

tension. Lord Rayleigh then added that the latter part of her letter seemed to him very suggestive, raising, if it did not fully answer, many important questions. Then for a few years he arranged for the publication of all her work in English, until the Germany of another era (1898) was proud to accept her discoveries for publication in her own language.³

When we state that the significance of the subject of surface tension lies in the fact that salts in solution arrange themselves in a monomolecular layer at the surface, and that the relation of every cell in the body to its surrounding medium depends upon this arrangement, we shall not have to stress further the importance of surface tension or its discovery. Agnes Pockels was one of the founders of our knowledge of this branch of physical chemistry, and none can read her letter to Lord Rayleigh and question her originality. She is now over seventy and I like to think that as she reflects on the new restrictions on the mental life of women in her country, she must know that no edict of government can subtract the fine product of her thought from the assets of mankind.

Here in Bryn Mawr College you will know the third example before she is mentioned. Emmy Noether is admitted by her peers into that small group of the world's greatest mathematicians. She was one of that brilliant group of mathematicians at Göttingen whom fate has scattered into many lands. Her field was algebra. Professor Einstein has said of her that she discovered methods which have proved of enormous importance in the development of the present-day younger generation of mathematicians; and Professor Weyl, that she originated a new and epoch-making style of thinking in algebra and, perhaps most signifi-

cant of all in speaking of a woman, that her strength lay in her ability to operate abstractly with concepts. One can not read the account of her work, given by Weyl at the Memorial Service to her here at Bryn Mawr last spring, without realizing the great beauty of her power of thought. Nature endowed her with that creative insight which is only to be described by the strongest word in our language, "genius."

She was one of the great minds of our time and, when this is fully realized, then the turn of fortune, sinister and weighted with ill-will, that lost her a chance to work in her own country, yet brought her here, will be seen to have its bright side. What a happy event that Miss Thomas, with her passionate belief in women, knows that the one woman of our generation to whom the name "genius" can be applied unequivocally "on the same terms as men," should have been added to the faculty of Bryn Mawr College!

And now, President Park, Einstein has said that the last eighteen months of Emmy Noether's life, spent as they were on your faculty, were the happiest and the most fruitful of her career. Surely these words are your enduring reward. And it is clear enough that your influence has not been limited to the walls of Bryn Mawr College. All women everywhere who care for the things of the mind are in your debt. I feel especially happy that this occasion gives me the chance to be spokesman of our gratitude. Our debt is not only because throughout your administration you have held up the high traditions of this college but far more because during a period of history with powerful forces, to use a significant medical term, seek to sensitize the mind of the whole world to prejudice, you have shown that you place intellect first.

SCIENTIFIC EVENTS

THE BIOCHEMICAL RESEARCH FOUNDATION OF THE FRANKLIN INSTITUTE

THE Biochemical Research Foundation of the Franklin Institute has been formed in Philadelphia by the separation of the Cancer Research Laboratories from the University of Pennsylvania. The new foundation will have for its aims: (1) the study of disease from a chemical point of view, (2) the study of new organic compounds for their therapeutic, medicinal and curative values and (3) the study of longevity and the diseases of age with the hope of prolonging the span of life.

The new foundation, which will be a sister institution to the Bartol Research Foundation for Physics, is under the director, Dr. Ellice McDonald, and consists of forty-three workers occupying forty-seven rooms

and is divided into three departments: The Department of Chemistry, Dr. E. F. Schroeder, chief; The Department of Physics, Dr. A. J. Allen, chief, and The Department of Cytology, Dr. J. O. Ely, chief. There will eventually be added departments of pharmacological research, of synthetic and organic chemistry and of therapeutics.

The new Biochemical Research Foundation will remain for the present in its former quarters, 133 South Thirty-sixth Street, Philadelphia. It maintains in addition two outside laboratories. A volume recording the work of the past year, comprising thirty-three scientific papers, will be issued in January.

AWARDS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS

THE eighty-third meeting of the American Society of Civil Engineers will be held in the Engineering

³ An account of her life and her bibliography are given in *Kolloid-Zeitschrift*, 58: 1, 1932.

Societies' Building, New York City, from January 15 to 18. At this meeting four honorary memberships in the society will be conferred by the president. The recipients are: John W. Alvord, consulting engineer, Chicago; J. F. Coleman, consulting engineer, New Orleans, and past-president of the society; Mortimer E. Cooley, dean emeritus, College of Engineering and Architecture, University of Michigan, and state engineer, PWA, Detroit, Michigan, and Col. W. J. Wilgus, consulting engineer, Ascutney, Vermont.

A posthumous award of the Norman Medal, a gold medal award instituted and endowed in 1872 by the late George H. Norman, will be presented to the late D. C. Henny, formerly a consulting engineer of Portland, Oregon, for his paper on "Stability of Straight Concrete Gravity Dams," which was adjudged the outstanding contribution of the year to engineering science. The J. James R. Croes Medal, instituted by the society in 1912, and named in honor of the first recipient of the Norman Medal, presented for the paper considered next in order of merit, will be presented jointly to A. T. Larned, civil and hydraulic engineer, Phoenix Engineering Corp., N. Y., and W. S. Merrill, hydraulic engineer, Ebasco Services, N. Y., for their paper "Actual Deflections and Temperatures in a Trial-Load Arch Dam."

The Thomas Fitch Rowland Prize, for a paper describing in detail "accomplished works of construction, their cost and errors in design and execution," will be presented to W. H. Kirkbride, chief engineer, Southern Pacific Company, Pacific Lines and Subsidiary Lines, San Francisco, for his paper on "The Martinez-Benicia Bridge." The James Laurie Prize, named in honor of the first president of the society and presented for the paper adjudged to be next in order of merit, will be presented to Wilson T. Ballard, engineer, PWA, Baltimore, Md., for his paper on "Three-Span Continuous-Truss Railroad Bridge, Cincinnati, Ohio." The Arthur M. Wellington Prize, for "papers on transportation, on land, on the water or in the air," will be presented to Hawley S. Simpson, research engineer, American Transit Association, for his paper on "Use and Capacity of City Streets." The Collingwood Prize for juniors, presented for papers describing work with which the writer has been directly connected, will be awarded to C. Maxwell Stanley, Muscatine, Iowa, junior member of the society, for a paper on "Study of Stilling-Basin Design." The Rudolph Hering Medal, for papers on sewage and sewage disposal, will be presented to the following: Robert A. Allton, sewage disposal engineer, Department of Public Service, Columbus; Orris Bonney, sewage relief engineer, Department of Public Service, Columbus; John H. Gregory, consulting engineer, professor of civil and sanitary engineering, the Johns

Hopkins University, and the late R. H. Simpson, who was chief engineer of the Department of Public Service, Columbus, for a collaboration on the paper "Intercepting Sewers and Storm Stand-by Tanks at Columbus, Ohio."

THE AWARD OF THE WILLARD GIBBS MEDAL TO PROFESSOR ROGER ADAMS

PROFESSOR ROGER ADAMS, head of the department of chemistry in the University of Illinois, has been awarded the Willard Gibbs Medal of the Chicago Section of the American Chemical Society for 1936, "for outstanding and fundamental contributions to synthetic organic chemistry, and for conspicuous achievements as a teacher of chemistry." A further announcement concerning Professor Adams's work reads:

He has carried out many difficult and important organic syntheses, including new local anesthetics, chaulmoogric acid, the principal remedy for leprosy, and allied compounds. He has synthesized diphenyl derivatives and has explained how atoms have to be arranged for the molecule of the derivative to be optically active.

This work has increased knowledge of the arrangement in space of the atoms. The development of the stereochemistry of diphenyls has stimulated the use of optical rotation for studying dynamic effects within certain molecules and has offered new methods of attack to other stereochemical problems.

Professor Adams's study of diphenyl derivatives has been of high theoretical importance to organic chemistry. Diphenyl resins at present are industrially employed in the manufacture of dyes, synthetic perfumes, explosives, medicinals and paints.

Butyn is one of the best known local anesthetics synthesized by Professor Adams. Made from coal tar materials, it is similar to novocaine, but is said to be quicker in action, and is especially useful in operations on the eye.

Professor Adams discovered the constituents of chaulmoogric acid, the effective principle of chaulmoogra oil, called the "backbone of leprosy treatment." The oil, taken from the seed of a fruit similar to grapefruit, which grows on a tree of the Indian plum family in the Philippines, Siam and Indo-China, was found to check leprosy even in fairly advanced stages and to control it in early stages. Injection of the ethyl ester of the acid under the skin of the leper was reported to be most valuable.

With knowledge of the constituents, Professor Adams was able to synthesize chaulmoogric acid as well as certain analogous compounds which are believed to be even more efficient. The synthetic acid, called diheptylacetic acid, is made from castor oil and acetic acid. It is produced on a fairly large scale, thus freeing investigators from the necessity of obtaining chaulmoogra oil for their work. Extensive tests with the synthetic substances are