an orbit that has a perigee of 195 miles and an apogee of 230 miles. Radio signals, described as a series of quivering long and short "beeps," can be heard clearly at 19.995 megacycles.

Spokesmen for the national space surveillance control center at Bedford, Mass., say that the residents of every major city in the United States eventually will be able to see the satellite (and its carrier rocket) with the unaided eye. It is said to be of the second magnitude, or about the brightness of a star in the Big Dipper.

# Pacific Science Information Center Established in Honolulu

A Pacific Scientific Information Center has been established at the Bishop Museum, Honolulu, with the aid of a grant from the National Science Foundation. The purpose of the center is to further the interchange of information concerning the geography and natural history of Pacific islands, especially information dealing with the land flora and fauna and with man in his relationship to his environment

An initial project is the compilation of a card catalog of persons working on or actively interested in these areas, with addresses and specific interests. Existing bibliographies, published and in manuscript, are being explored in preparation for the compilation of records concerning pertinent publications. Files of maps, air photographs, and geographical data that have been assembled at the Bishop Museum also will be reorganized and expanded.

The center is being directed by E. H. Bryan, Jr., of the Bishop Museum staff, who is a consultant in Pacific geography and bibliography for the Pacific Science Board, National Academy of Sciences-National Research Council. Work will be done in cooperation with the Pacific Science Association, which will hold its tenth Pacific Science Congress in Honolulu in August 1961.

## Age of Peking Man

The date of Peking Man, Sinanthropus (= Pithecanthropus) pekinensis, like that of most Pleistocene hominids, has been a matter of considerable uncertainty. Apparently, the earliest dating has been "first" (Günz-Mindel or Cromerian) interglacial and the latest, "second" (Mindel-Riss or Holsteinian) interglacial, the latter assignment being the most favored one. A recent paper by B. Kurtén [Vertebrata Palasiatica 3, 173 (Dec. 1959)] presents the results of a new study of the age of Peking Man, based on a combination of floral and faunal analysis of the Choukoutien deposit in which the remains of this fossil man were found. The pollen spectrum indicates a climate that was glacial, rather than interglacial. The ratio between living and extinct species of mammals is similar to that found in later "second" (Mindel II or Elster II) glacial deposits of Europe but differs significantly from that occurring in European "third" (Riss or Saale) glacial deposits. Kurtén thus assigns Sinanthropus to the time of the latter part of the Mindel (Elster) glaciation. Since a potassium-argon dating by Evernden, Curtis, and Kistler (1958) places the Mindel glaciation at about 360,000 B.P., Kurtén regards this as the approximate age of Peking Man.—W.L.S., JR.

# **American Academy Elects**

## Fellows and Foreign Members

The American Academy of Arts and Sciences, at its 180th annual meeting on 11 May, elected 116 new fellows; 32 of these were in the mathematical and physical sciences and 28 were in the biological sciences. The academy also elected 37 foreign honorary members, of whom 16 are in the mathematical and physical sciences and five are in the biological sciences.

Re-elected to the presidency of the academy for the fourth year was Kirtley F. Mather, professor of geology, emeritus, of Harvard University.

## Fellows

Mathematics. Alonzo Church, Princeton University; Nathan Jacobson, Yale University; Atle Selberg, Institute for Advanced Study, Princeton.

Physics. Robert B. Brode, University of California, Berkeley; Peter T. Demos, Massachusetts Institute of Technology; Herbert Friedman, Naval Research Laboratory, Washington; Roger W. Hickman, Harvard University; William L. Kraushaar, Massachusetts Institute of Technology; Conrad L. Longmire, University of California, Los Alamos, N. Mex.; Alvin M. Weinberg, Oak Ridge National Laboratory, Oak Ridge, Tenn.

Chemistry. Ralph A. Beebe, Am-

herst College; Elias J. Corey, Harvard University; Raymond M. Fuoss, Yale University; Izaac M. Kolthoff, University of Minnesota; William N. Lipscomb, Harvard University; Carl S. Marvel, University of Illinois, Urbana.

Astronomy. Walter O. Roberts, High Altitude Observatory, Boulder, Colo.

Earth sciences. Jacob A. Bjerknes, University of California, Los Angeles; Perry Byerly, University of California, Berkeley; Gustav A. Cooper, National Museum, Washington; Richard F. Flint, Yale University; George C. Kennedy, University of California, Los Angeles; Francis J. Pettijohn, Johns Hopkins University.

Engineering sciences. Arthur E. Bryson, Jr., Harvard University; Samuel H. Caldwell, Massachusetts Institute of Technology; Barnett F. Dodge, Yale University; Robert C. Gunness, Standard Oil Company (Indiana), Chicago; Irving Kaplan, Massachusetts Institute of Technology; Hans W. Liepmann, California Institute of Technology; William R. Marshall, University of Wisconsin; Louis D. Smullin, Massachusetts Institute of Technology; Theos J. Thompson, Massachusetts Institute of Technology.

Biophysics and biochemistry. David E. Green, University of Wisconsin; Boris Magasanik, Massachusetts Institute of Technology; Stanford Moore, Rockefeller Institute, New York; Hans Neurath, University of Washington, Seattle; Alexander Rich, Massachusetts Institute of Technology; William H. Stein, Rockefeller Institute.

Botany and bacteriology. James F. Bonner, California Institute of Technology; Royal A. Brink, University of Wisconsin; Mary I. Bunting, Radcliffe College; René J. Dubos, Rockefeller Institute; Norman H. Giles, Yale University; Carl P. Swanson, Johns Hopkins University.

Zoology. Robert W. Briggs, Indiana University; Clifford Grobstein, Stanford University; Libbie H. Hyman, American Museum of Natural History, New York; Arthur R. Kellogg, United States National Museum, Washington; John A. Moore, Columbia University; Francis J. Ryan, Columbia University.

Physiology and experimental psychology. Harry Eagle, National Institutes of Health, Bethesda, Md.; Alexander Hollaender, Oak Ridge National Laboratory; Stephen W. Kuffler, Harvard Medical School; Horace W. Magoun, University of California, Los Angeles;