Professor Giulio Sirovich, professor of chemistry in the University of Rome and director of the National Institute of Metallurgical Chemistry, was killed in an automobile accident on October 4.

A MEMORIAL meeting in honor of the late Dean Herman Schneider, of the University of Cincinnati, founder of the plan of cooperative technical education, will be held at the University of Cincinnati on

November 5. President Raymond Walters will preside, and addresses will be made by Dr. Charles F. Kettering, vice-president of the General Motors Corporation; Dr. Parke R. Kolbe, president of the Drexel Institute of Technology, Philadelphia, Pa., and Dr. Frank W. Chandler, professor of English and comparative literature in the College of Liberal Arts.

SCIENTIFIC NOTES AND NEWS

The Nobel Prize for physiology and medicine for 1939 has been awarded to Dr. Gerhard Domagk, of the German I. G. Farbenindustrie, in recognition of his work with protonsil, forerunner of sulfanilamide and similar chemical compounds for the treatment of streptococcus infections. The prize for 1938, which was held over from 1938, has been awarded to Dr. Corneille Heymans, professor of pharmaco-dynamics at the University of Ghent, Belgium, in recognition of his work on the sinus aorta mechanism in breathing. Dr. Domagk is reported to be awaiting the approval of the German Government before accepting the prize.

Dr. Edward A. Doisy, professor of biological chemistry and director of the department of the School of Medicine of the St. Louis University, received the seventh annual St. Louis Award, at a public ceremony held in the mayor's office on October 26. The award, \$1,000 and a certificate, is the gift of an anonymous donor. The certificate states that Dr. Doisy was chosen: "For his brilliant investigations and research which resulted in the discovery, isolation and synthesis of the vitamin that checks hemorrhage."

The Perkin Medal, given annually by the Society of Chemical Industry for "valuable work in applied chemistry," has been awarded to Dr. Charles M. A. Stine, vice-president in charge of research of E. I. du Pont de Nemours and Company. The Chemical Industry Medal has been awarded to Dr. Robert E. Wilson, president of the Pan American Petroleum and Transport Company.

The annual Progress Medal of the Society of Motion Picture Engineers was presented on October 18 at the semi-annual dinner to Dr. Loyd A. Jones, since 1916 chief physicist of the laboratories of the Eastman Kodak Company, in recognition of his contributions to motion picture technology.

The Franklin Institute of the State of Pennsylvania has made its first award of the Vermilye Medal "in recognition of outstanding contribution in the field of industrial management" to Lewis H. Brown, president of the Johns-Manville Corporation, New York. Presentation of the medal will be made in Philadelphia

on November 14. It is named after its donor, William M. Vermilye, vice-president of the National City Bank of New York.

At the graduation ceremony of the University of St. Andrews on October 6 the honorary degree of doctor of laws was conferred on Dr. Alexander Mackenzie, from 1914 until his retirement with the title emeritus in 1938 professor of chemistry in University College, Dundee.

The Chicago Branch of the American Association of Scientific Workers at its October meeting elected the following officers and members of the executive committee: Professor Arthur H. Compton, chairman; Dr. Zelma Baker, secretary-treasurer; Professor Anton J. Carlson, Dr. Ralph W. Gerard, Dr. Victor E. Johnson and Dr. Benjamin F. Miller, members.

Dr. Louis M. Massey, professor of plant pathology at Cornell University, was elected president of the American Rose Society at the recent Brooklyn meeting.

Dr. P. S. Burgess has returned as dean of the College of Agriculture of the University of Arizona and director of the Experiment Station, after spending a year in a similar capacity at the Rhode Island College. Dr. R. S. Hawkins, who has served as acting dean and acting director, has been appointed vice-dean and vice-director in addition to reassuming his position as head of the department of agronomy.

Dr. Willard M. Allen, associate professor of obstetrics and gynecology at the Medical School of the University of Rochester, New York, has been appointed professor of obstetrics and gynecology in the Medical School of Washington University, St. Louis. Dr. Otto H. Schwarz, who for eleven years has been head of the department, has expressed his desire to be relieved of the administrative responsibilities of the conduct of the department in order that he may have time to engage in consulting practice.

Nature states that W. C. Wilson, director of the unit for clinical research in surgery at Edinburgh Royal Infirmary, has been appointed regius professor of surgery in the University of Edinburgh. Dr. M. J. Murray, head of the department of chemistry, and Dr. Forrest F. Cleveland, head of the departments of physics and mathematics of Lynchburg College, have been appointed to assistant professorships of chemistry and physics, respectively, at the Armour Institute of Technology, Chicago. They will continue their joint research on the Raman effect and molecular structure.

Dr. Alfred Blalock, professor of surgery, Vanderbilt University School of Medicine, and Dr. Homer W. Smith, professor of physiology in the New York University College of Medicine, have been appointed members of the Medical Fellowship Board of the National Research Council for the period ending June 30, 1941.

Professor George Erle Beggs, of Princeton University, has been elected chairman of the Engineering Foundation. Dr. O. E. Buckley, executive vice-president of the Bell Telephone Laboratories, New York, has been elected vice-president; Otis E. Hovey has been reelected director, and John H. R. Arms has been reelected secretary.

Dr. ESMOND R. Long, director of the Phipps Institute, Philadelphia, has been elected a member of the Medical Research Committee and of the Committee on Standards of Undergraduate Education of the National Tuberculosis Association.

RICHARD W. JACKSON, associate professor of biochemistry at the Cornell University Medical College, has been appointed chief of the Protein Division of the Eastern Regional Research Laboratory at Wyndmoor, Pa., of the U. S. Department of Agriculture, where he will be in charge of research on the isolation and properties of proteins available from agricultural products.

Parke, Davis and Company have renewed their fellowships on Cascara and Vitamin C in the department of chemistry of the University of Pittsburgh. Robert W. Liddell, of the University of Pittsburgh, has been reappointed fellow, and Kenneth A. Kuiken has been appointed Vitamin C fellow. The Abbott Laboratories, Incorporated, also have provided a Vitamin C fellowship, to which Howard H. Fricke, of Washington State College, has been appointed. Dr. C. G. King, professor of biochemistry, is directing the researches.

Dr. George L. McNew, fellow at the Rockefeller Institute for Medical Research, Princeton, N. J., has been appointed chief of research in plant pathology at the New York State Agricultural Experiment Station.

LEONARD J. Goss, pathologist for the department of animal pathology of the Kentucky Agricultural Experiment Station, has been appointed veterinarian at the New York Zoological Park.

According to *Nature* Professor Kanichi Terazawa, dean of the faculty of science of Tokyo Imperial University, has succeeded Professor Mishio Ishimoto as director of the Earthquake Research Institute. Professor Ishimoto will continue his work as a member of the institute.

Dr. Mortier F. Barrus, professor of plant pathology at Cornell University, sailed on September 29 for Venezuela to organize extension workers there and to help to overcome plant disease problems. Dr. Carlos S. Chardon, formerly president of the University of Puerto Rico, is one of his co-workers.

THE Medical Aid Committee for Spanish Refugees announces that under its auspices Dr. Emilio Mira, professor of psychiatry in the faculty of medicine of the University of Barcelona, will spend two weeks in the United States prior to taking up his work as director of mental hygiene for the Cuban Government.

Dr. C. A. ELVEHJEM, professor of biochemistry at the College of Agriculture of the University of Wisconsin, will deliver the second Harvey Society lecture of the current series at the New York Academy of Medicine on November 16. He will speak on "The Biological Significance of Nicotinic Acid."

DR. EDWARD R. WEIDLEIN, director of the Mellon Institute of Industrial Research, gave the principal address at the dedication of the Paul Mellon Science Hall of the Choate School at Wallingford, Conn. The building is the gift of Paul Mellon, son of the late Andrew W. Mellon.

Dr. George B. Cressey, of Syracuse University, gave on October 25 an illustrated lecture on "China, Its Natural Resources and Their Significance" before the Smith College Chapter of Sigma Xi. During the afternoon he spoke to the members of the Department of Geology on "Pioneering in Siberia."

Dr. Ernest W. Goodpasture, professor of pathology at the Vanderbilt University School of Medicine, Nashville, gave a series of lectures before the Portland Academy of Medicine from October 23 to 25. His subjects were "Investigations of Virus Infections and Immunity by Means of Chick Embryo Technic"; "Experimental Bacterial Infections of the Chick Embryo" and "A Consideration of Pathogenesis of Virus and Bacterial Infection, with a Review of Some Virus Diseases."

Speakers at the ninth annual Forum on Current Problems of *The New York Herald Tribune* included Dr. James Bryant Conant, president of Harvard University; Dr. Arthur H. Compton, professor of physics at the University of Chicago; George Washington Carver, professor of chemistry at Tuskegee Institute; Dr. Perrin H. Long, associate professor of medicine

at the Johns Hopkins University; Dr. Foster Kennedy, professor of neurology at Cornell University Medical College, and Dr. Francis Carter Wood, director of the Crocker Institute for Cancer Research, Columbia University.

Dr. Harlow Shapley, Dr. Otto Glasser and Dr. Paul B. Sears are among the speakers announced by Cooper Union, New York City, in a series of lectures entitled "Adventures in Ideas" extending from October to April. They speak in the Sunday evening series, which will be held each week, with the exception of December 24 and 31, at 8:00 p.m., and which will be broadcast over station WQXR.

Fellowships in the medical sciences, administered by the Medical Fellowship Board of the National Research Council, of which Dr. Francis G. Blake, of Yale University, is chairman, will be available for the year beginning July 1. These fellowships are open to citizens of the United States or Canada who possess an M.D. or a Ph.D. degree. They are intended for recent graduates and not for those already professionally established. Fellows will be appointed at a meeting of the board about March 1. Applications to receive consideration must be filed on or before January 1, 1940. Appointments may begin on any date determined by the board. For further particulars concerning these fellowships, address the Secretary of the Medical Fellowship Board, National Research Council, 2101 Constitution Avenue, Washington, D. C.

THE National Association of Manufacturers is planning to extend specific recognition to science, in the form of awards to "outstanding contemporary scientists who will be selected as modern pioneers." The first occasion on which these awards will be bestowed is at the celebration of the one hundred and fiftieth anniversary of the American Patent System on February 27. Dr. Karl T. Compton, president of Massachusetts Institute of Technology, has been elected chairman of a committee of six scientific men who will make the selection. The other members are Dr. Forest R. Moulton, permanent secretary of the American Association for the Advancement of Science; Dr. George B. Pegram, dean of the Graduate School, Columbia University; Professor John T. Tate, professor of physics and dean of the College of Science, Literature and Art and director of University College of the University of Minnesota; Dr. Edward R. Weidlein, director of the Mellon Institute for Industrial Research, Pittsburgh, and Professor Frank C. Whitmore, research professor of organic chemistry and dean of the School of Chemistry and Physics at the Pennsylvania State College. The association has asked its members and trade groups and scientific societies to send nominations to its offices at 14 West Forty-ninth Street before December 1. A special committee of eighty industrialists has been appointed to promote the search for "modern pioneers." The chairman is Robert L. Lund, executive vice-president of the Lambert Pharmacal Company.

THE twelfth annual Graduate Fortnight of the New York Academy of Medicine was opened on October 23 with an address of welcome by Dr. Malcolm Goodridge, president of the academy. This year the subject discussed is "The Endocrine Glands and Their Disorders." Seven hundred visiting physicians, in addition to the 2,300 fellows of the academy, registered. Twenty-two clinical conferences and demonstrations were arranged to be held in seventeen of the hospitals of New York City, and eight round table conferences have been organized. Ten evening meetings, during which addresses were delivered by twenty-three speakers drawn from the leading universities and research institutions of the United States and Canada, were held, at which the speakers included: Dr. H. M. Evans, director of the Institute of Experimental Biology of the University of California; Dr. J. B. Collip, professor of biochemistry, McGill University; Dr. Elmer L. Sevringhaus, professor of medicine, the University of Wisconsin; Dr. Walter B. Cannon, professor of physiology, Harvard University; Dr. Robert F. Loeb, professor of medicine, Columbia University; Dr. C. N. H. Long, Sterling professor of physiological chemistry, Yale University; Dr. R. T. Woodvatt, clinical professor of medicine, Rush Medical College; Dr. John F. Fulton, Sterling professor of physiology, Yale University; Dr. William G. MacCallum, professor of pathology, the Johns Hopkins University, and Dr. Philip E. Smith, professor of anatomy, Columbia University. The scientific exhibit, which covers many aspects of endocrinology, is in the building of the New York Academy of Medicine.

The winter meeting of the Industrial Research Institute will be held in Chicago on Friday and Saturday, December 8 and 9. The institute, an affiliate of the National Research Council, has a membership made up of executives who manage scientific research for large and small industries in the United States. Members of the institute will be the guests of Swift and Company at its laboratories on Friday morning and afternoon. The Friday evening and Saturday sessions will be held at the Hotel Stevens.

The policy to be followed by the Royal Institution during the war has been under consideration by the managers, who have decided to maintain its activities so far as possible. The libraries and reading rooms will be kept open as usual. Although the present lighting restrictions prohibit the holding of the Friday evening meetings, a series of afternoon lectures is being arranged.

THE Royal Society, London, will function normally

during the war; the administrative office has been moved to Trinity College, Cambridge, and it is probable that the meetings of the society will be held in that town.

The celebration of the centenary of the Royal Microscopical Society in October has been postponed. It may be found necessary for the time being to curtail the number of ordinary meetings normally held in

London during the session. Arrangements are being made to continue publication of the society's journal as usual.

The new mechanical parts plant of the Spencer Lens Company was opened formally on October 26. The operations of each department were demonstrated, and there was an exhibit of scientific optical instruments.

DISCUSSION

THE WAR AND CHRONICA BOTANICA

The impact of the European war on science has already been felt in the United States through the cancellation of foreign subscriptions to American scientific journals and to services like Biological Abstracts. The same is true in other neutral nations as well as among the belligerents, no doubt. An obligation rests upon every scientific society and association in this country to consider the effects of the war situation and to join forces in preserving, as far as may be possible, essential scientific publishing and abstracting services until normal conditions return.

A colleague permits the writer to quote from a letter from the editor of *Chronica Botanica*, the international plant science news-magazine. The letter is signed by Dr. Frans Verdoorn, who writes in September from Leiden, Holland (Postoffice Box 8) as follows:

The present war which is expected to be a lengthy one makes it impossible for me to continue Chronica Botanica. About a fortnight ago my morning mail dropped from about 60 pieces to 12 and hardly any information or money is being received. I can still finish this year's Chronica and am doing so, but that will be all. This country of course is neutral and there is a fair chance that it will remain so, but that does not help me much as I am wholly dependent on information and subscriptions from countries now in war, from which I do not hear anything.

My wife and I gave 5 years to building up the *Chronica* and we are in great distress that we should have to stop it. And I will have to do so as the post which I will have to accept under the circumstances in the very near future, is in Java, . . . but one can not do any international work there. It is out of question to continue the *Chronica* there.

I feel, however, that it would be possible to continue the Chronica in some form in the States. Even if the States would be involved in a war, I could continue it there with the aid of North and South American editors, and it would still remain self-supporting. But I would need some kind of post for my own living, as—at least during the war—there will be hardly any profits on the Chronica. . . .

Even if I had a minor post to start with, I would be able to continue my *Chronica* in the States during the war, and that is the only thing that matters at present.

I am asking this not on behalf of myself, as there are for me personally suitable posts, but on behalf of the Chronica which during the past year has become a symbol to its 2,000 readers, a symbol of good will and cooperation, which I am most anxious to continue.

Any suggestions which may disclose possibilities for the continuance of *Chronica Botanica* should be sent immediately to Dr. Frans Verdoorn, Editor, *Chronica Botanica*, P. O. Box 8, Leiden, Holland. Dr. Verdoorn's ability as a plant scientist is widely recognized and the unique editorial services he has rendered to his professional colleagues all over the world through the medium of *Chronica Botanica* are deeply appreciated. It would be a permanent international scientific loss if *Chronica Botanica* should be forced to suspend on account of the war. Is there not a way out?

ROBERT F. GRIGGS

REMARKS ON THE CENTER OF POPULATION

This note is written to draw attention to an erroneous statement made at the end of the paper on "Centers of Population of Learned Groups," by C. B. Read.

In the paper referred to the center of a population the n members of which have rectangular coordinates $(x_i, y_i), i=1, 2, \ldots, n$, is defined as the point with coordinates

$$x = \frac{\sum x_i}{n} \qquad \qquad y = \frac{\sum y_i}{n}$$

that is, the point (x, y) is the center of gravity of the distribution. A statement is made implying that the sum of the distances of the members from this point is minimum. This is not true in general; (x, y) is the point for which the sum of the squares of the distances is minimum.

The distinction is clear in the special case of a population distributed on a straight line. The mean point is the center of population as here defined, while the median, a point such that the same number of members lie on each side of it, has the property that the sum of the distances from it is minimum. These points do not in general coincide; for many distributions the median is between the mean and a point of greatest population density, the mode. As a definite example consider the seven points having coordinates 0, 1, 2, 3,

¹ Science, 90: 61-63, July 21, 1939.