was his ability in research, it was more than equaled by his skill in teaching, and that, as always, was owed to wisdom and kindliness. In his own being he combined the ethical insight and scientific intelligence on which, taken together, he based his faith, declared at Brown University in 1947, "that the control of evil is possible. I am sure," he said in that address, "that humanity will continue to encounter great troubles, but I do not think that civilization will destroy itself. To surmount our troubles, we shall need courage, and patience, and clarity of thought, and sincerity in the advocacy of fair and reasonable courses of action. For these virtues we may pray, each in his own fashion."

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Book Reviews

Cancer, I, Hérédité, hormones, substances cancérigenès. J. Maisin. Paris: Casterman, Tournai-Paris, 1948. Pp. 248. 84 fr.

In the Introduction the author states that he has written this book for intellectuals not specialized in the cancer problem, although he hopes that the physician and even the cancerologist may draw some benefit from reading it. This statement alone suffices to explain the high qualities of the book. For if an intellectual from a field writes for another intellectual from another field, he will, naturally, maintain his subject on a plane high enough while avoiding tedious detail and an excess of technicalities. On the other hand, since he can rely on the receptiveness of mind of his reader and his general background, he will try to go to the essence of the facts and the biological problems therein involved. By doing so, these problems detach themselves from the strict branch of science from which they have emerged and become universal biological problems. Dr. Maisin has fully succeeded in making himself understood by another intellectual, and his hope of capturing the interest of the specialist has been fulfilled.

Whatever should be known of the work done on cancer in order to understand future developments is succinctly given in the first pages of the book together with pertinent historical data. The author then goes into a complete survey of the three main subjects of this volume: the relation of cancer to, first, heredity; second, hormones; and third, certain chemical substances called carcinogens. This he does brilliantly.

We are all aware of the appalling number of significant contributions to these subjects during the last 20 years. All of them are reviewed by the author, and the references are appended in an orderly fashion. The author does not list these coldly, leaving to the reader the task of drawing his own conclusions on the basis of the raw material displayed. The reader is constantly helped in this task by the author, who selects the facts, uses the right adjectives to qualify them, and often gives his own opinions on the problems, to many of which the School of Louvain has actively contributed.

One notes in the book the predominance of American literature, especially during the last 8 or 10 years. Interesting contributions from Europe have appeared, however, even during the war, and those from France and Belgium are not generally known among American cancerologists. Inclusion of these still further enhances the value of the book.

In several ways Maisin's book reminds one of that written by Charles Oberling and published in 1942. This book, which was translated into English, has been avidly read and has had a decided influence on many minds. The same should be done with Maisin's book following publication of the second volume.

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Outlines of physical chemistry. Farrington Daniels. New York: John Wiley; London: Chapman & Hall, 1948. Pp. viii + 713. (Illustrated). $5.00.

As Prof. Daniels states in his preface, *Outlines of physical chemistry* is to be regarded as the first edition of a new book. The high standards set by Getman and by Getman and Daniels in their previous well-known and widely used texts on physical chemistry have been maintained, but progress in research in physical chemistry required a rewriting rather than merely a revision.

The author's point of view is perhaps best presented by quoting a statement from the introductory chapter: "Usually science progresses by inductive reasoning from a few facts, follows with deductive reasoning based on the hypotheses, and, finally, tests by experimental measurements designed to prove or disprove the theoretical deduction. Many hypotheses are destined to be discarded when new facts and more precise data are obtained, but they fulfil a very necessary function in the development of science. A successful hypothesis is not necessarily a permanent hypothesis, but it is one which stimulates additional research, opens up new fields, or explains and coordinates previously unrelated facts. The scientist needs imagination in creating new hypotheses, but he needs also ingenuity and skill in devising experiments to test them and critical judgment in evaluating the results."

The general field of physical chemistry is covered quite completely, and it seems pointless to list the titles of the chapters. It should, however, be mentioned that in addition to the traditional topics, excellent chapters on