

scientists and engineers. Dr. Bueche was elected to his present assignment in 1965, when the General Electric Research Laboratory and the company's Advanced Technology Laboratories were combined into a single organization.

Born in Flushing, Michigan, in 1920, Dr. Bueche received his Bachelor of Science degree in chemistry from the University of Michigan in 1943, attended Ohio State University, and was awarded his Ph. D. in physical chemistry from Cornell University in 1947. After serving as a research associate at Cornell for three years, he joined the staff of the General Electric Research Laboratory in 1950. He was appointed manager of Polymer and Interface Studies in 1953 and manager of Chemistry Research in 1961.

As a working scientist, Dr. Bueche became widely known for his work on the physics and chemistry of polymers and the effects of high-energy radiation on plastic materials. As manager of Chemistry Research, he contributed to the success of many scientific projects ranging from improved Man-Made diamonds to selective membranes that behave much like human lung tissue, and from important new kinds of fuel cells to a completely new basic chemical technique called "oxidative coupling".

Author of several dozen technical papers, principally in the area of polymer research, Dr. Bueche also has been awarded 11 patents in this field. He was elected a fellow of the American Physical Society in 1963 and is a member and past chairman of the executive committee of the Division of High Polymer Physics. He is a member of the board of directors of the American Chemical Society and has held numerous other ACS posts, including chairmanship of the Kendall Award Symposium (1957), vice-chairmanship of the Division of Polymer Chemistry (1962), and chairmanship of that division (1963). Dr. Bueche is a council member of the Gordon Research Conferences, was recently named chairman-elect of the Board of Trustees, and is past chairman of the Elastomer Conference. He recently was elected by the Cornell University Board of Trustees to a one-year term as a member of the Council for the College of Engineering. He also is a member of the National Academy of Sciences—National Research Council Committee on Macromolecular Chemistry, a member of the Metals Properties Council of the Engineering Foundation, a member-at-large (Chemistry and Chemical Technology) of the National Research Council, and a member of the Research and Development Planning Council of the American Management Association.

Dr. Bueche's other professional and honorary society affiliation include the National Society of Professional Engineers, American Association for the Advancement of Science, Alpha Chi Sigma, Gamma Alpha, Phi Kappa Phi, Phi Lambda Upsilon, and Sigma Xi. He is a member of St. John the Evangelist Church, the Mohawk Golf Club, and the Mohawk Club in Schenectady, New York. He also is a member of the Susquehanna Valley Country Club, Sunbury, Pennsylvania. Among his hobbies are skiing, golf, and photography.

Dr. Bueche was married December 27, 1945, to Margaret L. Bassler, formerly of Sunbury, Pennsylvania. Dr. and Mrs. Bueche and their four children reside at 1065 Avon Road, Schenectady, New York.

Mr. DADDARIO. Our next witness is Dr. Charles A. Bishop, director of chemical processing and engineering development, United States Steel Corp., and he will be speaking in behalf of the American Iron & Steel Institute.

Dr. Bishop, you may proceed with your statement.

STATEMENT OF DR. CHARLES A. BISHOP, DIRECTOR, CHEMICAL ENGINEERING DEVELOPMENT, APPLIED RESEARCH, UNITED STATES STEEL CORP.

Dr. BISHOP. Thank you very much.

Mr. Chairman, members of the House Subcommittee on Science, Research, and Development, I am Charles A. Bishop, director of chemical engineering development, applied research, United States Steel Corp.; chairman of United States Steel's Air and Stream Pollution Committee; and chairman of the American Iron & Steel Institute's