American Institute of Mining and Metallurgical Engineers; most effective administrator and research worker in his chosen field.

James Taylor Kemp: B.S., 1912; Met.E., 1916; metallurgist of distinction; now in England as a member of the Mission for Economic Affairs.

## SCIENTIFIC NOTES AND NEWS

THE University of Florida at its commencement on May 29 conferred the degree of doctor of science on Dr. Thomas Barbour, director of the Museum of Comparative Zoology of Harvard University.

THE University of Akron, Ohio, conferred on June 4 the honorary degree of doctor of science on Bradley Dewey, director of the Office of the Rubber Division of the War Production Board. Mr. Dewey was the guest speaker, his topic being "Synthetic Rubber and the University of Akron—Now and in the Future."

The honorary degree of doctor of science was conferred at the commencement of the University of Maine on Dr. William H. Martin, dean of the College of Agriculture and director of the Agricultural Experiment Station of Rutgers University, in recognition of "splendid achievements in the fields of education and science."

At the one hundred and twelfth commencement of New York University the doctorate of science was conferred on Dr. Otto Loewi, research professor of pharmacology at the university.

The Trudeau Medal for meritorious achievement in the prevention and treatment of tuberculosis of the National Tuberculosis Association was awarded on May 10 at a meeting in Chicago to Dr. James Alexander Miller, professor of clinical medicine at the College of Physicians and Surgeons of Columbia University and director of the Tuberculosis Clinic of Bellevue Hospital.

The Royal Society of Canada, at its meeting in Montreal on May 29, awarded the Henry Marshall Tory Medal to Frank Allen, professor of physics at the University of Manitoba, "in recognition of his researches in the senses of vision, hearing, touch and taste." Dr. Allen, who founded the department of physics in 1904, was professor of physics and head of the department. He will retire on August 31. He has been appointed professor emeritus effective on September 1.

Dr. Howard Mumford Jones, dean of the Graduate School of Arts and Sciences of Harvard University, has been elected president of the American Academy of Arts and Sciences, Boston.

At the anniversary meeting of the Royal Institution, London, Lord Eustace Percy was elected president and Major Charles E. S. Phillips was elected secretary. Professor Grace MacLeod, professor of nutrition at Teachers College, Columbia University, chairman of the Nutrition Committee of Greater New York, is retiring with the title emeritus after teaching at the college for twenty-five years. Students of the class in nutrition for 1944 are starting a Grace MacLeod Loan Fund for graduate students in nutrition at the college.

Professor Marshall Kay, in charge of instruction and research in stratigraphy in the department of geology of Columbia University, has been promoted from an associate to a full professorship.

Dr. Morris Steggerda, who has been connected for the past fifteen years with the department of genetics of the Carnegie Institution at Cold Spring Harbor, has been appointed professor of anthropology at the Kennedy School of Missions, a division of The Hartford Seminary Foundation.

DR. LESLIE W. FOKER, director of the Minnesota Division of Industrial Health, is chairman of a new industrial nutrition committee, established in cooperation with the Nutrition in Industry Service of the U. S. Food Distribution Administration.

DEAN WILLIAM I. MYERS, of the New York State College of Agriculture; Dr. L. A. Maynard, director of the School of Nutrition at Cornell University, and C. Chester Dumond, New York State Commissioner of Agriculture, have been appointed members of a New York State Postwar Planning Committee to avoid chaotic food conditions after the war.

Dr. Ernest J. Jaqua, Eugene, Ore., formerly president of Scripps College, Claremont, Calif., has been appointed educational director of the Baruch Committee on Physical Medicine. Members of the scientific advisory committee are Dr. Frank H. Krusen, Rochester, Minn., Chairman; Dr. Jaqua, Secretary; Dr. John Stanley Coulter, Chicago; Dr. John Farquhar Fulton, New Haven, Conn.; Dr. Charles Gordon Heyd, New York; Dr. Andrew C. Ivy, Chicago; Dr. Chauncey D. Leake, Galveston, Texas; Dr. Frank R. Ober, Boston; Dr. Winfred Overholser, Washington, D. C.; Dr. Francis O. Schmitt, Cambridge, Mass., and Dr. Ray Lyman Wilbur, Stanford University, Calif., member ex officio.

THE Worcester Foundation for Experimental Biology announces the appointment of three new research members: Dr. Erwin Haas, of the University of Chicago; Dr. Robert P. Jacobsen, of the U. S. Public Health Service, and Dr. Oscar M. Hechter, of the

University of Southern California. Dr. Haas's work is primarily in the field of respiratory enzymes. Dr. Jacobsen is a steroid chemist, and Dr. Hechter's contributions have been primarily in endocrinology.

Dr. John Harland Paul, in charge of malaria control in Haiti, has been appointed director of the Bureau of Malaria Control of the Florida State Board of Health.

Dr. Lawrence W. Bass, director of the New England Industrial Research Foundation, Boston, previously assistant director of Mellon Institute, has been appointed associate director of chemical research for the Air Reduction Company, Inc., and the United States Industrial Chemicals, Inc.

Dr. Jacob Sacks, formerly assistant professor of pharmacology of the Medical School of the University of Michigan, has joined the staff of Endo Products, Inc., as director of the pharmacological laboratory.

DR. RAMON F. HANZAL, assistant professor of pathological chemistry at the School of Medicine of Western Reserve University, has become a biochemist with the Killian Research Laboratories in New York City.

Dr. Lawrence C. Curtis, geneticist at the Connecticut Agricultural Experiment Station, who has been a member of the staff for fourteen years, has been granted a year's leave of absence to serve as a member of a food mission to North Africa with the Division of Relief and Rehabilitation of the Foreign Economic Administration. The mission will study the production of food crops in North Africa and the distribution of these crops to the Allies and to liberated countries.

Dr. Paul O. McGrew, of the division of geology of the Chicago Natural History Museum, left for Mexico on June 8 to make a study of the volcano El Parícutin, which on February 20, 1943, erupted suddenly. Since that time it has grown into a volcanic cone rising 1,200 feet above the ground surface, giving out volcanic bombs, einders and ash and clouds of gases.

Dr. Harlow Shapley, director of the Harvard College Observatory and national president of the Society of the Sigma Xi, gave the address at the spring initiation meeting of the Smith Chapter on April 11. The title of the lecture was "Reaching for the Stars."

Dr. C. E. Kenneth Mees, director and vice-president of the Eastman Kodak Company, will be the speaker at the dinner on June 23 of the Rochester meeting of the American Physical Society and the American Association of Physics Teachers. The address will be entitled "The New World and the Scientist."

THE inaugural meeting of the new Division of High-Polymer Physics of the American Physical Society will be held on June 23 and 24 at the University of A program of approximately twenty Rochester. selected papers on the elasticity, viscosity and other physical properties of high-polymeric materials, as well as on the application of physical methods to manufacturing processes, has been arranged. Recognizing the expansion in the applications of physics and physical techniques arising from the recent rapid development of the field of high-polymeric materials, the council of the society last November authorized the establishment of the division. Its object is the advancement and diffusion of the knowledge of the physics of high-polymeric materials. The interests of the division will be sufficiently broad to appeal to physicists in academic, industrial and governmental laboratories. The inaugural program at Rochester is being sponsored by members of an organizing committee of which Dr. W. J. Lyons, Southern Regional Research Laboratory, 2100 Robert E. Lee Boulevard, New Orleans 19, Louisiana, is serving as secretary.

THE fifty-seventh regular meeting of the Iowa Academy of Science was held in Cedar Rapids on April The attendance was about two hundred, and papers were read before the sections of botany, chemistry, geology, mathematics, physics, psychology, science teaching and zoology. Dr. E. R. Smith, of the Iowa State College, delivered the presidential address; Dr. J. N. Martin and Dr. C. W. Lantz presented papers of general interest; Dr. L. R. Laudon, of the department of geology of the University of Kansas, gave an illustrated address entitled "Oil from the Sixty-eight papers were presented at meetings of the sections. Officers of the academy elected for 1944-45 are: President, Ben H. Peterson, Coe College; Vice-president, Joseph C. Gilman, the Iowa State College; Secretary-Treasurer, Cornelius Gouwens, the Iowa State College.

The first annual meeting of the Potomac Division of the American Phytopathological Society at the station of the Bureau of Plant Industry at Beltsville, Md., was a war conference to facilitate an exchange of ideas among the plant pathologists of Maryland, Delaware and the U. S. Department of Agriculture. The attendance was approximately one hundred. Nineteen papers representing results of original research were presented. In addition to the research papers, quarantine protection problems and war-time work in plant pathology were discussed. Officers for the Potomac Division for 1945 are: President, H. B. Humphries; Vice-president, W. J. Zaumeier; Secretary-Treasurer, T. F. Manns, and Representative on Council, H. P. Barss.

THE semi-annual meeting of the American Society

of Mechanical Engineers will be held at Pittsburgh from June 19 to 22. In addition to a full program of technical papers, there will be a panel discussion on developments in industrial furnaces; a symposium on instrument controls action and one on controlled atmospheres in metals engineering. Igor I. Sikorsky will be the speaker at the dinner of the society on the evening of Wednesday, June 21.

THE Washington Branch of the American Association of Scientific Workers has arranged a symposium for Friday evening, June 16, at 8 o'clock, in the Auditorium Archives Building on "The Utilization of Scientific Personnel in Wartime" under the chairmanship of R. H. Montgomery, economic adviser to the executive director of the Foreign Economic Administration. The speakers are Dr. Vannevar Bush, director of the Office of Scientific Research and Development, and Colonel John N. Andrews, office of the director of the Selective Service System.

THE Fifth Conference on Science, Philosophy and Religion will meet at the Men's Faculty Club of Columbia University over the week-end of September 7. In accordance with the practice adopted last year, attendance will be limited to members and participants in the program. There will be no public meetings.

At the ninety-seventh annual general meeting in London of the British Palaeontographical Society, a committee was appointed to consider plans for the commemoration in 1947 of the centenary of the society.

THE John and Mary R. Markle Foundation has authorized a grant-in-aid of \$5,400 annually, for a two-year period, in support of research on experimental renal hypertension at the University of Illinois College of Medicine, Chicago. The work, which was initiated in 1942, under a two-year grant of \$7,000 from the foundation, is being conducted under the direction of Dr. George E. Wakerlin, professor of physiology and head of the department.

THE Sugar Research Foundation has made grants amounting in all to \$104,000 for research on sugar to the following recipients: Dr. Ancel B. Kevs, professor of physiology at the University of Minnesota; Dr. Julian A. Boyd, associate professor of pediatrics at the Iowa State University; Dr. Frederick J. Stare and Dr. A. Leroy Johnson, both of the School of Medicine and Public Health of Harvard University; Dr. Melville L. Wolfrom, professor of chemistry at the Ohio State University, and Dr. Carl Neuberg, professor of chemistry at the Washington Square College of New York University.

THE University of Arizona is acquiring the private herbarium of Dr. Forrest Shreve, of the Carnegie Institution of Washington. The collection contains 30,000 specimens and is recognized as an excellent representation of the Mexican flora. About half the specimens are from Mexico, mainly from the northern half of that country. The other half of the collection is chiefly from the southwestern states with about 1,500 sheets from Maryland, Georgia and Alabama, and an undetermined number from Jamaica. The Mexican plants include a considerable number of old collections made by Pringle, Palmer, Marcus Jones and Purpus. The more recent material includes sets of nearly all the important collections that have been made in Mexico since 1930. Included among the specimens are nine types, about 200 topotypes and about 300 isotypes.

CHANGES in the undergraduate curriculum of the Massachusetts Institute of Technology to meet the special requirements of education in science, engineering and architecture after the war have been approved by the faculty. The plan is the result of months of study by a faculty committee appointed to consider simplification of courses. Members of the committee were Professor Earl B. Millard, Chairman; Professor Leicester F. Hamilton, Registrar Joseph C. MacKinnon, Professor George W. Swett, Professor Arthur L. Townsend, Professor Carlton E. Tucker and Professor Bertram E. Warren. The most important feature of the revision is a coordinated fouryear program in the humanities and social sciences which emphasizes the long-established educational philosophy of instruction of the institute in the ethical and social implications of science and technology.

## DISCUSSION

## A NOTE ON EQUATIONS OF GROWTH1

It is an altogether too well-known fact that the growth of diverse cellular populations can not be

<sup>1</sup> In accordance with Art. 113(2) U. S. Navy Regulations, the opinions or assertions contained herein are the private ones of the writer, and are not to be construed as

described by a single growth equation, merely by changing the numerical values in the "constants" so as to fit each case. Much less realized is the equally evident fact that a single differential equation with official or reflecting the views of the Navy Department or

Naval Service at large.