

CORRECTIONS

Catalysis of Phosphoryl Group Transfer. The Role of Divalent Metal Ions in the Hydrolysis of Lactic Acid *O*-Phenyl Phosphate and Salicylic Acid *O*-Aryl Phosphates, by James J. Steffens, Iris J. Siewers, and Stephen J. Benkovic,* Volume 14, Number 11, June 3, 1975, pages 2431-2440.

The chemical and physical properties of the five-membered cyclic acyl phosphate, in particular the cyclic anhydride of α -acetylactic acid phosphate, have been described by F. Ramirez, S. Glaser, P. Stern, P. D. Gillespie, and I. Ugi, *Angew. Chem., Int. Ed. Engl.* 12, 66 (1973), G. D. Smith, C. N. Caughlan, F. Ramirez, S. L. Glaser, and P. Stern, *J. Am. Chem. Soc.* 96, 2698 (1974), and in references therein. The cyclic anhydride intermediate derived from lactic acid phosphate, eq 10, is a member of this class of compounds.

The Reconstitution of Microtubules from Purified Calf Brain Tubulin, by James C. Lee and Serge N. Timasheff,* Volume 14, Number 23, 1975, pages 5183-5187.

Page 5186, column 2, paragraph 2: This paragraph has 8 missing lines, and contains 5 lines that are duplicates from the preceding paragraph. The paragraph should read, in full:

In order to test further the requirement of high molecular weight components in the assembly of microtubules, the tubulin solutions in 3.4 *M* glycerol-PG were centrifuged in a partition cell at 60000 rpm and 20° in an analytical ultracentrifuge for 96 min until only 5.8S tubulin dimers remained in the compartment centripetal to the partition. The purity of the tubulin solution in this compartment of the cell was then checked by dodecyl sulfate gel electrophoresis. The results for such a sample, shown in Figure 5C, demonstrate that, even at a loading concentration of 350 μ g, no high molecular weight components are observed. The ability of these tubulin solutions, highly purified by the sedimentation procedure, to reassemble into microtubules was tested by turbidity and electron microscopy, with the results shown in Figures 4D and 6. It is evident that heating of these tubulin solutions to 37° results in the formation of aggregates as shown in Figure 6. The aggregation reaction is reversible, as shown by the response of turbidity to temperature changes. Figure 4D shows that the aggregates formed are indeed microtubules. Thus, fully dissociated tubulin can be reassembled into microtubules in the absence of high molecular weight components detectable by dodecyl sulfate gel electrophoresis.