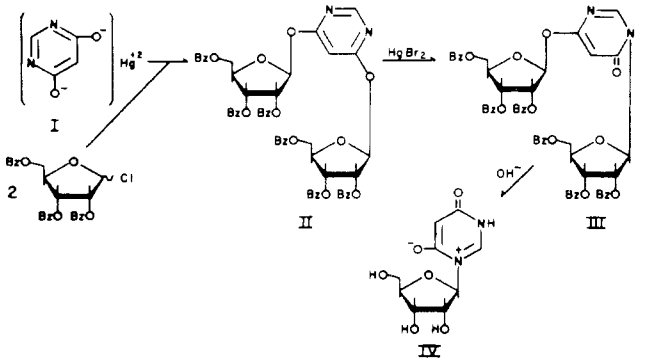
A. Ronzio, W. Bruce Rowe, and Alton Meister, Volume 8, March 1969, p 1066, the abstract should be corrected as follows: line 2 of column 2 should begin diphosphate, rather than triphosphate; thus, . . . "derivative of methionine sulfoximine and adenosine diphosphate, which are tightly bound. . "

In the paper "The Mercuric Bromide Rearrangement and 1-β-D-Ribofuranosyl-4,6-pyrimidinedione, an Isomer of Uridine," by Paul W. Wigler and Hyun-J. Lee, Volume 8, April 1969, p 1344, Schemes I and II (pp 1345 and 1346) were omitted by the printer. The schemes are reproduced in full below, with a few explanatory paragraphs.

Results

Condensation of 4,6-pyrimidinedionemercury (I) with 2 moles of 2′,3′,5′-tri-*O*-benzoyl-1-D-ribofuranosyl chloride in dry acetonitrile gives a 4,6-di-*O*-(riboside)-4,6-dioxypyrimidine (II). If $HgBr_2$ is added to this mixture under anhydrous conditions, the di-*O*-glycosidic pyrimidine is converted into a 1,4-di(ribosyl)-4-oxy-6-pyrimidinone (III). When the latter compound is treated with dilute sodium methoxide in dry methanol the *N*-glycosyl bond is preserved but the *O*-glycosidic bond at position 4 of the pyrimidine is cleaved. In addition, the benzoyl-blocking groups on the ribosyl moiety are removed by the mild alkaline degradation. The dipolar ionic structure of isouridine (IV) is shown in Scheme I.

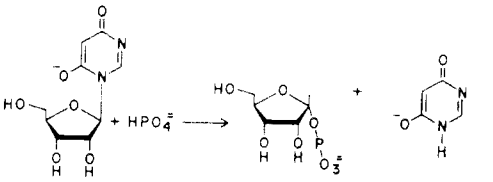
SCHEME I



The reaction of isouridine with inorganic phosphate, catalyzed by rabbit liver uridine phosphorylase, is shown in Scheme II. The substrates and products are represented in the predominant ionic forms for a pH of 7.4, based on the ionization constants and electrophoretic mobility of the compounds. The products of the enzymatic reaction were identified by paper chromatography.

An examination of the molecular model of 1-β-D-ribofuranosyl-4,6-pyrimidinedione (isouridine) reveals that the rotation of the glycosyl bond is hindered by the proximity of the C-6 oxygen atom and the C-2′ hydrogen atom. Thus, the conformation of the pyrimidine ring of this nonrigid molecule is rotated 180° in comparison with the preferred orientation of uridine. The chemical synthesis of isouridine was attempted to provide a compound with an ultraviolet spectrum similar to that of uridine, but a pyrimidine ring conformation opposite to that of uridine. A comparison of uridine with the new ribonucleoside may show the effect of molecular conformation on the physical, chemical, and biochemical properties of the ribofuranosylpyrimidinediones.

SCHEME II



In the paper "Catalytic Mechanism of Pig Heart Mitochondrial Malate Dehydrogenase Studied by Kinetics at Equilibrium," by Emanuel Silverstein and Guruprasad Sulebele, Volume 8, June 1969, p 2543, the following changes should be made.

On p 2546, the legend to Figure 4 should include: ●, oxalacetate ⇄ malate; ○, NAD ⇄ NADH. On p 2546, column 2, 15 lines from the bottom, NAD–NADH should read NAD ⇄ NADH. On p 2547, in Table II under the column heading Initial, there should be arrows between Oxalacetate malate and between Malate oxalacetate, to read Oxalacetate → malate, Malate → oxalacetate.

In the paper "Limitations Inherent in the ΔpH Method of Determining Binding Isotherms of Bovine Serum Albumin," by James M. Cassel and Jacinto Steinhardt, Volume 8, June 1969, p 2603, the following corrections should be made.

In the abstract, ω should be w, as in eq 1 and 2. In eq 1 (p 2604) the term

$$\log \frac{\bar{r}}{n - r}$$

should be

$$\log \frac{\bar{r}}{n - \bar{r}}$$

In eq 2 (p 2604) the left-hand side should read ΔpH rather than pH.