

re-establishment of geography, but no action was taken. Dr. Rice, discouraged by the policy of the university to discontinue geography, withdrew his support of the institute. The building is now closed, pending the decision of the university as to its further use.

It is too soon for the staff of the institute to have completed plans for the future, but Edward S. Wood, Jr., expert in acrophotography, is going on with his consulting jobs, and Erwin Raisz is continuing at his workshop in Cambridge.

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Radiation Sensitivity of Benzene- d_6 ¹

OF ORGANIC compounds, the aromatic are the most resistant to radiation, and of these the most resistant heretofore reported is benzene (1). For example, it is less sensitive to decomposition by high-energy radiation than aliphatic hydrocarbons by a factor approximating 100. It has been shown (2) that the 100 ev yields of gaseous products from liquid benzene

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irradiated with 1.5-mev electrons from a HVEC Van de Graaff generator are, respectively, $G(H_2) \approx 0.037$ and $G(C_2H_2) \approx 0.022$.

We have now examined the radiation chemistry of benzene- d_6 and find that it is even more resistant to high-energy radiation than benzene, with yields $G(D_2) \sim 0.011$ and $G(C_2D_2) \sim 0.013$. These results are undoubtedly to be correlated with differences of zero-point energy of C-H and C-D and perhaps of C-C vibrations in the two compounds, but no simple relationship can be expected. The fact that $G(H_2) > G(C_2H_2)$, whereas $G(D_2) < G(C_2D_2)$, suggests that in radiolysis benzene decomposes by at least two essentially different processes.

It is noteworthy that benzene- d_6 has the lowest currently known radiation sensitivity of any liquid organic substance.

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