

PRESENTATION OF THE MEDAL

TO-NIGHT the Institute of Chemists is performing through me a service, which is not only a personal one, but also by its action is establishing a new contact with workers in a neighboring field of science. Our performance to-night is clothed not only with an obvious desire to please, but also with a desire to reveal an interpretation and a spirit which pervades our organization. We believe in each other, in unanimity of understanding and effort and fair team play. It is our feeling that we record the favorable response of a large majority of the workers in our science by bestowing upon you this honor to-night. It personally gives me the greatest pleasure to be able to present you with this Medal of the Institute of Chemists in recognition of your meritorious work in your special branch of chemistry and for your broad influence as a teacher.

TREAT B. JOHNSON

PRESIDENT OF THE AMERICAN
INSTITUTE OF CHEMISTS

SOME TENDENCIES IN THE PROMOTION OF CHEMICAL RESEARCH

In recent years the civilized world has come to expect much of the sciences, and particularly of physics and chemistry. This attitude has been fostered at the outset by an awakened realization of what they have actually contributed in discoveries and inventions. The laws of nature are, in truth, the wealth of the world. Lord Moulton once remarked that without the teaching of science man blunders through life as a card player would blunder through a game of cards if he did not take the trouble to look at the cards in his hands and learn their value. The popular mind has lately become prone to believe that everything is possible to science; hence large responsibilities are likely to be thrust upon its masters.

Probably no influence or group of factors has contributed more largely to the recent exaltation of chemistry than the world war with its manifold involvements. The stress of the ominous years that witnessed a series of conflicts of hitherto unmatched enormity, the almost overwhelming necessities of readjustments in nearly every field of human activity, the depressing deprivations and the suddenly augmented demands confronting the antagonistic and even the non-combatant nations—such features served to impress in hitherto unrealized degree upon thoughtful peoples how indispensable chemistry has become to modern life in the complexity of present-day civilization. Problems of munitions and armament, of poisonous gases and optical glasses, of the supply of novel materials for use in the upper

reaches of the air or in submarine depths, of food and clothing where agriculture seemed unable to meet new needs—these and innumerable other demands called for the chemist's resourcefulness in the fullest measure.

The story of many of the achievements of chemistry as revealed by war-time history has been rehearsed so often that it has become quite familiar in various details. Consequently it has been only natural for thoughtful persons to entertain the hope that this science would presently be diverted from the exigencies of strife and the distress of the state in order to be directed to the promotion of national prosperity and the betterment of the race. A distinguished chemist has remarked that "original research is in itself the most powerful weapon that has ever been or ever can be wielded by mankind in struggling with the great problems which nature offers on all sides for solution." (Meldola.) This thought has become the ardent belief of eager multitudes. The word research has become an expression to conjure with; a term used not infrequently without any adequate appreciation of its fundamental implications. Thus it has come about that science has been exposed upon an elevated pedestal to the fullest view of an over-awed public. "From time to time," a sympathetic writer has pointed out, "so many marvels have been suddenly sprung upon us in the past which have owed their birth to research carried on in silence in laboratories and the like that the general public is quite ready to treat such homes of research as mysterious workshops, the methods and aims of which are beyond them, but from which great discoveries may at any moment arise. It looks forward with hope to these future discoveries and it feels too much in awe of the secrets of science to desire to control or criticize the methods by which they are arrived at." (Moulton.)

The chemist himself, on the other hand, knows all too well that there is no royal road to untrammelled success in his domain. Across the fields that he traverses there are liable to be barriers of the most varied sorts that may impede or even completely stop his progress. He is not protected against the stumbling blocks encountered in other walks of life. Men of science realize that they can not answer the riddles of life or solve the problems of industry on command; yet the larger public is beginning to assume that in the scientific disciplines a little enthusiasm and well-directed energy will inevitably furnish the required solutions. The man-on-the-street sees the modern engineer constructing bridges of hitherto unattained proportions; he watches the skyscraper rising under the builder's guiding hand to surprising heights; and he observes the harnessing