

ences, will present the results of his excavations on Frontenac Island, Cayuga Lake, during the summers of 1939 and 1940.

Professor David Goddard, professor of botany at the University of Rochester, is chairman of the Research Section. Other members of the executive committee include Professor Bishop, Professor Floyd C. Fairbanks, professor of astronomy at the university and president of the academy, Dr. Dean L. Gamble and Dr. R. L. Roudabush, both of Ward's Natural Science Establishment, and W. S. Cornwell, recorder.

CONFERENCE OF RADIO ENGINEERS AT THE OHIO STATE UNIVERSITY

THE fourth annual Broadcast Engineering Conference, directed by Dr. W. L. Everitt, of the Ohio State University, which lasted for ten days opened on February 10 for the discussion of new developments in the field of color television, ultra-high frequency transmission, etc.

During the first week speakers reported on technical improvements of speech input systems, studio acoustics, polyphase broadcasting, receivers, loud speakers, sound reproduction from recording and the status of television. Dr. Peter C. Goldmark, head of research in television of the Columbia Broadcasting System, discussed his work on color television, and E. K. Jett, chief engineer of the Federal Communications Commission, spoke at a dinner session on "Communications in National Defense." A. D. Ring, assistant chief engineer in charge of broadcasting for the Federal Communications Commission, led a general question period during the first week's program, which was sponsored jointly by the department of electrical engineering of the university and the National Association of Broadcasters.

Sessions held during the second week's program, which opened on February 17, considered the status of frequency modulation, its operating problems and technical aspects. Lectures were given on ultra-high frequency broadcasting. Homer Dudley, of the Bell Telephone Company, specialist in design and construction of speech analyzing and synthesizing circuits, spoke on "The Vocoder or Remaking Speech Electrically" on the evening of February 18.

A new feature of this year's conference was the addition of laboratory experiments on new equipment and techniques in broadcasting station measurements. Each member had an opportunity to make broadcast station measurements. The laboratory periods were held in the evening in several sections, so that all attending could make tests in which they are particularly interested. The scope of the conference was broadened this year to include topics of interest to the engineers working with airway and police communications, general receiver and laboratory development.

SYMPOSIA AT THE ST. LOUIS MEETING OF THE AMERICAN CHEMICAL SOCIETY

SCIENTIFIC problems involved in national defense, including the production of synthetic rubber and other materials and the fortifying of food with minerals and vitamins, will be discussed at the one hundred and first national meeting of the American Chemical Society, which will be held in St. Louis from April 7 to 11. An attendance of 3,500 is expected.

Dr. Charles L. Parsons, Washington, D. C., is the national secretary of the meeting. Dr. LeRoy McMaster, Eliot professor of chemistry and head of the department at Washington University, has been named honorary chairman. H. Edmund Wiedemann, consulting industrial chemist and past national president of the Food and Drug Officials Association, has been appointed general chairman.

Fourteen symposia, representing virtually every field of chemistry, in addition to technical papers to be presented before seventeen of the eighteen professional divisions, are planned. Several addresses by well-known scientific men will be delivered at a general session on Monday, April 7, in the St. Louis Municipal Auditorium. Dr. William Lloyd Evans, of the Ohio State University, president of the society, will preside.

"Fortifications of Foods with Minerals and Vitamins" is the subject of a group of papers to be presented in the Division of Agricultural and Food Chemistry, of which Gerald A. Fitzgerald, of the General Foods Corporation, New York City, is chairman. Another session of the division will be devoted to "Fats." The Biological Division, of which Dr. Herbert O. Calvery, of the U. S. Food and Drug Administration, is chairman, will hold its semi-annual symposium on "Vitamins."

"Some Current Projects in Medicinal Chemistry," "New Engineering Technique," "New Developments in the Processing of Rubber" and "Phenol-Formaldehyde Resins and Plastics" are other divisional symposia which will bring the emphasis of science to bear upon questions related to national defense.

The Division of Petroleum Chemistry, which is celebrating the twentieth anniversary of its founding, will discuss "Analytical Methods Used in the Petroleum Industry."

"Smokeless Fuels and Air-Pollution Abatement" will be the subject of a session of the Division of Gas and Fuel Chemistry. Other symposia will deal with the nomenclature of inorganic chemistry; thermodynamics of electrolytic dissociation; contemporary work in the monosaccharide field of sugar chemistry; the last two years of college chemistry, and a student symposium in chemical education.

Divisional papers will also be presented in the fields