model); Spectrometer; Grating Spectrograph; Universal Spectrograph; Precision Micro-Colorimeter; Immersion Colorimeter.

Chemical Model of the German Typewriter "Adler." G.E. Wattmeter Type P3.

Information concerning these offers and requests for rare instruments that can be sold, loaned or leased for essential war or other research can be obtained from D. H. Killeffer, chairman of the committee, 60 East 42nd Street, New York, N. Y.

## METEOROLOGICAL TRAINING FOR THE ARMY AIR FORCES

AN opportunity for high-school graduates with two and a half years of mathematics to receive training in basic pre-meteorology, leading to commissions, has been announced by the Army Air Forces. The new course will begin on May 17. At the same time applications for courses, beginning on March 1, will continue to be accepted.

Civilians, enlisted men and members of the Enlisted Reserve Corps, including students who have recently graduated or are about to do so, are eligible for the courses. Pay while in training, and free uniforms, board, room and tuition are provided. Applications should be addressed to "Weather," care of the University of Chicago.

The basic premeteorology course for high-school graduates requires twelve months, and is followed by advanced training in meteorology for eight months and commissions as meteorological officers in the Army Air Forces. Requirements are: age, 18 to 21 years, inclusive; two and a half years of high-school mathematics, including algebra and plane geometry, as well as one year of high-school science.

Applicants for the premeteorology course opening on March 1 must be between the ages of 18 to 30, inclusive, and must have completed college algebra, trigonometry and analytic geometry. Previous requirements of one year of residence in college will be waived for outstanding students. This course requires six months, and is followed by the advanced training in meteorology.

The curriculum in the basic course is equivalent to two years of college study in mathematics and science. The premeteorology course is the equivalent of one year of college in these fields. It is expected that both courses of study will be credited by colleges toward post-war degrees.

The basic course in premeteorology and the course in meteorology will be offered at twenty-nine selected colleges and universities throughout the country.

## PHILADELPHIA MEETING OF THE INDUS-TRIAL RESEARCH INSTITUTE

THE importance of research, both to the present war effort and to our economic development after the war, was given special emphasis at the recent winter meeting of the Industrial Research Institute in Philadelphia on January 22 and 23. It was attended by over seventy-five industrial executives and research directors, representing member companies and their guests. The sessions were all informal round-table conferences, as is the custom in institute meetings.

At the opening session on Friday morning, W. C. Stevenson, chief of the Laboratories and Technical Equipment Section, Safety and Technical Equipment Division of the War Production Board, described the present regulations of the board that affect the supply of materials and equipment for research laboratories. He stated that the War Production Board feels that research is one of the most important phases of the war effort. The Laboratories and Technical Equipment Section has been charged with the duty of working out ways in which laboratories doing essential research can obtain materials and equipment with the least possible delay and burdensome paper work. Mr. Stevenson explained how to take advantage of the special concessions that have already been secured for research laboratories under the Production Requirements Plan and the Controlled Materials Plan that is gradually supplanting it.

R. C. Newton, vice-president of Swift and Company, Chicago, led a discussion on post-war planning and the research laboratory. It was brought out that, without slackening their all-out war effort, many industrial concerns are giving some organized study to post-war problems and how to meet them. The important part that industrial research directors must play in the post-war planning activities of their companies was emphasized.

There was a symposium on new research tools and their applications in place of the usual visit to a local plant or laboratory. This comprised talks, illustrated by movies and slides, on high-speed photography by Professor Harold E. Edgerton, of the Massachusetts Institute of Technology, and F. Nickel, Jr., of the Western Electric Company, and on the electron microscope by M. C. Banca, Radio Corporation of America, Camden, N. J.

The possibilities and limitations of job evaluation procedures, as applied to research organizations, were discussed at simultaneous group conferences under the leadership of F. W. Blair, chemical director, the Procter and Gamble Company, Ivorydale, Ohio; J. N. Dow, technical director, Bigelow Sanford Carpet Company, Thompsonville, Conn.; J. M. McIlvain, administrative supervisor, Research and Development Department, the Atlantic Refining Company, Philadelphia, Pa.; and R. S. Taylor, chief engineer, Servel, Inc., Evansville, Ind. Following this, A. G. Ashcroft, product engineer, Alexander Smith and Sons Carpet Company, Yonkers, N. Y., chairman of a special

#### NOMINATIONS OF OFFICERS OF THE AMERICAN INSTITUTE OF ELEC-TRICAL ENGINEERS

THE National Nominating Committee of the American Institute of Electrical Engineers, consisting of members from various parts of the country, has nominated the following official ticket of candidates for the offices becoming vacant on August 1:

- For President: Nevin E. Funk, vice-president in charge of engineering, Philadelphia Electric Co.
- For Vice-presidents:
  - Middle Eastern District, W. E. Wickenden, president, Case School of Applied Science, Cleveland, Ohio.
  - Southern District, C. W. Ricker, professor and head of the School of Electrical Engineering, Tulane University, New Orleans, La.
  - North Central District, L. A. Bingham, assistant professor of electrical engineering, University of Nebraska.
  - Pacific District, J. M. Gaylord, chief electrical engineer, Metropolitan Water District of Southern California, Los Angeles.
  - Canada District, W. J. Gilson, general manager, Eastern Power Devices, Ltd., Toronto.
- For Directors: C. M. Laffoon, engineering manager, A. C. Generator Eng. Dept., Westinghouse Electric and Mfg. Co., East Pittsburgh.
  - C. W. Mier, engineer, Southwestern Bell Telephone Co., Dallas, Texas.
  - S. H. Mortensen, chief electrical engineer, Allis-Chalmers Mfg. Co., Milwaukee, Wis.

For National Treasurer: W. I. Slichter, professor emeritus of electrical engineering, Columbia University.

These official candidates, together with any independent nominees that may be proposed later in the manner specified by the constitution and by-laws, will be voted upon by the membership at the coming election this spring.

H. H. HENLINE, National Secretary

## AWARD OF THE WILLARD GIBBS MEDAL

To Dr. Conrad Arnold Elvehjem, professor of biochemistry, University of Wisconsin, the Chicago section of the American Chemical Society has awarded the thirty-second Willard Gibbs Medal, founded by William A. Converse. This is the highest award that the section can bestow. It is given each year in special recognition of "eminent work in and original contributions to pure or applied chemistry." The medal is awarded to Dr. Elvehjem,

For his studies involving trace elements in nutrition, begun in 1928, in collaboration with Hart, Steenbock and Waddell, with the discovery that copper is essential to the formation of hemoglobin and for subsequent extensive studies of the metabolism of iron, copper, manganese, zinc, cobalt, selenium, boron and aluminum and their function in nutrition.

For studies in tissue respiration, begun at Cambridge and since 1929 applied to the study of vitamin function, which have shown the relation of thiamine to cocarboxylase, riboflavin, *d*-amino acid oxidase and xanthine oxidase, and of nicotinic acid to coxymase.

For studies involving the B vitamins, begun with the use of the chick as test animal and the use of liver extract as vitamin source, which resulted in his greatest achievement—the discovery of nicotinic acid as a cure for black tongue in dogs.

For continuing pioneer work; in discovering the place of nicotinic acid in the fight to combat black tongue, pellagra and other deficiency diseases occurring particularly in the southern part of the United States; in demonstrating that chick dermatitis is due to pantothenic acid deficiency; in the discovery of a very labile factor in green, succulent material through studies with mineralized milk diets, which lead to further studies on synthetic diets for test animals; and for studies on the newer members of the vitamin B complex, now in progress.

Dr. Elvehjem was born in McFarland, Wis., on May 27, 1901. He was graduated from the University of Wisconsin in 1923 and received his Ph.D. degree from the same institution in 1927.

He has been associated with his Alma Mater, without interruption, since 1925, when he became an instructor in biochemistry. He became assistant professor in 1930, after having spent a year abroad studying at the University of Cambridge, England. He was appointed associate professor in 1932 and professor in 1936.

The formal presentation of the medal will be made at the meeting of the Chicago section on May 20.

# SCIENTIFIC NOTES AND NEWS

DR. DONALD D. VAN SLYKE, a member of the Rockefeller Institute for Medical Research, Department of the Hospital, New York City, has been elected an honorary member of the Kungl. Vetenskaps-Societeten (Royal Society of Sciences) of Upsala, Sweden. AT the commencement exercises of the Marquette University School of Medicine on February 13, the degree of doctor of science was conferred on Rear Admiral Ross T. McIntire, Surgeon General of the United States Navy.

DR. LESLIE T. WEBSTER, a member of the Rocke-