motion picture, as a means of demonstration. By their domination of time, motion pictures are of enormous help to research workers, since the human eye has its limitations." He described an apparatus set up by the Rockefeller Institute for the study of heart disease, and exhibited one taking motion pictures of human capillaries.

Mr. Herbert Ingram, of Rochester, N. Y., declared that photographic evidence should form the basis for intelligent research and case records. He said further:

Hospitals should record reliable, accurate case details with supplementary pictorial history. There must be a clinical photograph of the patient, a photograph of diseased tissue, perhaps removed, a photomicrograph of the tissue structure and, in case of cardiac disease, an electro cardiogram.

Photographs of rare skin diseases, intra-abdominal tumors, external glandular malformations, postures and a host of other pathologies provide invaluable data. The diagnosis of disease becomes much simpler by having a visual as well as written record of the progress of a disease.

Many physicians engaged in orthopedic work forget the details of patients who later become involved in medico-legal proceedings. The doctor is at a loss to explain many details of treatment and the progress of injuries without photographic evidence. Motion picture studies of surgical and medical techniques form a newer field than photography and have great possibilities as a teaching medium.

A scientific example of the value of motion pictures would be a photographic study of various gaits, such as ataxia, propulsion and Parkinson's disease. Another possible field is in animal research—to record the results of experiments in diet and in the study of the effects of vaccines.

Dr. Carl D. Clark, director of art and photography at the University of Maryland, was chosen vice-president of the association, and Theodore Nelcey, of the School of Medicine, of Yale University, secretary-treasurer. The directors named are: Dr. Louis Schmidt, of the Rockefeller Institute; Dr. A. B. Soule, of the University of Vermont, and Miss Stella Zimmer, of Syracuse University. The conference ended with an inspection of the Yale University buildings.

## THE TULSA MEETING OF THE GEOLOG-ICAL SOCIETY OF AMERICA

The forty-fourth annual meeting of the Geological Society of America will be held on Tuesday, Wednesday and Thursday, December 29 to 31, at Tulsa, Oklahoma, under the auspices of the Tulsa Geological Society, and on invitation of the American Association of Petroleum Geologists. Headquarters, place of registration and exhibits will be in the Mayo Hotel.

The headquarters of the council will also be at the Mayo Hotel, where the scientific sessions will be held. The address of the retiring president, Dr. Alfred C. Lane on "Eutopotropism" will be delivered in the auditorium of the Central High School, on December 29, at 8 o'clock.

Fellows are urged to submit without delay the titles and abstracts of papers which they wish to present at the meeting, so that the program committee may arrange to advantage a program of the sessions. By order of the council, no paper will be considered for the program unless the title is accompanied by an abstract suitable for printing in the proceedings of the society.

All sessions are open to the general public, but the council requests each fellow to send to the secretary as soon as practicable, and not later than December 15, the names and addresses of advanced students or other persons who are seriously interested in geology and are deserving of recognition as visitors. The council will then invite them to attend the meeting.

The affiliated societies which are meeting with the Geological Society of America are:

The Paleontological Society; secretary, B. F. Howell, Princeton University, Princeton, N. J.

The Mineralogical Society of America; secretary, F. R. Van Horn, Case School of Applied Science, Cleveland, Ohio.

The Society of Economic Geologists; secretary, Edward Sampson, Princeton University, Princeton, N. J.

Section E of the American Association for the Advancement of Science will hold meetings in New Orleans, Louisiana, on January 1, 1932, and a joint session with the Geological Society of America is being arranged. On Saturday, January 2, a field trip is planned to the salt domes and salt mines of Teche County.

## THE SEVENTH PAN-AMERICAN SCIEN-TIFIC CONGRESS

THE Seventh Pan-American Scientific Congress will be held in Mexico City from February 5 to 19, 1932.

The program of the congress will be concerned with the physical and mathematical sciences; general and applied geology; engineering; industrial chemistry; biology; scientific agriculture; medicine; hygiene and public health; anthropological and historical sciences; juridical sciences; social and economic sciences, and education.

Members of the congress will include the official representatives of the countries that decide to take part; the representatives of universities, institutions and scientific associations in American countries; the nationals of the countries taking part in the congress and the foreigners residing in them who receive a special invitation from the organizing committee; the authors of papers presented to the congress; all other persons who wish to inscribe themselves and who possess a university degree or who by other ways prove, to the satisfaction of the secretariat general of the Congress, their interest in scientific matters.

The organizing committee extends a cordial invitation to all scientists of America to attend the congress and to take part in its labors. "The sessions will promote the knowledge of the progress made in the various countries of the continent, in order to study and discuss some of the outstanding problems of those nations and will help to set up closer bonds of lasting friendship between the various countries. Mexico awaits enthusiastically the visit of those who will be its guests for a few days, during which both the authorities and the organizing committee will spare no effort to make their stay in the country as agreeable as possible in every way."

Dr. Alfonso Pruneda, President of the Organizing Committee, c/o Comision Organizadora del Septimo Congreso Cientifico Americano, Apartado Postal 517, Mexico, D.F., will send descriptive pamphlets on request.

## THE AMERICAN INSTITUTE OF PHYSICS

To meet a generally recognized need for an agency suitably constituted to undertake cooperative projects, the American Physical Society, the Optical Society of America, the Acoustical Society of America and the Society of Rheology have formed the American Institute of Physics. This new organization is controlled by the four societies, and certain specific tasks have been outlined for its first efforts. It does not have individual memberships at the present time, and its constitution is still in process of development. The headquarters office of the institute is at 654 Madison Avenue, New York, N. Y.

Three major tasks have been set for the immediate attention of the institute. The first and most pressing is concerned with the journals of the four societies, which include The Physical Review, Reviews of Modern Physics, Physics, the Journal of the Optical Society, the Review of Scientific Instruments, the Journal of the Acoustical Society, and the Journal of Rheology. With perhaps one exception these journals are projects which the societies find increasingly difficult to support. And yet they are vitally necessary publications. This situation was brought to the attention of the Chemical Foundation, whose financial assistance in publications of a scientific character is well known. In conference it was recommended that a cooperative organization representative, so far as possible, of all physics should be formed at once, and the material help of the Chemical Foundation in such a project was promised.

While detailed plans have not been completed for meeting the problem of publication, it is expected that a combination of certain functions will be recommended. The business of subscriptions, advertising, printing and mailing, for example, could be carried on in one office for all the journals, probably with increased economy. There is, however, no thought of taking over the editorial function. That should remain with the individual societies.

The second function of the institute is to make contact with the newspapers and news magazines of the country with a twofold object. On the one hand, it is desired to help journalists prepare their articles to meet higher standards of accuracy and suitability. On the other, the institute aims to increase the public interest in physics, taking cognizance of the fact that the financial support accorded any human activity is in proportion to the intensity and breadth of interest which it inspires.

The four societies which have established the institute realize that there are numerous other groups, national and local in scope, of physicists or those who are interested in physics. They wish through the institute to invite the cooperation of these groups in mutual service and in national projects. A study of the proper steps to take in this direction is being made as a third function of the institute.

A cooperative committee of the four societies has now become the governing board of the American Institute of Physics. It consists of three representatives chosen by each society, making a board of twelve in all. The initial personnel is as follows:

Physical Society: Karl T. Compton, chairman of the board; George B. Pegram, secretary; John T. Tate. Optical Society: Paul D. Foote, Loyd A. Jones, F. K. Richtmyer.

Acoustical Society: H. D. Arnold, Harvey Fletcher, F. A. Saunders.

Society of Rheology: E. C. Bingham, Wheeler P. Davey, A. Stuart Hunter.

It is contemplated that normally each member shall serve three years, a new representative to be elected to replace one retiring each year by each society.

At a meeting held at Schenectady in September, the board appointed Dr. Henry A. Barton, assistant professor of physics at Cornell University, to act as director of the new institute. Dr. John T. Tate, professor of physics, University of Minnesota, who is editor of the journals of the Physical Society, was appointed adviser on publications.

The first public activity of the new institute consisted of a dinner to journalists held at the New York Athletic Club on November 10. This dinner was very well attended by newspapermen and magazine editors