Introduction

The masonry symposium, sponsored by ASTM Committee C-7 on Lime, C-12 on Mortars, and C-15 on Manufactured Masonry Units, was established in 1974 by J. Ivan Davison to whose memory this fourth symposium is dedicated. The symposium, as intended by Mr. Davison, is a continuing activity of the ASTM committees interested in masonry and provides a very important opportunity for the exchange of ideas and information to benefit the entire masonry industry.

The first symposium, held in June of 1974, served as a base for future symposia and as such included a historical review of masonry and its components as well as papers on masonry research and new developments in masonry. Masonry: Past and Present, ASTM STP 589, published in August of 1975, resulted from this first symposium. In June of 1976 the second symposium was held. It was similar in scope to the first symposium but contained more papers on the then current testing and research programs. Although no publication resulted from this symposium, several of the papers did appear in the Journal of Testing and Evaluation.

Masonry: Materials, Properties, and Performance, ASTM STP 778, published in September of 1982, was the result of the third masonry symposium that was held in December of 1980. This symposium provided a forum for the then current research on masonry units, mortar and grout and their components, and masonry assemblages. The majority of the papers dealt with the performance of masonry assemblages.

This publication is the result of the fourth masonry symposium, Masonry: Research, Application, and Problems, held in December of 1983. The title of this symposium was chosen by the symposium committee in an effort to encourage the submission of papers dealing with field application and end use problems with masonry as well as masonry research. The Call for Papers was intended to reach those interested in all aspects of masonry in the United States as well as several foreign countries. The committee was successful in this effort as illustrated by the papers contained herein. In addition to papers on research, dealing primarily with masonry assemblages, also included are papers on test methods and field application as well as field problems. These papers are authored by some of the industry's most knowledgeable people, and the information they have shared should be useful in understanding many of the problems that are experienced with the application of masonry in the field. But more importantly, this information can be used in future ma-

sonry design and construction to avoid problems. These papers will also serve to indicate some areas in which more information is needed, and hopefully, will encourage other investigators to address these areas.

A great deal has been learned about masonry construction in the thousands of years since man began stacking rocks to provide shelter. Very impressive gains in masonry engineering and masonry material properties have been made, but new techniques, ideas, and problems perpetually flow from the minds and the experience of people involved with masonry, universities active in masonry research, the material manufacturers, engineers, architects, builders, and others. Future symposia will continue to provide a means of exchange of information on these new techniques and ideas and solutions to the problems, and will provide a valuable source of information about masonry construction. The end result, the application of this knowledge, will assure more durable and economical masonry construction.

John T. Conway

Santee Cement Company, Holly Hill, SC 29059; symposium cochairmen and editor.

John C. Grogan

Brick Institute of America Region Nine, 8601 Dunwoody Place, Suite 507, Atlanta, GA 30338; symposium cochairman and editor.