spite of these minor physical shortcomings and the questionable historical motives, the Aldrich Company must be enthusiastically applauded for making this classic available again to both chemists and historians.

William B. Jensen, University of Cincinnati

References and Notes

1. W. J. Wiswesser, "Johann Josef Loschmidt (1821-1895): A Forgotten Genius", *Aldrichim. Acta*, **1989**, *22*, 17-19. This article also gives instructions on how to order.

2. A. N. Meldrum, "The Development of the Atomic Theory: Dalton's Chemical Theory", *Manchester Mem.*, **1911**, *55(6)*, 1-18.

3. Quoted in reference 2, p. 9.

TRANSLATIONS

The Answer to Last Issue's Puzzle

The reaction between "cuperous nitre" and tin described by Cavallo was discovered by the British chemist Bryan Higgins in 1773 (1). Though the editor was unable to find mention of an equation describing the reaction in the standard reference books, the most likely representation is:

$$Sn(s) + Cu(NO_3)_2{\cdot}3H_2O(s) \rightarrow SnO(s) + CuO(s) + 3H_2O(l) + 2NO_2(g)$$

Cuperous nitre is, of course, copper dinitrate trihydrate and the observation that "copious nitrous fumes" are emitted, as well as the facts of thermodynamics, make it likely that the nitrate ion, rather than the copper ion, is the primary oxidizing agent. $\Delta H°$ for this reaction is -220.97 kcal/mol, $\Delta S°$ is 189.2 cal/K mol and $\Delta G°$ at 298K is -277.4 kcal/mol. An alternative reaction with $Cu(OH)_2(s)$, $Sn(OH)_2(s)$, $NO_2(g)$ and only 1 mole of H_2O as products is slightly more exothermic but less favorable overall due to a smaller entropy change. The moisture in the copper nitrate is necessary to kinetically initiate the reaction and the folding of the foil minimizes heat loss to the environment, thus helping to make the reaction thermally self-accelerating.

A recent twist on the use of copper nitrate as an oxidizing agent is the development of a new laboratory reagent called *claycop*, which is short for clay-supported copper nitrate (2).

References and Notes

1. B. Higgins, "Actual Fire and Detonation Produced by Contact of Tin Foil with the Salt Composed of Copper and the Nitreous Acid", *Phil. Trans.*, **1773**, *63*, 137.

2. P. Laszlo and A. Cornélis, "CLAYCOP: A User Friendly Oxidizing and Nitrating Reagent", *Aldrichim. Acta*, **1988**, *21*, 97-103.

AWARDS

The Dexter Award

The 1989 Dexter Award for outstanding accomplishment in the history of chemistry has been awarded to Dr. Dean Stanley Tarbell of Vanderbilt University. The award, which consists of a cash prize of $2000 and an engraved plaque, was presented to Dr. Tarbell at the Fall National Meeting of the American

Dr. Dean Stanley Tarbell

Chemical Society in Miami Beach.

Born in Hancock, New Hampshire, in 1913, Dr. Tarbell received both his undergraduate and graduate training in chemistry from Harvard University, taking a Ph.D. in organic chemistry under Dr. Paul Bartlett in 1937. Most of his academic career (1938-1967) has been spent as an organic chemist at the University of Rochester. In 1967 he became Distinguished Professor at Vanderbilt University and Professor Emeritus in 1981. Dr. Tarbell's work in the history of chemistry, which has been done in collaboration with his wife, Dr. Ann Tracy Tarbell, has largely centered on the development of organic chemistry in the United States, and has resulted in numerous articles and two books: a biography of Roger Adams (*Roger Adams; Scientist and Statesman*), published in 1981, and *Essays on the History of Organic Chemistry in the United States*, published in 1986.

The Division would at this time also like to solicit nominations for the 1990 Dexter award. Nominations should include a complete vita for the nominee, consisting of biographical data, educational background, awards and honors, publications, and presentations and other services to the profession; a nominating letter summarizing the nominee's achievements in the field of the history of chemistry and citing unique contributions which merit a major award; and at least two seconding