tified as triose phosphates. Neuberg's four forms of fermentation provided the first attempt at an integrated picture of glucose breakdown in which the dynamics of fermentation was explained by the competition of hydrogen acceptors. The observation that substances extraneous to fermentation may act as hydrogen acceptors and that, thereby, a vast number of aliphatic, aromatic, and heterocyclic aldehydes may be reduced to the corresponding aldehydes led to the formulation of the concept of phytochemical reduction. The significance of enzymes giving rise to carbon-carbon linkages such as the transketolase was foreshadowed in the studies on acetoin fermentation and by the discovery of the enzyme carboligase.

Neuberg's studies of the enzymic formation of lactic acid resulted in the introduction of its salts as brake fluids in German artillery pieces during World War I. During the last 30 years Neuberg's interest was attracted to the mechanisms of solubilization of insoluble matter in nature. He explored the effects of organic phosphates and polyphosphates arising in carbohydrate metabolism in the solubilization of insoluble salts, observations which up to now have not made their full impact felt on biological thought.

This short outline of some of Neuberg's main contributions to biochemistry cannot but give a very meager impression of his over-all influence in the field. It does not give an account of his discovery of a host of enzymes, of his studies of the structure of natural products and of his synthesis of phosphorylated intermediates of carbohydrate metabolism. His work was particularly characterized by a multitude of methodological and chemical observations, and many of the chemical tools of our laboratory were discovered and developed by Neuberg and his pupils. He usually contributed not only the concepts but also the techniques to his own work.

The enormous amount of work accomplished by Neuberg and his numerous pupils has been set down in about 900 publications from his laboratory. The Kaiser Wilhelm Institute of Biochemistry in Berlin-Dahlem under his leadership gave opportunity and inspiration to generations of biochemists from Europe, Asia, the Western Hemisphere, and Australia. His influence stemmed not only from his original contributions but also from his editorship of the *Biochemische Zeitschrift,* which he founded at the age of 28, and also from his membership in a number of the highest scientific councils of Germany. After he came to the United States in 1940 he continued to work, often under adverse conditions, and the uninterrupted flow of publications up to the last month of his life attested to a productivity and energy unaffected by age and change of environment.

Neuberg's unquenchable craving for knowledge reached beyond the frontiers of his own science. He was amazingly well versed in classical literature and history, and he read Greek and Latin as well as Hebrew. The sleeplessness of his last years of failing health was, in some measure, appreciated by him because it gave him more time to read.

Two weeks before his death he gave, before a distinguished group of biochemists, a farewell lecture on some of the fundamental enzymic reactions of fermentation as demonstrable by simple experiments. He was too weak to stand, his voice had to be amplified, his daughter read part of the lecture, and an assistant carried out the experiments. But Neuberg's love of biochemistry and his unimpaired power of intellect dominated the audience.

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News of Science

Statement on Hungary

A declaration that urges the Soviet and Hungarian governments to permit exchanges of visits between Hungarian scholars and those of other countries and to put an end to restrictions on intellectual freedom in Hungary was presented to the Soviet Ambassador and the Hungarian Envoy Extraordinary in London on 4 Dec. The statement was sponsored by the International Committee on Science and Freedom, Didsbury, Manchester, England, and signed by some 1000 scholars from 108 universities and colleges in 23 countries.

Among those presenting the declaration were Prof. Cyril Darlington of Oxford University (a member of the Committee on Science and Freedom and leader of the delegation); Sir David Lindsay Keir, master of Balliol College, Oxford; Prof. Pulleyblank of Downing College, Cambridge, representing the 16 fellows of the college who had given their corporate support to the statement; H. J. Fleure, emeritus professor of London University; and Dame Kathleen Lonsdale, professor of chemistry at University College, London.

Other British supporters of the declaration in Britain are Sir Thomas Murray Taylor, principal and vice-chancellor of Aberdeen University and the senate of the university subscribing as a body; Sir Hector Hetherington, principal and vice-chancellor of the University of Glasgow; Prof. W. Mansfield Cooper, vice-chancellor of Manchester University; Dr. J. W. Cook, vice-chancellor of Exeter University; and Dr. E. M. W. Tillyard, master of Jesus College, Cambridge.

Universities in other countries represented on the list of signers include the Sorbonne, Harvard, Princeton Institute of Advanced Studies, Columbia (New York), Rome, Padua, Berlin, Göttingen, Tokyo, Canberra (Australia), Athens, Vienna, Leiden (Holland), Hamburg, Ottawa, Buenos Aires, and Istanbul. The American Association of University Professors sent in a supporting declaration.

The document presented to the Soviet Ambassador read:

"We have heard the repeated calls for help from Hungarian intellectuals, scholars, scientists and writers, addressed to their colleagues throughout the world.

"We express to you our deep concern at the fate of our colleagues in Hungary and appeal to you to restore to them the rights of intellectual freedom and free cultural contacts with scholars in other countries.

"We ask you to give your answer in the most practical manner: namely by permitting at once a free exchange of visits between scholars outside Hungary and those in the Hungarian Universities and by ending immediately all restrictions on intellectual freedom."