



Now Picker offers a complete ^{14}C Dating Laboratory for less than \$17,000.

Picker has combined a benzene synthesizer and a liquid scintillation counter to achieve a sensitive system for low-level ^{14}C and ^3H counting. The benzene synthesizer converts a ^{14}C or ^3H sample to benzene which is then counted by the liquid scintillation counter. This system is suitable for a variety of applications including ground water studies, reactor monitoring, accelerator experiments, air and ground water pollution studies, and for the measurement of very low activity biological samples. As a ^{14}C dating laboratory, it can achieve 50,000 years.

Picker's Benzene Synthesizer

This integrated sample conversion system is unusual because the overall conversion efficiency is so high: yields are typically greater than 90%. The secret is a new high-efficiency, non-explosive vanadium-alumina catalyst that can be reused if thermally reactivated prior to use, and, most importantly, produces no observable fractionation. The synthesizer has both wet and dry combustion trains.

The organization of the benzene synthesizer makes it relatively simple to operate (and to live with) since stand-

ard laboratory glassware predominates and all the connections are easily accessible and can be modified or repaired by the investigator. It requires no special facilities for installation (but does require 220V. AC).

Picker's Liquimat® 220 Liquid Scintillation Counter

This is a seasoned counter ideally suited to this application. It offers a combination of moderate cost, high analytical performance, and user utility unmatched by any other liquid scintillation counter. The Liquimat 220 is a four-channel, 100 sample, ambient temperature system with independent operation of each analysis channel, logarithmic energy response, and exceptional quench correction versatility. This counter is a high-performance version of the Liquimat 220 with a guaranteed E'/B of 450 or better for ^{14}C and 150 or better for ^3H . Phototubes are specially selected for extremely low noise.

Can we now send you detailed information? Please write to Picker Nuclear, 1275 Mamaroneck Avenue, White Plains, N. Y. 10605. Please request file 237S.

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