others will occasion a great deal of confusion. The term "adherend" is used in the place of a substrate in the adhesion literature, so it makes it very difficult to differentiate between "adherend" and 'adherent", which differ only by "d" and "t", in verbal and written communication. Also, let me cite a paper by Bowden and Tabor,<sup>3</sup> where they have used the term "adherent" for substrates, as is evident from the following quote: "Many attempts have been made to explain the observed results in terms of the physical and chemical properties of the adhesives and adherents." This is not an isolated example, I have seen many times that terms "adherend" and "adherent" are used interchangeably. Also, as you will note that "adsorbent" is the term used in adsorption literature for substrates. So the use of the term "adherent" as suggested by Dr. Dukes is fraught with confusion, and is not warranted.

2) According to the latest, and I believe the most popular lexicon in the United States, "adsorb" and "adhere" are both transitive and intransitive verbs.<sup>4</sup> If Dr. Dukes accepts this, then his argument in the third paragraph is eviscerated.

3) There are parallel terms, such as "adsorbate", "solubilizate", "contaminate", etc., in other areas, and it makes great sense to have "adherate" in adhesion science. LETTER

4) The English language is a live language and many new words are being assimilated in the arsenal of words as needs arise. If a term best describes a property or phenomenon, there is nothing wrong in its general adoption.

So based upon these cogent arguments, the term "adherate" as intended originally in my Letter should be given Warm Welcome, and it should be accorded a permanent position in the adhesion vocabulary.

In the end, let us leave a detailed discussion of this issue to linguists, grammarians, etymologists, philologists, and lexicographers, and allow the "adherate" to adhere to an adherend.

K. L. MITTAL System Products Division IBM Corporation Poughkeepsie, NY 12602

- 1. W. A. Dukes, J. Adhesion 7, 253 (1975).
- 2. K. L. Mittal, J. Adhesion 6, 377 (1974).
- 3. F. P. Bowden and D. Tabor, in *Proc. Second Inter. Congr. Surface Activity*, vol. 3 (Butterworth, London, 1957). P. 386.
- 4. Webster's New Collegiate Dictionary, 1973 Edition (G. C. Merriam Co., Springfield, MA).