tivities, arrange for participation by the scientific community, disseminate information, and make semiannual reports on its activities.

5) Authorized the administrator to acquire and develop research facilities, aeronautical and space vehicles, and related property and accommodations; hire 260 specially qualified scientific and engineering personnel at pay grades higher than provided in the Classification Act of 1949 and to pay others entering Federal service for the first time at rates two grades higher than usual starting salaries; make monetary awards for significantly valuable scientific or technical contributions.

6) Declared that any relevant invention made in the performance of contracted work under the NASA would be the exclusive property of the U.S. Government and authorized the administrator to apply for or waive patent rights.

Physics Course

The Educational Testing Service, Princeton, N.J., reports that a new physics course will undergo its first large-scale evaluation in 300 of the nation's schools next fall. Frederick L. Ferris, Jr., associate director of test development at ETS, is in charge of the evaluation aspects of the study, which may involve testing as many as 10,000 high school students several times during the academic year.

The new program was developed by the Physical Science Study Committee, a group of scientists, teachers, and education specialists who have been working for 2 years under the leadership of Jerrold R. Zacharias at Massachusetts Institute of Technology. The committee staff, supported by grants from several large foundations, has developed a new text; a laboratory manual, including many ingenious experiments; and a variety of visual aids. More than 50 new motion pictures for this project are now in production.

Summer institutes are being sponsored by the National Science Foundation at five colleges for the 300 teachers who will use the new materials next fall. Teachers at these institutes will take special tests. These tests will provide a basis for study of the relationship between the achievement of teachers and the subsequent achievement of their pupils.

Associated Midwest Universities

Twenty-six leading educational and research institutions have formed an inter-university corporation to be known as Associated Midwest Universities, a successor to the organization formerly known as Participating Institutions of Argonne National Laboratory. James H. Jensen, provost, Iowa State College, is the first president of the new organization, which has headquarters at the Argonne National Laboratory's main site near Lemont, Ill.

The articles of incorporation list three main purposes for organizing the new corporation:

1) To promote, encourage, and conduct research and education in all branches of science, including but not limited to nuclear science in relation to all other fields of science.

2) To establish means for facilitating the use of the Argonne National Laboratory and other laboratories by duly qualified personnel and students from the several cooperating institutions and other research and educational institutions.

3) To establish, maintain, and operate laboratories and other facilities as necessary for research and education.

This is the third such university association to be organized within the framework of the Atomic Energy Commission. The first two are Associated Universities, Inc., which is the AEC's contractor for operations of the Brookhaven National Laboratory, Upton, N.Y., and the Oak Ridge Institute of Nuclear Studies, which directs educational and other activities associated with the Oak Ridge (Tenn.) National Laboratory for the AEC. The administrative framework of Associated Midwest Universities is expected to be somewhat similar to that of ORINS.

Toward Controlled Fusion Reactions

Recent Congressional hearings have brought out new information on the progress of United States attempts to harness the hydrogen bomb reaction for industrial power.

Two main conditions must be attained before it is possible to utilize the power released in a fusion reaction. First, heavy hydrogen must be brought to a temperature of at least 100 million degrees centigrade. Second, the atomic nuclei in this hot gas must be held together for an appreciable time. Scientists working at the University of California Radiation Laboratory, an Atomic Energy Commission facility, have concerned themselves with the first of these two conditions and are "well along the road" to the temperature objective, according to testimony released by a House Appropriations subcommittee.

Temperatures of 10 million degrees, 90 million degrees short of the required temperature level for a controlled hydrogen fusion reaction, have been generated by the University of California scientists. While the achievement of the objective temperature itself will not lead to the immediate availability of the power of fusion reactions, it is a prime objective and its attainment will be a major advance toward the solution of problems surrounding the controlled release of fusion reaction power.

TV Program on the Senses

Gateways to the Mind, a discussion of human senses, will be the next Bell System Science Series TV program. It will be seen on the NBC network on the evening of 23 October. This 1-hour color film, one of a continuing series, presents the story of man's knowledge about his senses and their function as the channels through which all awareness of the external world is passed to the brain.

Producer-director Owen Crump uses a movie sound stage as the setting for this story of the senses, with Frank C. Baxter explaining the story to a production crew about to start on a picture. The scientific material that will be presented during the course of the program includes animated sequences, documentary films, and sequences of experiments dealing with optical illusion.

George Wald of Harvard University served as principal adviser for the production, with Frederick Crescitelli, professor of zoology at the University of California, Los Angeles, acting as consultant. The scientific material in the program was prepared under the general supervision of a 10-member advisory board. Starting with Aristotle's discussion of the five senses, the program shows how scientific research in the past has increased the list of recognized senses to include balance, pressure, pain, tension, and so forth, and how current research at Princeton, McGill, and other institutions is expanding man's knowledge of sight and of the brain's role in sensory perception.

After the initial telecast, the Bell Telephone Companies will make the program available to schools and other interested groups in 16-mm color films.

Summer Research in Geology

A group of 50 students of geology composed of faculty members, graduate students, and undergraduates has departed from Princeton University to take up summer research projects in Canada, the Caribbean, Western Europe, and other areas.

One project, on which the chairman of the department of geology has spent the past 12 summers, involves the study of the formation and development of mountains and the relationships of