ADDITIONS AND CORRECTIONS

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Alexander N. Tarnovsky,* Villy Sundström, Eva Åkesson,* and Torbjörn Pascher: Photochemistry of Diiodomethane in Solution Studied by Femtosecond and Nanosecond Laser Photolysis. Formation and Dark Reactions of the CH_2I-I Isomer Photoproduct and its Role in Cyclopropanation of Olefins

There were typographical errors in this paper regarding second-order rate constants for the cyclopropanation reaction between the CH_2I-I isomer and cyclohexene in the solvents dichloromethane and acetonitrile. The correct second-order rate constants are $(3.4 \pm 0.2) \times 10^7$ M^{-1} s^{-1} in CH_2Cl_2 and $(4.2 \pm 0.9) \times 10^7$ M^{-1} s^{-1} in CH_3CN (instead of $(3.4 \pm 0.2) \times 10^6$ and $(4.2 \pm 0.9) \times 10^6$ M^{-1} s^{-1}, respectively).

This change affects the following places:

Abstract, page 237, last sentence.

Page 246, left column. "...$(0.4-40) \times 10^6$ M^{-1} s^{-1}..." instead of "...$(4-40) \times 10^5$ M^{-1} s^{-1}...".

Page 246. Caption of Figure 9, last sentence. The figure itself is correct.

Page 246. Table 3.

Page 246. Figure 10 should be replaced with the new figure.

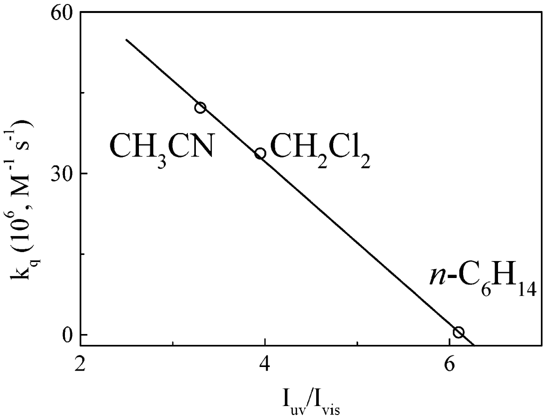

Figure 10. The second-order rate constants for the cyclopropanation reaction between the CH_2I-I isomer and cyclohexene in the solvents CH_3CN, n-C_6H_{14}, and CH_2Cl_2 plotted vs the ratio between the amplitudes of the UV band (~390 nm) and the visible CT band (~560−570 nm) of CH_2I-I measured in the same solvents.

The conclusions in section 3.7 of the original manuscript are not altered: (i) it is the vibrationally relaxed CH_2I-I isomer that reacts with cyclohexene; (ii) the second-order rate constants of this reaction increase significantly upon going from the solvent n-C_6H_{14} to CH_2Cl_2 and CH_3CN, but all are smaller than the diffusion-limited rates; (iii) the relative strength of the visible "iodide-to-carbenium" CT transition with respect to the ~390 nm transition of CH_2I-I correlates with the second-order rate constants for the reaction between CH_2I-I and cyclohexene in the solvents n-C_6H_{14}, CH_2Cl_2, and CH_3CN (see Figure 10).

None of the corrections change any of the values in other tables, text, or figures.

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