PREFACE

The National Conferences on Clays and Clay Minerals are held annually under the sponsorship of the Interdivisional Committee on Clay Minerals of the National Academy of Sciences — National Research Council. The major objective of the Conferences is to bring together persons from all fields of endeavor in which clay materials are important so that they may discuss matters of mutual interest.

At the Third National Conference, the proceedings of which are printed herein, about three hundred persons participated. Among those participating were geologists, mineralogists, chemists, physicists, agronomists, ceramists, and engineers from all over the United States and from Canada and Germany. The active discussion and enthusiasm of the meetings indicated the need and value of such conferences and showed the particular value of meetings where everyone attending is interested in the same general subject.

The symposium on "Problems of Clay and Laterite Genesis" held at the meeting of the American Institute of Mining and Metallurgical Engineers in St. Louis in 1951 gathered together for the first time in the United States people from many different fields who were interested in clay mineralogy. Informal discussions at that time indicated the desirability of holding conferences on clay mineralogy where persons from all fields could discuss matters of mutual interest. The writer was asked by those present in St. Louis to serve as chairman of a committee to look into the most desirable means of arranging for and holding such conferences. The members of the committee were suggested from the floor. The committee discussed the matter with the National Academy of Sciences - National Research Council and found that they would welcome the establishment of a Clay Minerals Committee which would sponsor such conferences. It was decided that this was the best way to proceed, and a recommendation to that effect was made to persons attending the Clay Minerals Conference held in 1952 at Berkeley, California under the sponsorship of the University of California. These persons, representing a good cross-section of people interested in clay mineralogy, affirmed the recommendation and the preliminary exploratory committee was appointed by the Academy - Research Council as the Clay Minerals Committee with some considerable additions in order to obtain representation from all fields and from active centers of clay mineral researches. The initial Conference sponsored by the Committee was held at the University of Missouri in 1953.

Arranging for and holding such conferences involves a very large amount of work almost all of which falls on the local committee. The success of the meeting rests on their shoulders. A very large debt of gratitude is owed to Doctor R. A. Rowland and Doctor W. O. Milligan and their colleagues

Preface

for the excellent job they did in arranging for the Houston Conference. Our thanks should be extended to Doctor Milligan further for his service in assembling, editing, and seeing to the printing of these Proceedings. Thanks are also due to the Rice Institute for providing excellent facilities for the Conference.

Annual conferences involve some expense and the Committee is greatly indebted to the following organizations for their generous financial donations which made the holding of the Houston Conference possible with a very nominal charge to the participants:

> The Rice Institute The Atlantic Refining Company Baroid Division, National Lead Company California Research Corporation Gulf Development Company Humble Oil and Refining Company Magnet Cove Barium Company Monsanto Chemical Company Schlumberger Well Surveying Company Shell Development Company The Texas Company Milwhite Mud Sales Company

It is also desired to express sincere thanks to the administrative personnel of the National Academy of Sciences — National Research Council particularly to Doctor H. R. Gault, who was Executive Secretary of the Division of Earth Sciences, and to Doctor W. O. Benson the present Executive Secretary of the Division for their complete and helpful cooperation in all of the Committee's activities. We are especially indebted that the National Academy of Sciences — National Research Council is undertaking to publish these Proceedings.

RALPH E. GRIM, *Chairman* Committee on Clay Minerals of the Academy — Research Council