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Letter to the Editor

Use of the term "detergent" in biochemistry

Sir,

In reply to Dr. Zeman¹, we would like to point out that the term "detergent" is commonly used in the biochemical literature in the sense of "micelle-forming amphiphile usually capable of solubilizing membrane lipids and integral membrane proteins" (*cf.*, refs. 2 and 3). In well known modern textbooks in biochemistry the term "detergent" is also used in this sense (see, for instance, refs. 4–6). However, we have noted that the terms "surfactant" and "surfactant micelle" are often used in the physical literature (for instance as in ref. 7).

We appreciate Dr. Zeman's comments on the industrial nomenclature in this field but we doubt that the widespread and non-ambiguous use of the term "detergent" in membrane biochemistry can be erased by the draft International Standard ISO/DIS 862. To preclude misunderstanding, the chemical name(s) of detergent(s) should always be given.

We support the use of the term "detergent" in the strict sense of "soluble amphiphile that can form micelles in water" (*cf.*, ref. 3). The term "surfactant" is wider, as some amphiphiles do not form micelles. The terminology of commercial products for laundering, washing and cleaning can hardly cause any confusion in biochemistry.

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- 1 I. Zeman, *J. Chromatogr.*, 426 (1988) 452.
- 2 A. Helenius and K. Simons, *Biochim. Biophys. Acta*, 415 (1975) 29.
- 3 J. Møller, M. Le Maire and J. P. Andersen, in A. Watts and J. J. H. M. De Pont (Editors), *Progress in Protein-Lipid Interactions 2*, Elsevier, Amsterdam, 1986, p. 147.
- 4 A. Lehninger, *Principles of Biochemistry*, Worth, New York, 4th ed., 1986.
- 5 L. Stryer, *Biochemistry*, Freeman, San Francisco, 3rd ed., 1988.
- 6 G. Zubay, *Biochemistry*, Addison-Wesley, Reading, MA, 1983.
- 7 B. Cabane and R. Duplessix, *J. Phys. (Paris)*, 48 (1987) 651.

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