

Hole-Catalyzed Epoxidation [*J. Am. Chem. Soc.* **1991**, *113*, 3613–3614]. Nathan L. Bauld* and Gholam Mirafzal

Page 3613. It has come to our attention that attempts by another laboratory to reproduce the hole-catalyzed epoxidations reported in the above papers have been unsuccessful.¹ Consequently, a rather extensive reinvestigation of these reactions has been undertaken.² In contrast to the previously reported results, we now find that the best yield of *trans*-stilbene oxide which we could obtain and isolate is only 8%. A wide variety of other products is also formed, many of which could conceivably be secondary reaction products of initially formed stilbene oxide. Analogous investigation of the oxidation of *cis*-stilbene was also undertaken. Once again, small amounts (no more than 2%) of epoxides (a mixture of the epoxides of *cis*- and *trans*-stilbene) were formed and isolated, along with a host of other products. Similar results were also found in a less extensive investigation of the epoxidation of *trans*- β -methylstyrene. The authors therefore retract the claims of the first paper cited that hole-catalyzed epoxidation generates high or even useful yields of epoxides. Although the relevance of the putative hole-catalyzed epoxidation to the second paper is minor and rather indirect, the comparison of this epoxidation to metalloporphyrin-catalyzed epoxidation should also be considered invalid. See accompanying Addition and Correction for Bauld, N. L.; Mirafzal, G.; Kim, T.; Liu, J. *J. Am. Chem. Soc.* **1993**, *115*, 7653–7664.

(1) Adamo, M. F. A.; Aggarwal, V. K.; Sage, M. A. *J. Am. Chem. Soc.* **2002**, *124*, 11223.

(2) Bauld, N. L.; Yang, Jingkui. Unpublished results.

JA033463O

10.1021/ja033463o

Published on Web 12/06/2003

Is Hole Transfer Involved in Metalloporphyrin-Catalyzed Epoxidation? [*J. Am. Chem. Soc.* **1993**, *115*, 7653–7664]. Taisun Kim, Gholam A. Mirafzal, Jianping Liu, and Nathan L. Bauld*

Page 7653. It has come to our attention that attempts by another laboratory to reproduce the hole-catalyzed epoxidations reported in the above papers have been unsuccessful.¹ Consequently, a rather extensive reinvestigation of these reactions has been undertaken.² In contrast to the previously reported results, we now find that the best yield of *trans*-stilbene oxide which we could obtain and isolate is only 8%. A wide variety of other products is also formed, many of which could conceivably be secondary reaction products of initially formed stilbene oxide. Analogous investigation of the oxidation of *cis*-stilbene was also undertaken. Once again, small amounts (no more than 2%) of epoxides (a mixture of the epoxides of *cis*- and *trans*-stilbene) were formed and isolated, along with a host of other products. Similar results were also found in a less extensive investigation of the epoxidation of *trans*- β -methylstyrene. The authors therefore retract the claims of the first paper cited that hole-catalyzed epoxidation generates high or even useful yields of epoxides. Although the relevance of the putative hole-catalyzed epoxidation to the second paper is minor and rather indirect, the comparison of this epoxidation to metalloporphyrin-catalyzed epoxidation should also be considered invalid. See accompanying Addition and Correction for Bauld, N. L.; Mirafzal, G. *J. Am. Chem. Soc.* **1991**, *113*, 3613–3614.

(1) Adamo, M. F. A.; Aggarwal, V. K.; Sage, M. A. *J. Am. Chem. Soc.* **2002**, *124*, 11223.

(2) Bauld, N. L. and Yang, Jingkui. Unpublished results.

JA0334659

10.1021/ja0334659

Published on Web 12/06/2003