succeeded in crystallizing insulin. In association with Vincent DuVigneaud and Oscar Wintersteiner. Jensen collaborated in a series of three papers in which the three investigators demonstrated the polypeptide nature of the hormone. During the same period, through meeting K. K. Chen who was also in Abel's laboratory, Jensen became interested in the chemistry of the physiologically active substances present in various toad poisons-an interest which resulted in a series of some 20 publications, of which the last appeared in 1937. In 1933, on Abel's retirement, Jensen joined him in the Laboratory for Endocrine Research at Johns Hopkins and remained there until 1937, continuing work on the chemistry of insulin and of the toad poisons.

Jensen spent the years 1937-38 in the Institute of Experimental Biology in Berkeley, in collaboration with Simpson, Tolksdorf, Herbert Evans, and others on studies concerned with the chemistry of the hormones of the anterior lobe of the pituitary. In 1938 Jensen assumed charge of the Biochemistry Laboratory at the Squibb Institute, and in 1941 he became associated with the research staff of



Hans Friedrich Jensen

Upjohn and Company. He became a naturalized citizen of this country in 1944, and from 1944 to 1947 was director of research with Desbergers, Limited, of Canada. During these years his interest in the chemistry and physiology of the endocrine principles

resulted in the publication of some dozen papers.

In 1947 he became director of the biochemistry department at the Army Medical Research Laboratory, Fort Knox, Kentucky, and was also made professorial associate in biochemistry at the University of Louisville School of Medicine. Between 1947 and the time of his death he published 35 papers on a variety of topics, especially on biochemical aspects of stress and on the mechanics of blood coagulation and fibrinolysis. He was in the middle of an active and productive program in this last area of interest when he died unexpectedly, on 30 September 1959. He is survived by Else Borgeest Jensen, whom he married in 1924.

He was a member of the American Society of Biological Chemists, the American Association for the Advancement of Science, the Society for Experimental Biology, the Association for Endocrine Research, the New York Academy of Science, the American Society of Hematology, and the International Society of Hematology.

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## Science in the News

# Salary Report Presented by University Professors' Group

American colleges and universities must "run fast" if they want to maintain their relative positions in the salary survey conducted by the American Association of University Professors, according to a report presented by Fritz Machlup of Johns Hopkins University on 8 April in Detroit, at the annual meeting of the AAUP. Machlup, who is chairman of the association's Committee Z on the Economic Status of the Profession, reported that for institutions submitting sufficient data for 1958–59 and 1959–60 to be included in the survey, the average increase in

compensation for full-time faculty members during this period was 6.6 percent.

The percentage increases by academic rank range from 6.2 percent for instructors to 7.1 percent for professors. The results of the survey indicate that if this rate of increase is maintained, an institution will have to make a 7-percent adjustment every year to retain its relative position.

#### **Institutions Improve Grades**

Even more significant as an indication of salary trends is the information that 75 institutions, or more than one-third of the 213 submitting reports for both years, improved their grades in the Average-Compensation Scale.

This grading scale, explained Machlup, is established by the association's Committee Z and is used to provide a limited amount of information regarding the salary structure at an institution.

While only one institution, Harvard University, received a grade of A last year in the Average-Compensation Scale, Princeton University also achieved the A grade for 1959-60. More significant changes occurred in other grade categories.

Among institutions that authorized publication of their salary indices, 18 received a grade of B in the Average-Compensation Scale last year, as compared with 27 this year. These latter include the following institutions: Amherst College; California Institute of Technology; the College of the City of New York; Columbia University; Columbia Teachers College; Cooper Union; Cornell University; Dartmouth College; Duke University; Haverford College; Hunter College; Indiana University; Johns Hopkins University; Northwestern University; Purdue University; Swarthmore College; the Universities of California, Chicago, Michigan, Minnesota, Pennsylvania, and Virginia; Wayne State University; Wellesley College; Wesleyan University; Williams College; and Yale University.

While 26 institutions reported grades of C in the Average-Compensation Scale last year, the number increased to 59 in 1959-60, or more than double that of the previous year. Machlup commented that it is important to note the presence of several junior colleges in the ranks of the institutions with higher salary scales. Similar increases were reported for the other grades.

#### **Development of the Grading System**

The self-grading salary survey of the AAUP was first conducted in 1957 as part of the general effort to call attention to the low salary levels prevailing in most institutions of higher education and to point out the need for salary increases if college teaching is to become attractive as a permanent career for well-qualified individuals. In 1959-60 the average compensation in 323 institutions, with 63,152 full-time faculty members, was calculated at \$7960. The "weighted" average for professors was \$10,789; for associate professors, \$8124; for assistant professors, \$6804, for instructors, \$5542.

Machlup explained that the foregoing figures include specified fringe benefits, in particular the contributions of the institutions toward pension funds. However, only those contributions are included which become the property of the faculty member within 5 years. A few institutions have retirement funds which do not become the property of the faculty member unless he remains with the institution for many years. Such schemes, in Machlup's words, "are not part of the compensation for services rendered but rather for submission to a captivity."

Of 330 institutions which supplied sufficient data to be included in this analysis, 140 report average compensation for full-time faculty members of less than \$7000.

Although the salary survey reveals an encouraging upward trend in a large number of institutions of higher education, compensation for college and university faculty members remains poor. The AAUP emphasizes that institutions will have to make every possible effort to raise salaries annually if they are not to fall behind in the movement to attain levels of compensation commensurate with professional attainment.

#### Red Sea Viewed by Weather Satellite

The accompanying picture of the Red Sea was taken by the wide-angle camera in Tiros I, the U.S. weather satellite, at 6 A.M., EST, 4 April 1960, during the 43rd orbit. When the picture was taken the satellite was over the Red Sea and directed toward the northwest. The dark band to the left is the Nile. The Gulf of Suez and the Gulf of Aqaba can be seen fanning out from the Red Sea, and the Mediterranean Sea is visible at the upper left.

This is one of hundreds of photographs taken by the wide-angle camera during the satellite's first week aloft. At week's end both the wide-angle and narrow-angle cameras were functioning, but the clock timer that controls the photo-storage tape recorder for the narrow-angle camera had ceased to function. Consequently, the use of that camera is now limited to pictures that can be obtained by direct command from either the Fort Monmouth, N.J., or the Kaena Point, Hawaii, ground stations, without going into storage.

### \$150,000 To Be Shared by Four Atoms for Peace Award Winners

Four American scientists have been named recipients of the Atoms for Peace Award. Leo Szilard and Eugene P. Wigner will share the 1959 award; Walter H. Zinn and Alvin M. Weinberg will share the 1960 award. All have been active in the development of nuclear reactors.

Each man will receive a gold medallion symbolizing the award, and the four will share equally in the combined honorarium of \$150,000. The awards will be presented at a ceremony to be held at the National Academy of Sciences, Washington, D.C., on 18 May.

In making the announcement, James R. Killian, Jr., chairman of the Trustees of Atoms for Peace Awards, said:

"The Trustees believe the development of the nuclear reactor is one of the great advances in man's capability for using atomic energy for peaceful purposes. It gives the world a new source of energy with which to meet the growing requirements of modern



View of the Red Sea from an altitude of 450 miles.