

Sweet tidings.

High Specific Activity
Low Prices
Unexcelled Quality Control

Sugar Nucleotides

NEC-513	ADP Glucose-C ¹⁴ (D-Glucose-C ¹⁴ (U))	228mc/mM*	\$85/10uc	\$320/50uc
NEC-536	GDP Mannose-C ¹⁴ (D-Mannose-C ¹⁴ (U))	151mc/mM*	\$110/10uc	\$400/50uc
NEC-557	UDP Arabinose-C ¹⁴ (L-Arabinose-C ¹⁴ (U))	183mc/mM*	\$90/5uc	\$350/25uc
NEC-429	UDP Galactose-C ¹⁴ (D-Galactose-C ¹⁴ (U))	280mc/mM*	\$100/10uc	\$350/50uc
NEC-213	UDP Galactose-H ³ (D-Galactose-1-H ³ (N))	65.2mc/mM*	\$80/50uc	\$300/250uc
NEC-403	UDP Glucose-C ¹⁴ (D-Glucose-C ¹⁴ (U))	237mc/mM*	\$60/10uc	\$200/50uc
NEC-414	UDP Glucuronic-C ¹⁴ Acid (D-Glucuronic-C ¹⁴ (U))	233.0mc/mM*	\$60/10uc	\$260/50uc
NEC-543	UDP Xylose-C ¹⁴ (D-Xylose-C ¹⁴ (U))	198mc/mM*	\$90/5uc	\$350/25uc

* Sp. Act. in Stock

Write for complete radio-chemical specifications.

FREE wall chart of Nucleotide Derivatives available upon request.



and engineers in order to produce more "complete, universal men." University reform and elimination of obsolete methods and practices is imperative in Italy, but international vilification of the *Mater universitatis* and her students and graduates is not.

GIORGIO SOLI

41-885 Laumilo Street,
Waimanalo, Hawaii 96795

Reference

1. L. Barzini, *The Italians* (Atheneum, New York, 1964).

Zond 5: Sketches and Guesses

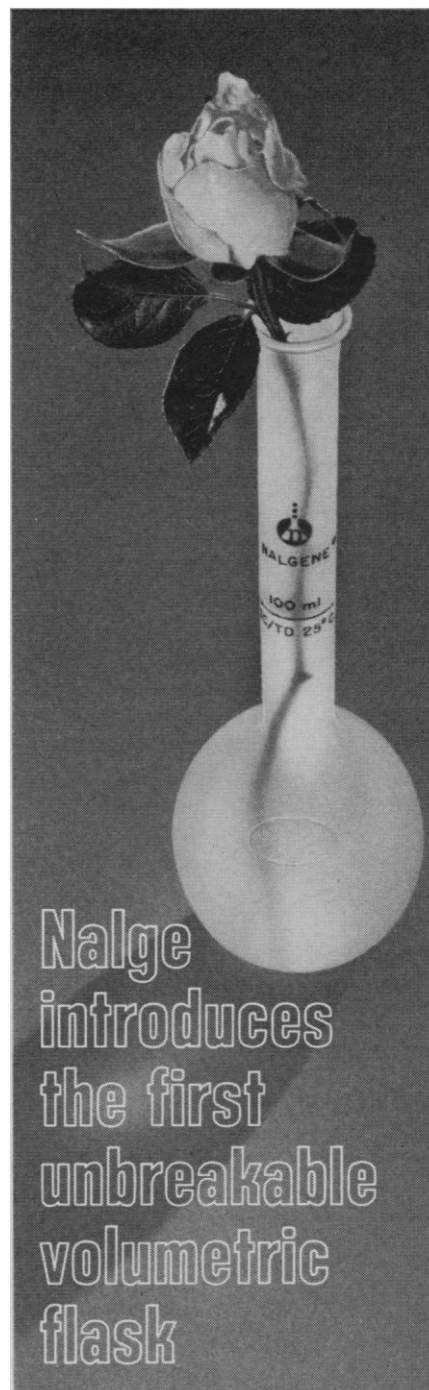
While I generally agree with the uses of the Zond 5 class of (Soviet) spacecraft proposed by Davies and Murray (11 Oct., p. 243), their description of Zond 5 as being comparable in design to the Soviet Mars and Venus probes is, I think, wide of the mark.

The sketch in Dmitriyev's article (*Pravda*, 25 Sept.) does show three sections for the spacecraft in its parking orbit. However, it is easily seen that the section described by Davies and Murray as containing a midcourse rocket motor (that is, a rocket engine) is not that at all. It is, in fact, the upper stage of the booster rocket and its purpose is to inject the Zond 5 into its translunar trajectory. That upper stage adds some 10,400 feet per second (3120 meters per second) to the Zond 5 which at that point already has an Earth satellite velocity of perhaps 25,400 feet per second. Midcourse engines add only corrections of the order of hundreds of feet per second and often less ΔV . The stage was ignited 67 minutes after the initial launching and discarded after burn-out, leaving only two compartments. All this is described by Dmitriyev and is shown in his sketches. He describes a sphere—the "descent vehicle"—and an instrument compartment as leaving the parking orbit.

Despite Dmitriyev's relatively detailed article, both Davies and Murray and myself will have to await photographs of the Zond 5 spacecraft comparable to those of the Venus 4 released by the Soviet Union. The latter were sufficiently detailed so as to permit counting of threads in the "plumbing," whereas the crude sketches of Zond 5 give rise to an extended guessing game, no less.

SAUNDERS B. KRAMER

1241 Eureka Avenue,
Los Altos, California 94022



Precision molded and precision calibrated, the Nalgene® Volumetric Flask is in a class by itself. It won't etch, contaminate or break. Repeated autoclaving won't affect its accuracy. Each flask is individually calibrated to better than $\pm 1\%$.

100 ml size now in stock, 250, 500, and 1000 ml sizes coming soon. Order from your lab supply dealer . . . and specify Nalgene Labware. Ask for our 1968 Catalog or write Dept. 2124, Nalgene Labware Division, Rochester, N.Y. 14602.

NALGENE LABWARE DIVISION
NALGE
SYBRON CORPORATION