already committed to teaching or research as a career were given fellowships for advanced medical study.

Aid for rural public health services was concentrated in four southern states: Tennessee, Mississippi, Alabama and Oklahoma. In the first of these the fund has been active for seventeen years. In four counties in Tennessee, three in Mississippi and one in Oklahoma local health departments have been built up to a point where they illustrate the value of adequate staffing and a planned program, and, with direct and indirect aid from the fund, the technical and administrative services of the state health departments have been strengthened. The state health laboratory of Oklahoma, for example, did 50 per cent. more work in the first six months of 1941 than in all of 1938. Progress in the control of tuberculosis by artificial pneumothorax and of gonorrhea by sulfonamide therapy marked the work of the county health departments to which the fund gives financial or technical assistance.

No new hospital award was made this year, but a community hospital at Pittsfield, Ill., was completed and one at Mt. Pleasant, Mich., was begun. The capacity of a hospital at Kingsport, Tenn., was doubled, the cost being divided between the fund and the community. The twelve hospitals already in service under this program were used almost to normal working capacity and their earned income rose faster than their operating expenses. At several hospitals visiting instructors from leading medical schools stimulated staff education through long informal clinical institutes.

Mrs. Edward S. Harkness is honorary president of the Commonwealth Fund. Malcolm P. Aldrich is president; the board of directors now includes Mr. Aldrich, Phil W. Bunnell, Samuel H. Fisher, George Welwood Murray, Dean Sage and William E. Stevenson.

## STALIN PRIZES

IN 1941, several outstanding Soviet scholars and mathematicians received Stalin Prizes for scientific contributions made during the last six or seven years.

The Stalin Prizes were established in honor of the sixtieth birthday of Joseph Stalin in 1939. They are divided into three classifications: 1st prize, 100,000 rubles; 2nd prize, 50,000 rubles; 3rd prize, 25,000 rubles.

The Soviet mathematicians receiving first prizes were:

Vinogradov, Ivan Metveyevich, member of the Academy of Science of the USSR, for his work published in 1937, entitled "A New Method in the Analytical Theory of Numbers."

Gelvich, Petr. Augustovich, Major General of Artillery, professor of the Artillery Academy of the Red Army, for his scientific works: "On Dispersion, Probability of Hits, and Mathematical Anticipation of the Number of Hits," published in 1934; "Theoretical Fundamentals for the Elaboration of Gunnery Rules," published in 1936; and "Firing at Rapidly Moving Targets," published in 1940.

Kapitza, Peter Leonidovich, member of the Academy of Science of the USSR, for his work "Turbodetander for Obtaining Low Temperatures and Its Application for Obtaining Liquid Air," published in 1939.

Muskhelishvili, Nikolai Ivanovich, member of the Academy of Science of the USSR, professor of the State University in the city of Tbilisi, for his work published in 1935, "Some Basic Problems in the Mathematical Theory of Elasticity."

Mathematicians receiving second prizes were:

Alikhanov, Abram Issaakovich, member correspondent of the Academy of Science of the USSR, and Alikhanian, Artem Issaakovich, scientific worker of the Physico-Technical Institute of the Academy of Science of the USSR, for their scientific work on radio published in 1936, 1938 and 1940.

Kholmogorov, Andrei Nicolayevich, member of the Academy of Science of the USSR, and Khinchin, Alexander Yakovlevich, member correspondent of the Academy of Science of the USSR, professors at the Moscow State University, for their scientific works on the theory of probability: "Asymptotic Laws of the Theory of Probability," published in 1936, "On Analytical Methods in the Theory of Probability," published in 1938, and "Limit Laws of the Sums of Independent Chance Quantities," published in 1938.

Pontriagin, Lev Semenovich, member correspondent of the Academy of Science of the USSR, professor of the Moscow State University, for his work published in 1938, "Topological Groups."

Sobolev, Sergei Ljvovich, member of the Academy of Science of the USSR, professor of the Moscow State University, for his works on the mathematical theory of elasticity: "Some Questions in the Theory of the Expansion of Vibrations," published in 1937, and "On the Theory of Non-Linear Hyperbolic Equations with Partial Derivatives," published in 1939.

## THE INTER-AMERICA BUREAU OF THE NEW YORK ACADEMY OF MEDICINE

THE New York Academy of Medicine, realizing the responsibility of North American physicians in the advancement and dissemination of knowledge of the medical sciences in the Western Hemisphere, has organized an Inter-America Division whose purpose is to cultivate friendship, understanding and sympathy with the medical men in other countries of the Americas.

It is pointed out that the present war has dimmed the light of the medical sciences in many, if not all, of

the great medical teaching and research centers of Europe. Even were these centers still operating, access to them by North and South Americans alike is unattainable. As a result, an ever-increasing rapprochement is developing between the scientists of the Western Hemisphere. For the first time, perhaps, many of us are becoming acquainted, exchanging ideas, knowledge and culture.

To further these ends the Bureau of Clinical Information of the academy has made provisions to welcome medical visitors from the American countries and to extend to them the facilities it possesses for the pursuit of knowledge. A Spanish physician who can converse in Spanish, Portuguese and English will be available to the medical visitors from the Republics of Central and South America.

This bureau provides information regarding opportunities for post-graduate medical study in New York or other medical centers of the United States, and particularly publishes a *Daily Bulletin* of clinics, meetings, lectures, conferences, hospital rounds and other interesting medical activities in New York which are freely open to medical visitors.

At the academy itself, many lectures and conferences are held to which visiting physicians are welcomed. The library is one of the largest of its kind in the United States. Its files of American and foreign periodicals are very complete. A bibliographic and photostat service is available for visitors at the usual library rates. The library itself is open to the public every week day from 9 to 5 o'clock.

### THE SHORTAGE OF TECHNICALLY TRAINED CHEMISTS

THE American Chemical Society has made public a survey of one hundred and eighteen colleges and twenty-nine chemical corporations and has issued a statement to the effect that present and impending shortages of technically trained men in the army of production threaten to hamper the war effort of the nation.

The survey was conducted by the Defense Committee of the society, consisting of Professor Roger Adams, head of the department of chemistry at the University of Illinois, *chairman;* Dr. James B. Conant, president of Harvard University; Professor Warren K. Lewis, Massachusetts Institute of Technology; Dr. Thomas Midgley, Jr., of Worthington, Ohio, vice-president of the Ethyl Gasoline Corporation; Dr. Edward R. Weidlein, director of the Mellon Institute of Industrial Research, Pittsburgh; Dr. Robert E. Wilson, president of Pan American Petroleum and Transport Company, New York; and Dr. Charles L. Parsons, of Washington, D. C., secretary of the society.

It is reported by the committee that many chemical companies complained that production is falling off, and that future production is jeopardized by the withdrawal of trained chemists and chemical engineers from industry. An "appalling shortage" of trained individuals in chemistry and chemical engineering is shown by the colleges, which reported almost without exception that chemical or chemical engineering alumni are all employed and that current demands can not be supplied. Harvard University disclosed that the present shortage of trained chemists is the most serious in its experience.

That essential industry needs in 1942 from 2,000 to 3,000 more chemists and chemical engineers than will be graduated or are otherwise available, and "no one knows whence they are to come," was the situation brought out by a canvass of corporations representing a cross-section of the chemical industry. It is pointed out that "magnesium, aluminum, transparent plastics, rubber, explosives, medicinals and innumerable minor but essential supplies needed by the Army, Navy, Signal, Sanitary and Medical Corps, can be produced only under the guidance of trained engineering and chemical personnel."

The official statement, which is signed by Dr. Charles L. Parsons, secretary of the society, reads:

> The Army and Navy are deeply concerned. Investigations made by this organization prove that trained personnel to produce this material is lacking. Not only the finished product but also the raw material going into smokeless powder, rubber, etc., can be produced only under the active control of experienced chemists and chemical engineers. There is far greater immediate danger to the ultimate outcome of the war from shortages of such man power than there is from any lack of officers and men in the combat force. Without production of essential materials the war will be lost, since the combat forces can not exist without material.

## SCIENTIFIC NOTES AND NEWS

THE John Scott Medals and Premiums of the City of Philadelphia were presented on February 13 at the midwinter meeting of the American Philosophical Society to Major Edwin H. Armstrong, professor of electrical engineering at Columbia University, for his work in frequency modulation in radio and to Dr. Robert R. Williams, chemical director of the Bell Telephone Laboratories, for his work on thiamin (vitamin $B_1$).

THE Edison Medal of the American Institute of Electrical Engineers was presented at the annual meeting to Dr. J. B. Whitehead, professor of electrical