

THE INDUSTRIAL RESEARCH INSTITUTE

THE third annual meeting of the Industrial Research Institute was held in Pittsburgh on May 16 and 17. More than fifty research executives from leading industrial concerns attended the meeting, which had headquarters at the Hotel Schenley. H. Earl Hoover, vice-president of the Hoover Company, Chicago, gave the address of the retiring chairman. Problems of industrial research management and of the education and training of research personnel were discussed at informal round table sessions during the meeting. There were group visits by the members and guests of this organization of research directors to the research laboratories of the Aluminum Company of America, Gulf Research and Development Company, Jones and Laughlin Steel Corporation, the Mellon Institute, the United States Bureau of Mines and the Westinghouse Electric and Manufacturing Company.

The Industrial Research Institute, an affiliate of the National Research Council, was organized three years ago to provide an agency for the study of research organization and management in industry, rather than technical problems. The membership is composed of industrial concerns maintaining research laboratories as a part of their organization. The chief executives in charge of research of the member companies represent them in the activities of the institute. It has its headquarters in Chicago.

At a dinner session, Donald R. G. Cowan, manager of commercial research of the Republic Steel Corporation, Cleveland, addressed the institute on the "Relation between Market and Technical Research."

The main technical sessions of the meeting were devoted to round table discussions. The important question of how the training of men for industrial research can be improved, both in our college and universities and after employment in industry, were discussed on the Friday round table. On Saturday morning, the members of the institute compared their respective methods of scheduling and controlling the many technical research projects that make up a laboratory's "production line" of daily work.

New officers and directors were chosen at a business meeting. L. W. Wallace, director of engineering and research, Crane Co., Chicago, was elected chairman, and F. W. Blair, chemical director, the Procter and Gamble Company, Ivorydale, Ohio, was elected vice-chairman, for the ensuing year. H. S. Benson, of the Research Division, United Shoe Machinery Corporation, Beverly, Mass., and W. R. Hainsworth, vice-president of Servel, Inc., New York, were also elected to three-year terms on the executive committee. Other members of the committee are: H. Earl Hoover, vice-president, The Hoover Company, Chicago, past chair-

man; Caryl P. Haskins, president, Haskins Laboratories, New York; Maurice Holland, director, Division of Engineering and Industrial Research, National Research Council, New York, and R. C. Newton, chief chemist, Swift and Company, Chicago.

CONFERENCE ON THE SUN AND SOLAR-TERRESTRIAL RELATIONSHIPS AT THE HARVARD OBSERVATORY

TWENTY-TWO investigators in the fields of astronomy, physics, meteorology and biology took part in a "Conference on the Sun and Solar-Terrestrial Relationships" at the Harvard Observatory on June 2 and 3. Recent studies of the sun and the solar atmosphere, the effect of solar radiation on the upper atmosphere of the earth and the influence of the sun on the earth were discussed. The conference was designed to review scientific work in progress on solar problems, and to discuss plans for future research.

Among the specific problems considered were the spectrum of the solar corona, new methods of measuring solar energy, sun-spots, effects of the sun on radio reception, relation of the sun to earth magnetism, photosynthesis, relation between radiation and growth of plants and variations in solar radiation. Dr. Robert R. McMath, of the McMath-Hulbert Observatory of the University of Michigan, showed his unusual motion pictures of motion in the solar prominences. A principal topic of the discussions was the recent discovery of the Swedish physicist, Dr. Bengt Edlén, that hitherto unidentified elements in the solar spectrum are probably iron, nickel and calcium in high stages of atomic excitation.

The participants in the conference included Professor Henry N. Russell, director of the observatory of Princeton University; Professor Brian O'Brien, of the observatory of the University of Rochester; Dr. Alvin G. McNish, of the Carnegie Institution of Washington; Dr. McMath, of the University of Michigan; Dr. Charles G. Abbot, secretary of the Smithsonian Institution, Washington, D. C., and Dr. Harlan T. Stetson, Professor Manuel S. Vallarta, Dr. C. L. Pekeris and Dr. Henry H. Hemmendinger, of the Massachusetts Institute of Technology.

Members of the faculty of Harvard University who took part were Professor Harlow Shapley, Professor Donald H. Menzel, Dr. Leo Goldberg, William Petrie, Dr. Fred L. Whipple, Karl F. Guthe, Miss Pearl Rubenstein and Dr. Cecilia Payne Gaposchkin, all of the Harvard Observatory; Associate Professor Harry R. Mimno and John A. Pierce, of the Cruft Laboratory of Communication Engineering; Professor Kenneth V. Thimann and Dr. F. K. Skoog, of the Harvard Biological Laboratories, and Mrs. H. F. Cullinane, of the Blue Hill Meteorological Observatory.