the acid were administered. After about two months of treatment I observed in all cases a marked darkening of the hair. The recently grown shafts appeared to be normally pigmented. It is my impression that an oral dose of 100 mg twice a day is ample to give results. The data seem to show that p-aminobenzoic acid has the same effect with respect to graying as the B complex preparation used in my earlier studies.

In view of the favorable results obtained I am continuing my experiments with a considerably larger series of cases in order to establish the optimum daily dosage of para-aminobenzoic acid. The detailed data will appear elsewhere.

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## **OUOTATIONS**

## CHEMISTRY AND CANCER

On our "Science in the News" page to-day is a collection of strange diagrams. They show the structures as the chemist conceives them of certain molecules known to produce cancer. It was for his brilliant fundamental study of these structures that Professor Louis Frederick Fieser of Harvard's chemistry department merited the Katherine Berkan Judd \$1,000 prize of The Memorial Hospital for the Treatment of Cancer and Allied Diseases.

No one can now predict whether this particular study will be the one that will lead to that goal of so many wearying researches—the prevention of malignant cell growth and its non-surgical treatment. But there can be little doubt that if the goal is to be reached it must be through a more complete understanding of the body's own normal and abnormal chemical processes.

Memorial Hospital, in its hearteningly handsome building on East Sixty-eighth Street, provides the occupants of its 250 beds with the most modern x-ray machines, ranging in size up to 1,000,000 volts, with the most up-to-date devices for applying the curative radiation of radon gas, with the most skillful and aseptic surgery. But all these are drastic methods of dealing with a malignant growth that has already become dangerous. What about the cause? It is fortunate that beneath the same roof, under the direction of Dr. Cornelius P. Rhoads, men are working on the chemical root of the problem—subjecting experimental mice, for example, to the carcinogenic chemicals synthesized in Harvard's Converse Laboratory.

This correlation of the clinical and the chemical is one of the most encouraging aspects of modern cancer research. While doing all possible by present means for those already afflicted, scientists no longer base all their hopes on mysterious therapies whose modes of action are unknown. They are trying, step by difficult step, to reconstruct the chemical processes of life and ascertain the point at which those processes occasionally go off into the wilderness detour that we know as cancer. A substantial contribution toward that pathfinding is acknowledged in the award to Dr. Fieser, who thinks of the disease in terms of strange diagrams of molecular structure.—The New York Times.

## SCIENTIFIC BOOKS

## ORGANIC CHEMISTRY

High Polymers. Editorial Board, R. E. Burk, H. Mark and G. S. Whitby. Volume I. Collected Papers of W. H. Carothers on High Polymeric Substances. By H. Mark and G. S. Whitby. Illustrated. xix+459 pp. New York: Interscience Publishers, Inc. 1940. \$8.50.

Volume II. Physical Chemistry of High Polymeric Systems. By H. Mark. Illustrated. vii + 345 pp. New York: Interscience Publishers, Inc. 1940. \$6.50.

In the introduction to the series, "High Polymers," included in Volume I, the Editorial Board points out the technical and theoretical importance of high polymeric materials to the chemist. They set as their aim in this series the collection of our present knowledge in this field.

Volume I in the series, as the name shows, is a collection of the original papers of Carothers on high polymers and closely related topics. The volume contains a biography of Carothers; his papers reprinted under the headings: Studies on Polymerization and Ring Formation; Acetylene Polymers and Their Derivatives; Miscellaneous Papers; and a complete bibliography of Carothers' papers and patents. The value of the original papers has been increased by the preparation of an index which is a great aid to the student in locating specific topics.

Volume II in the series is essentially a revised edition of Professor Mark's "Allgemeine Grundlagen der hochpolymere Chemie." It contains a discussion of the fundamental concepts in general and physical chemistry which the author deems to be essential for the student who expects to work in the high polymer