Each year as funds permitted the division has search. I undertaken conferences for the initiation and coordination of chemical research. Such conferences have been held on the subjects of permanence of printed records, on the coordination of chemical literature on biologi

on the coordination of chemical literature, on biological nomenclature, and on farm waste and chemistry of soils. The results of these meetings have been intangible in part, but the mere bringing together of eminent men interested in a certain phase of chemistry is important.

The division has from time to time collected pertinent data relating to chemistry. Since 1922, the division has each year made a census of graduate students in chemistry throughout the country, and this census has been published in the journals. The division also conducted a study of conditions of chemical research in the Southern States. The report of this study was published by the Chemical Foundation. Other activities include cooperation between academic and industrial research, and a list of research problems in various fields of chemistry.

One of the important activities of the division has been the administration of the grants in aid of research. During the past four years 42 grants have been made to 37 individuals. Many papers have been published as a result of these grants and many capable research workers have been encouraged in their work. Particularly during the last few years, the grants-inaid have proved invaluable to research workers who have found themselves handicapped through lack of funds.

Another important activity of the Research Council and of the Division has been in connection with the National Research Fellowships. Since their foundation, 257 fellowships in chemistry have been awarded to 150 individuals. While it is true that some will profit more than others from the opportunities afforded by these research fellowships, there can be no question that the National Research Fellowships have produced tangible results.

Through meetings of the division and of committees, and through other contacts afforded by the division, those interested in various fields of chemistry are brought together and contacts are established. It is from these contacts that we may expect some of the major benefits in the course of time.

## SCIENTIFIC EVENTS

## CHICAGO PROGRAM ON RADIATION AND PLANT LIFE

THE American Society of Plant Physiologists has joined with Sections G and O and their affiliated organizations in the programs of June 20 and 21. On the morning of June 22, however, a special symposium has been arranged for plant physiologists who are attending the meetings. The meeting will be held in the Civic Opera Building, Chicago, in the rooms of the Lighting Institute at 10:00 A. M. The meeting will be open to all visiting botanists and to professional growers of plants. The titles of the papers are as follows:

"Influence of Radiation on CO<sub>2</sub> Absorption by Plants": W. H. Hoover, Smithsonian Institution.

"The Interrelated Effects of Light and Temperature on Plant Growth": A. D. Davis, University of California.

"Growth as a Criterion for Physiologic Response to Radiations": E. S. Reynolds, Missouri Botanic Garden.

"Photoperiodism and its Practical Application to Greenhouse Crops": Alex Laurie, Ohio State University.

"Responses of Certain Plants to Artificial Radiation Factors Applied as Supplements to Daylight": R. B. Withrow, Purdue University.

"The Response of Greenhouse Plants to Electric Light Supplementing Daylight": Laurenz Greene, Purdue University.

"Experimental Work at Pennsylvania State College

on Radiation as Applied to Plants'': H. W. Popp, Pennsylvania State College.

"Chemical Responses of Certain Plants to Solar Ultra-violet Radiation": W. E. Tottingham, University of Wisconsin.

"Some Growth Responses of Plants to X-ray Treatments": C. A. Shull, University of Chicago.

The program will be continued in the afternoon, if necessary, followed by a round table discussion.

CHARLES A. SHULL

## MATHEMATICS AT THE CHICAGO MEETING

THE preliminary program of the Chicago meeting of the American Association for the Advancement of Science and Associated Societies, printed in the issue of SCIENCE for May 19, contains information concerning the programs of the different sections, but it may be well to repeat here a summary of the plans of the mathematicians given in the announcement of the American Mathematical Association.

It reports that the American Association and associated societies will present unusually attractive programs in connection with the Century of Progress, the week of June 19 being devoted chiefly to pure science and the next week to applied science. There will be numerous addresses by prominent foreign scientific men who have been specially invited for