The substances appear to be "the same or related compounds, possibly steroids." They are both stable to heat and acids, less stable in alkali, and soluble in alcohol and acetone.—G. DuS.

■ A comprehensive 20-year study of the seed plants and ferns of the southeastern United States is under way at Harvard University under the direction of C. E. Wood, Jr., of the Arnold Arboretum and Reed C. Rollins, director of the Gray Herbarium. The massive project, which will cover the plants of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee, has the cooperation of botanists in several southern universities.

The project was first proposed and is supported by George R. Cooley, a retired Albany, New York, investment banker, who has devoted recent years to a study of the southern flora. The project also has financial support from the National Science Foundation. Present knowledge of the 1,000-mile-square area is based largely on a study made 35 years ago.

The new work will codify, illustrate, and describe the nature and geographical distribution of each plant group. Two volumes will treat ferns and seed plants that are not cultivated; a third volume will treat the cultivated plants. The plant names will be based on the International Code of Botanical Nomenclature.

■ A modified set of equations for his generalized theory of relativity, completed by Albert Einstein a few months before his death, has been published by the Princeton University Press as an appendix to the fifth edition of Einstein's book, *The Meaning of Relativity*. Much of Einstein's thought was a search for a unified and pure field theory—that is, a theory embracing the laws of electromagnetism and gravitation and excluding singularities. In the new edition Einstein wrote: "In my opinion, the theory presented here is the logically simplest relativistic field theory which is at all possible." However, he immediately adds, in effect, that whether the equations are more than a formal exercise is still an open question.

■ The Spanish government has ordered a 3000-kilowatt research reactor. The reactor, which is to be built by the General Electric Company, will use fuel enriched to 20-percent in uranium-235. The reactor is of the submerged or swimming pool type.

■ The Joint Committee on Atomic Energy has concluded a 2-day seminar in executive session on the problem of indemnification against reactor hazard. Representatives of the AEC joined atomic manufacturing, operating, and insurance interests in an exchange of views on the problems of providing adequate indemnification for reactor owners and manufacturers. Sen. Clinton P. Anderson (D., N.M.) stated that committee action with a view to solving any present problems would begin soon.

■ The National Park Service has found it necessary to reduce the northern elk herd in Yellowstone National Park by about 7000 head since December 1955. Of these, 6500 were killed by hunters and park rangers, and 650 were trapped and shipped to ranges in New Mexico and Montana. The population had reached 12,000, although the carrying capacity of the range is only about 5000.

Scientists in the News

WILLIAM R. HAWTHORNE, Jerome Clarke Hunsaker professor of aeronautical engineering at Massachusetts Institute of Technology, is giving this year's Minta Martin lecture in aeronautical centers throughout the country. The lecture series is supported by a special gift from the late Glenn L. Martin and, together with the professorship, is in honor of Hunsaker, a leading figure in aviation. The first lecture was given 21 Mar. at the University of Maryland under the auspices of M.I.T., the University of Maryland, and the Washington Section of the Institute of Aeronautical Science.

VIRGIL E. GOODWIN has been named manager of the Birmingham, Ala., branch of Central Scientific Company. Goodwin has had 9 years of experience in the industrial laboratory supply field.

ARTHUR H. COMPTON, physicist, formerly chancellor and now distinguished service professor of natural philosophy at Washington University, St. Louis, is giving a series of five lectures at Michigan State University on the following subjects: "Science and human goals," 5 Apr.; "Freedom and interdependence," 17 Apr.; "Economic potential and world population," 1 May; "Tensions and obsolescence of war," 15 May; and "How can freedom win?" 29 May.

G. PONTECORVO, professor of genetics in the University of Glasgow, has taken up residence as visiting professor of zoology in Columbia University for the spring term. During April he is delivering the Jesup lectures in the department of zoology. The general title of the lectures is "Present trends in genetic analysis." The first two lectures were given on 3 and 5 Apr. Others will follow on 10, 12, 24, and 26 Apr.

JAMES B. MACELWANE was recently given the Jackling award of the American Institute of Mining Engineers, posthumously. He was cited "For his outstanding work in geophysics, geophysical engineering, as a teacher; and for his lecture [the Jackling lecture, which he was preparing during his final illness], 'The earth sciences in the program of the International Geophysical Year, 1957–1958.'"

JAMES J. WARING of the Colorado Foundation for Research in Tuberculosis will give the first J. Burns Amberson lecture on 22 May, during the annual meetings of the National Tuberculosis Association and the American Trudeau Society in New York. The lecture is named in honor of Amberson; recently retired head of the chest service of Bellevue Hospital, New York, and professor of medicine, College of Physicians and Surgeons, Columbia University.

NIKOLAAS TINBERGEN of the University of Oxford is Walker-Ames professor of zoology for the spring term at the University of Washington, Seattle. He is presenting a series of lectures and conducting field observations on the behavior of some local animals.

WALTER B. SHELLEY, associate professor of dermatology at the University of Pennsylvania School of Medicine, gave the 1956 annual Sigmund Pollitzer lecture at New York University Postgraduate Medical School. He talked on "Recent studies on the physiology and biochemistry of itching."

C. D. W. THORNTON will head the activities in atomic energy of the Farnsworth Electronics Company of Fort Wayne, Ind., a division of International Telephone and Telegraph. Thornton comes from the Atomic Energy Commission at Washington, where he was director of the general manager's office of operations analysis and planning.

ROBERT F. INGER, curator of amphibians and reptiles at the Chicago Natural History Museum, will spend six months in the tropical rain forest of North Borneo, where he will collect and observe reptiles, amphibians, and fishes in an effort to achieve a better understanding of the rain forest environment. He will also establish a small weather station.

VERNON BRYSON has been appointed associate director and professor of the Institute of Microbiology, Rutgers University, effective 1 July. Bryson is program director of the Genetic and Developmental Biology Section of the National Science Foundation.

WILLAM A. McCLELLAN, general practitioner in Oxford, Ohio, for the past 7 years, has joined the staff of the University of Tennessee College of Medicine as assistant director of the department of general practice.

DAVID C. LEA has been appointed research and development manager of the Forest Products Division of Olin Mathieson Chemical Corporation, West Monroe, La. Lea formerly was with Potlatch Forests, Inc., Lewiston, Idaho, where he was technical director.

JOHN M. ERICKSON has been named associate professor of chemistry at South Dakota State College.

JEAN-PIERRE CORNAZ will spend a year with Stanford Research Institute's chemical engineering section, investigating new design techniques for ion-exchange columns. Cornaz formerly was scientific assistant with the Swiss Federal Institute of Technology at Zurich.

The Pittsburgh Section of the American Ceramic Society presented the ninth Albert Victor Bleininger award for meritorious achievement in ceramics to ARTHUR S. WATTS. Watts, professor emeritus, Ohio State University, was honored for his long years of service as a ceramic educator and his many contributions in the field of ceramics.

HERBERT H. KENT, who was formerly chief of the physical medicine and rehabilitation department of the Illinois Veterans Administration Hospital, has been appointed associate professor of physical medicine at the University of Oklahoma.

WARREN L. BAKER has been appointed chief of the technical industrial relations division, a new office of the Air Research and Development Headquarters that has been created to help secure scientific and technical contributions from organizations that have not previously held ARDC contracts. Baker was formerly with the Socony Vacuum Oil Company, where he headed the aviation division.

Recent Deaths

EDWARD A. COLMAN, Berkeley, Calif.; 45; director of the forest service watershed conservation studies in California; 20 Mar.

CLAIR E. FOLSOME, Plainfield, N.J.; 53; director and professor of obstetrics and gynecology at New York Medical College; former vice president and executive director of the Ortho Research Foundation; 19 Mar.

IRENE JOLIOT-CURIE, Paris, France; 58; professor of physics at the Sorbonne and director of France's radium laboratory; 1935 joint winner with her husband of the Nobel Prize in chemistry for the discovery of artificially induced radioactivity; 17 Mar.

GEORGE W. MULLINS, Woodstock, Vt.; 75; professor emeritus of mathematics at Barnard College; executive secretary of the College Entrance Examination Board from 1933–46 and one of the founders of Educational Testing Service; 11 Mar.

WILLIAM H. OVER, Vermillion, S.D.; 89; retired director of the museum of the University of South Dakota; 20 Feb.

GEORGE M. PRICE, Syracuse, N.Y.; 91; professor emeritus of surgery at Syracuse University; 20 Mar.

GEORGE SARTON, Cambridge, Mass.; 71; professor emeritus of the history of science, at Harvard University; founder of *Isis* and *Osiris*; author of numerous books and papers on the history and philosophy of science; vice president AAAS Section L in 1935; 22 Mar.

Education

■ A grant of $10,000 from the Fund for the Advancement of Education and the loan of equipment for a nominal fee by the Hi-Fidelity Center, Inc., Albany, N.Y., has made it possible for the Mount Pleasant High School in Schenectady to begin trying out instruction by use of closed-circuit television. The project will be expanded to provide for two studio classes and four served by television. The system permits students in the television classes to ask questions of the instructor. The first experiments were tried with advanced algebra and trigonometry classes; it is planned to extend the instruction to classes in science, French, and English. A maximum of 325 volunteer students will participate.

■ The Botanical Society of America will sponsor from 2 July to 11 Aug. a Summer Institute of Botany at Cornell University for 50 teachers from small colleges. The teachers will receive tuition, a stipend of $300, and, in some cases, allotments of $75 for each dependent.

The purpose of the institute is to give teachers the opportunity to learn of recent developments in their special fields of interest and to encourage them to start or continue research projects in their own departments. The institute is financed by a grant of $31,400 from the National Science Foundation. Harlan P. Banks, head of Cornell's Botany Department, will direct the staff of twelve botanists from twelve universities.

■ The National Science Foundation and the Atomic Energy Commission are sponsoring a new program in aid of science teaching in secondary schools. The program will be administered by the Oak Ridge Institute of Nuclear Studies, which is owned by 34 southern universities. Eight or ten high-school teachers will be selected to participate; they will spend 3 months in training at Oak Ridge and 9 months traveling to various high schools, at each of which they will spend a week giving lectures and demonstrations. Each will be provided with a station wagon and equipment for demonstrations in physics and chemistry.

Grants, Fellowships, and Awards

■ The John and Mary R. Markle Foundation has announced the appointment of 23 scholars in medical science, all faculty members of medical schools in the United States and Canada. The fund appropriated $690,000 toward the support of these doctors and their research, to be granted at the rate of $6000 annually for 5 years to the 23 medical schools where they will teach and carry on research.

The scholars were selected from 49 candidates nominated by deans of medical schools, each of whom presented a 5-year program for advancing the scholar in his academic career. The scholars and their fields are Alfred Jay Bollet, internal medicine; Clement E. Brooke, pediatrics; Nicholas P. Christy, internal medicine; Charles F. Crampton, biochemistry; Joseph Dancis, pediatrics; Vincent C. Diraimonda, internal medicine; Merlin D. DuVal, Jr., surgery; Frederic L. Eldridge, internal medicine; Henry A. Harbury, biochemistry; David T. Karzon, pediatrics and virology; Robert F. Kibler, internal medicine; David M. Kipnis, internal medicine; Ernest Knobil, physiology; Robert I. Merritt, obstetrics and gynecology; Ashton B. Morrison, pathology; Robert E. Parks, Jr., pharmacology; David M. Prescott, microscopic anatomy; Henry Z. Sable, biochemistry; Belding H. Scribner, internal medicine; Frank C. Spencer, surgery; Peter A. Stewart, physiology; Judson J. Van Wyk, pediatrics; W. Dean Warren, surgery.

■ The College Entrance Examination Board has invited social scientists who are interested in investigating the nonintellectual aspects of college success to submit short preliminary statements. Research plans should include: (i) a statement of the factors to be studied, the hypotheses involved, the criteria of college success to be employed, and the approximate study design to be followed, (ii) an estimate of the cost of preparing