March 17, Dr. W. B. Burnett, "New Textile Products."

March 31, Dr. R. L. Wakeman, "Synthetic Resins."

April 14, Mr. D. E. Pearsall, "The Explosives Industry."

April 28, Mr. E. R. Mease, "Organic Chemical Processing."

May 12, Dr. E. B. Kester, "Coal Products."

## SYMPOSIUM ON BIOPHYSICS OF THE AMERICAN INSTITUTE OF PHYSICS

A SPECIAL meeting devoted to the subject of biophysics will be held on November 4, 5 and 6 under the auspices of the American Institute of Physics. The Eldridge Reeves Johnson Foundation for Medical Physics of the University of Pennsylvania is cooperating in arranging the meeting and will act as host. All sessions will be held in Philadelphia at the university.

On certain evenings during and after the meeting Dr. Irving Langmuir will present a series of lectures under the Johnson Foundation Lectureship. The subject of the lectures will be "Monolayers and Multilayers and their Applications to Biological Problems."

The names and tentative subjects of some of those expected to address the morning and afternoon sessions are as follows:

William Mansfield Clark, professor of physiological chemistry, the Johns Hopkins Medical School, "Potential Energies of Biologically Important Oxidation-Reduction Processes."

Wallace O. Fenn, professor of physiology, University of Rochester, "The Mechanics of Muscular Contractions."

Herbert S. Gasser, director, the Rockefeller Institute for Medical Research, "Electrical Signs of Biological Activity."

L. H. Germer, research physicist, Bell Telephone Laboratories, Inc., 'Electron Diffraction Methods of Studying Organic Films.''

E. Newton Harvey, professor of physiology, Princeton University, "The Physical Properties of Protoplasm."

Selig Hecht, professor of biophysics, Columbia University, "The Photochemical Basis of Vision."

M. H. Jacobs, professor of general physiology, University of Pennsylvania, and director, the Marine Biological Laboratory at Woods Hole, 'Diffusion Processes in Living Systems.''

Francis O. Schmitt, associate professor of zoology, Washington University, "Optical Studies of Living Systems."

D. W. Bronk, professor of biophysics, University of Pennsylvania; director, the Johnson Foundation for Medical Physics, "The Relation of the Biological and Physical Sciences."

Additional papers have been invited on nuclear physics as a tool for biological research, the pathological effects of radiation, energy exchanges in living systems and other biophysical subjects. As a part of the meeting, the last day, Saturday, November 6, will be devoted to contributed papers and general discussion. Workers in the field are invited to contribute ten-minute papers on the subjects of their researches. They are requested to submit abstracts not exceeding 200 words in length, not later than October 25 to insure a place in the final program.

A further announcement of the meeting will be mailed to any one interested in receiving it. There will be no general circularization of notices. Admission cards will be necessary for some of the sessions. The institute and the foundation are anxious to welcome any one interested in the subject of the conference and will gladly mail information and admission cards upon request, addressed to American Institute of Physics, 175 Fifth Avenue, New York, N. Y.

## THE ANNUAL MEETING OF THE AMERICAN WELDING SOCIETY

THE eighteenth annual meeting of the American Welding Society will open at Atlantic City on October 16 and continue through Friday, the 22d. A metals exposition in which nearly fifty organizations are participating will be held. The American Society of Mechanical Engineers will join in sponsoring a technical session on Tuesday afternoon.

At the opening session at the Hotel Traymore on Monday morning, Alfred E. Gibson, vice-president of the Welman Engineering Company, Cleveland, Ohio, will deliver the annual presidential address. E. R. Fish, of the Hartford Steam Boiler and Insurance Company, senior vice-president of the society, will preside. The Samuel Wylie Miller Memorial Medal "for meritorious achievement contributing conspicuously to the advancement of the art of welding and cutting" and the Lincoln Medal "for the best paper of the year in the Welding Journal" will be awarded and the election of new officers will be announced.

Comfort A. Adams, formerly Gordon McKay professor of electrical engineering at Harvard University, will present a report of progress in the Welding Research Committee of the Engineering Foundation of which he is chairman. This committee, organized in 1935, is sponsoring more than fifty active research projects in universities of the United States and Canada; assembling, digesting and publishing the world's available information regarding welding research; and correlating current and future programs in industrial and fundamental research in welding.

Reviews of welding activities will be made by the regional vice-presidents of the society and there will be a series of eight technical sessions, describing recent advances in welding. "Fundamental Research in Welding" will be the subject of an all-day symposium

on Tuesday, at which the investigations of eight laboratories will be reported. The American Society of Mechanical Engineers will join in another technical session in the afternoon, at which G. F. Nordenholt, of the Product Engineering Company, New York, will be chairman. H. M. Hobart, consulting engineer of the General Electric Company, who received the Samuel Wylie Miller Memorial Medal last year, will preside at a conference and meeting of the fundamental research committee on Tuesday evening. Four papers devoted to "Fabrication" will be given on Wednesday morning. The afternoon will be spent in viewing the Metals Exposition. The growing demand for stainless steel and its applications and the welding of low alloy steels will be outlined at the Thursday morning symposium and there will be a shipbuilding symposium on Thursday afternoon. The final session on Friday morning will be devoted to railroads.

C. A. McCune, secretary of the Magnaflux Corporation, New York, is general chairman of the convention. On Sunday, October 17, President Gibson will give an informal reception to members of the society.

## THE SIXTEENTH INTERNATIONAL PHYSIOLOGICAL CONGRESS

THE sixteenth International Physiological Congress will be held at Zurich from August 14 to 18, 1938. under the presidency of Professor W. R. Hess, of the University of Zurich. Members of the Swiss National Committee are: I. Abelin, Bern; L. Asher, Bern; F. Battelli, Geneva; E. Bürgi, Bern; Ch. Dhéré, Fribourg; S. Edlbacher, Basle; H. Fischer, Zurich; B. Flaschenträger, Zurich; A. Fleisch, Lausanne; W. Frei, Zurich; W. R. Hess, Zurich; P. Karrer, Zurich; M. Minkowski, Zurich; A. v. Muralt, Bern; E. Rothlin, Basle; J. Strohl, Zurich; F. Verzár, Basle. The general secretary of the congress is E. Rothlin, Basle, and R. Speich, of the Swiss Bank Corporation, Basle, is treasurer. The congress will meet in six sections as follows: General and comparative physiology, Biophysics, Biochemistry, Applied physiology (work, sport, aviation), Psychophysiology and Pharmacology.

The sixteenth meeting marks the fiftieth anniver-

ON the occasion of the dedication of the new chemistry building at the University of Delaware on October 15 and 16 honorary degrees will be conferred on Dr. The Svedberg, professor of chemistry at the University of Upsala; on Professor Frank C. Whitmore, dean of the School of Chemistry and Physics at the Pennsylvania State College and president of the American Chemical Society, and on Dr. Warren K. sary of the International Physiological Congress. According to the official statement:

The fact that this congress is being held in Switzerland, the country in which its first meeting was held, affords an excellent opportunity to honor the founders of the International Physiological Congress by devoting special attention to the original objects they had in view and in the spirit with which they were imbued. Wherefore, due regard being had to the changed circumstances of the present day, it is desired in simple outward setting to emphasize the importance of *demonstration* and *discussion* of problems of mutual interest, and more especially to further personal contact between those taking part therein. In addition each member, especially the younger generation of scientists, is to be given the opportunity to introduce himself to his colleagues by an individual communication.

All members of physiological, biochemical, experimental pathological and pharmacological institutes or laboratories are entitled to participate. Those who are not members of any recognized society or institute must be recommended by the director of a recognized laboratory or institute or by the president of a recognized society. The subscription will be 35 Swiss frs, and should be forwarded by check or postal order (Account V 5) payable to the sixteenth International Congress of Physiology, Swiss Bank Corporation, Basle, Switzerland.

There will be the usual entertainments and excursions during the congress. Afterwards a survey of the physiology of high altitudes will be given at the Jungfraujoch High Alpine Research Station. Those interested should communicate with the president, Professor A. von Muralt, 5, Buhlplatz, Bern, Switzerland.

Before the congress an international meeting for cell research will be held at Zurich from August 7 to 13, under the presidency of Professor von Moellendorff, of the Anatomical Institute, Zurich, and the International Veterinary Congress will follow from August 21 to 25, under the presidency of Professor Flückiger, director of the Swiss Federal Veterinary Department at Bern.

## SCIENTIFIC NOTES AND NEWS

Lewis, professor of chemical engineering at the Massachusetts Institute of Technology.

AMONG the honorary degrees conferred on October 14 at the sesquicentennial of Franklin and Marshall College were the following: the doctorate of laws on Dr. Karl T. Compton, president of the Massachusetts Institute of Technology, and on Dr. Harry Woodburn Chase, chancellor of New York University, and the