

Kinetic Studies of ADP Reactions with the Temperature Jump Method—Corrections

BY MANFRED EIGEN AND GORDON G. HAMMES¹

The original communication² concerning kinetic studies of ADP reactions contained several printing errors in the tables of rate constants. In order to rectify this matter, the tables are reprinted correctly here. The definitions of the various rate constants are contained in the original publication.

TABLE I

Reactants	$k_{12} \cdot 10^{-7}$ M^{-1} sec. ⁻¹	$k_{21} \cdot 10^{-7}$ M^{-1} sec. ⁻¹	$k_{32} \cdot 10^{-4}$ sec. ⁻¹	$k_{33} \cdot 10^{-10}$ M^{-1} sec. ⁻¹	k_{42}/k_{31} ^a
ADP + PR	3.4	7	0.06	3.0	21
ADP + CPR	20	1	1.9	2.3	0.53
ATP + PR	4.8	7	0.06	3.0	15
ATP + CPR	20	0.8	1.9	2.3	0.39

^a Determined from the equilibrium constants of ADP, ATP³ and the indicators (measured by pH- and spectrophotometric titration).

TABLE II

Reactants	$k_{13} \cdot 10^{-3}$ sec. ⁻¹	$k_{31} \cdot 10^{-7}$ M^{-1} sec. ⁻¹	$k_{21} \cdot 10^{-4}$ sec. ⁻¹	$k_{42} \cdot 10^{-5}$ M^{-1} sec. ⁻¹	k_{31}/k_{13} M^{-1}	k_{42}/k_{21} M^{-1}
Mg ⁺⁺ + ADP	2.5	0.3	3	1	10 ^{3.1}	10 ^{1.5}
Mg ⁺⁺ + ATP	1.2	1.2	3	3	10 ^{4.0}	10 ^{2.0}
Ca ⁺⁺ + ADP	>400	>25	10 ^{2.8}	...
Ca ⁺⁺ + ATP	>250	>100	10 ^{3.6}	10 ^{1.8}

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(2) M. Eigen and G. G. Hammes, *J. Am. Chem. Soc.*, **82**, 5951 (1960).

(3) A. E. Martell and G. Schwarzenbach, *Helv. Chim. Acta*, **39**, 653 (1956).

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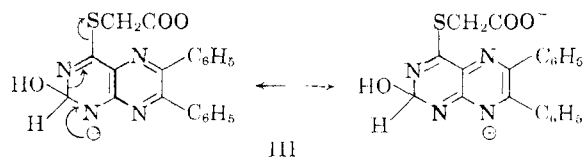
A Facile Pyrimidine Ring Cleavage: Corrections

BY EDWARD C. TAYLOR, ROBERT J. KNOPF, J. A. COGLIANO,
J. W. BARTON AND WOLFGANG PFLEIDERER

The text of this article as it appears in *Tins Journal*, **82**, 6058₂ (1960), was not seen in proof by the author before printing, and hence contains a number of errors which are corrected herein; the author's reprints have been printed from the corrected form.

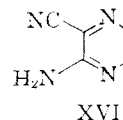
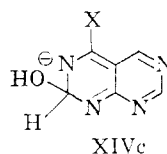
Page 6058: In the list of authors, for "Pleiderer" read "Pfleiderer." In col. 1, line 21, for "4-allyl" read "4-alkyl."

Page 6059: In col. 1, formula III should be



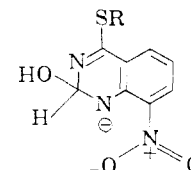
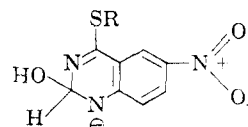
In line 6, for "have" read "has." In line 20, for "(X-XII)" read "(X-XI)." In line 34, delete "(R = -SCH₃)." In col. 2, line 37, for "derivations" read "derivatives." In the last line, delete "9."

Page 6060: In col. 1, formulas XIVc and XVI should be



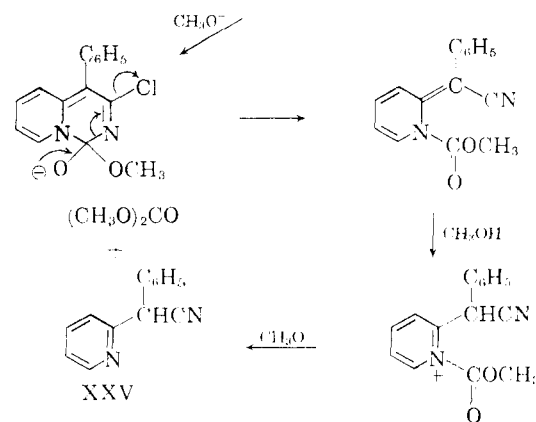
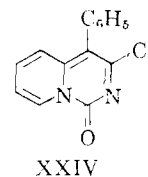
In line 6, for "were" read "was."

In col. 2, the formula under XXI should be



The formula to the right of XXIII should be

Page 6061: In col. 1, the formulas should be



Page 6062: In col. 1, line 36, for "ref. 7" read "ref. 17." In footnote (21), for "Mauntner" read "Mautner." In col. 2, line 17, for "pyrimidine" read "pyrimidine." In line 33, for "59 g." read "50 g." In line 39, for "15" read "150." In line 46, for "form" read "from."

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