

Two research fellowships in organic chemistry carrying a salary of \$2,000 each a year have been organized for the coming year in the Sterling Chemistry Laboratory of Yale University. They will be known as the Milton Campbell research fellowships in organic chemistry and will be open only to men who have received their Ph.D. degree. Application for these fellowships with complete credentials should be directed to Professor Treat B. Johnson. A graduate fellowship in organic chemistry has been tendered to the Sterling Chemistry Laboratory by the Eli Lilly Laboratories for the year 1928-29. It has been awarded to Mr. Robert M. Herbst.

A census of the scientific workers of the Soviet Union has been taken by the Russian Academy of Sciences. There are altogether about 26,000 scientific workers active in the U. S. S. R., of which 12,000 are living in Leningrad and Moscow. A reference book on the scientific institutions of the U. S. S. R. is being issued by the academy.

DR. J. McKEEN CATTALL, editor of *SCIENCE*, sails for Europe on May 26, returning on August 5. During this interval editorial communications should be addressed to Dr. McKeen Cattell, whose address is Garrison, N. Y.

UNIVERSITY AND EDUCATIONAL NOTES

COLTON LABORATORY, built and equipped to care for the departments of physics, chemistry and biology at Hiram College, was dedicated May 12. The building consists of three stories over a full basement and is constructed of concrete, brick and stone. It is named in honor of Professor George H. Colton, who was a teacher of the sciences at Hiram College from 1873 to 1926. Addresses were made by Dr. H. C. Cowles, Dr. Harry N. Holmes and Dr. H. B. Lemon, representing, respectively, botany, chemistry and physics.

THE departments of mathematics and physics of Princeton University have announced the following special program of graduate courses and lectures during the coming academic year in the field of recent developments in mathematical physics: Professor H. Weyl will lecture on "Group Theory and Quantum Mechanics." He will be assisted by Dr. H. P. Robertson, visiting assistant professor from the California Institute of Technology. Professors Eisenhart and Robertson will offer a course in "The Mathematics of the Newer Quantum Theory." Professor E. U. Condon will give a course in "Wave Mechanics," with special emphasis on the physical concepts and applications.

DR. JAMES I. SCARBOROUGH has been appointed head of the department of surgery at the University of Arkansas, to assume his new duties on September 15.

DR. LEE WALLACE DEAN, formerly of the University of Iowa, has been appointed full-time professor of oto-laryngology in the Washington University School of Medicine. Dr. Dean will assume his duties immediately.

THE recent promotion of Dr. Selig Hecht to a full professorship of biophysics in Columbia University was incorrectly reported in *SCIENCE* as being in the department of biochemistry.

DR. J. C. GEIGER, for five years connected with the faculty of the University of Chicago, has arrived at the University of California to accept an appointment as associate professor of epidemiology in the medical school and Hooper Foundation for Medical Research.

DR. M. T. TOWNSEND, of St. John's College, Md., has been appointed associate professor of histology and embryology in the medical school at the University of Oklahoma.

MISS HOPE HIBBARD, fellow in the International Education Board, at present in Paris, has been appointed assistant professor of zoology at Oberlin College.

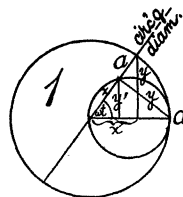
DR. W. W. JAMESON has been appointed to the chair of public health at the University of London, tenable at the London School of Hygiene and Tropical Medicine.

DR. HERMANN SIERP, professor of botany in the University of Munich, has been appointed to the chair of botany in the University of Köln.

DISCUSSION AND CORRESPONDENCE

THE LITTLE CIRCLE OF REFERENCE

ONE usually defines a simple harmonic motion as the motion of the projection of a uniformly circulating point on a fixed diameter. It may sometimes with advantage be defined as the motion of the projection of a fixed circumferential point on a uniformly circulating diameter, relatively to that diameter. In figure 1



the two y 's and the two x 's are obviously the same, the angular displacement of the diameter at t seconds being ωt . The foot point from a lies on what may be called the little circle of reference; and since $x =$