NEWS *and Notes*

Frank T. Gucker, Jr., Department of Chemistry, Northwestern University, has been appointed chairman, Department of Chemistry, Indiana University, succeeding **Ralph L. Shriner,** recently appointed head of the Organic Division, Department of Chemistry, State University of Iowa. Dr. Gucker will assume his new duties September 1.

H. J. Stafseth, professor of pathogenic bacteriology, Michigan State College, has been appointed head, Department of Bacteriology and Public Health, and director of Biological Sciences. Prof. Stafseth has recently returned from China, where he served as a technical adviser to the Chinese Ministry of Agriculture.

Arthur H. Graves, curator of Public Instruction, Brooklyn Botanic Garden, retired July 1 after 26 years of service. Dr. Graves will continue researches, begun in 1910, on a deadly fungus disease of the American chestnut tree.

William V. Houston, president of Rice Institute, and **Ralph P. Agnew,** chairman, Department of Mathematics, Cornell University, will be visiting professors at Case Institute of Technology during the summer session. Dr. Houston will lecture and consult on research problems, as well as carry on his own investigation in quantum mechanics. Prof. Agnew will teach a course in Infinite Series and Summability. The visiting professorships are made possible by a grant from the Cleveland Foundation.

D. W. Thorne, associate professor of agronomy, Utah State Agricultural College, has been appointed to succeed **R. J. Evans,** head of the Department of Agronomy since 1930, who retired on July 1.

Frederick Wyatt, chief psychologist, McLean Hospital, Waverley, Massachusetts, has been appointed associate professor (affiliate), Department of Psychology, Clark University. Dr. Wyatt will take part in the training program in clinical psychology and will also continue his work at the McLean Hospital.

William von Fischer, a member of the Department of Chemistry, Case School of Applied Science, since 1935, has been promoted to professor of chemistry.

Robert B. Woodward, associate professor of chemistry, Harvard University, has announced the first synthesis of substances with general molecular structural characteristics identical with those of fibrous proteins. The synthesis, the closest man-made substance to nature-made proteins, introduces an entirely new class of synthetic materials from which useful fibers and transparent films can be made.

M. C. Kik, associate professor of agricultural chemistry, College of Agriculture, University of Arkansas, has been decorated by the Government of the Netherlands in appreciation for services rendered during and after the war. Prof. Kik has been made an officer in the Order of Orange-Nassau.

Ezra T. Cresson, Jr., associate curator, Department of Insects, Academy of Natural Sciences of Philadelphia, resigned July 1 after 39 years of service. The Board of Trustees of the Academy has designated him a Research Fellow of the institution.

F. H. Spedding, director, Institute for Atomic Research at Iowa State College, has been elected associate chairman of the Board of Governors of the Argonne National Laboratory.

C. N. Hugh Long, Sterling professor of physiological chemistry, Yale University, has been appointed dean, School of Medicine, succeeding **Francis G. Blake.**

Herbert A. McCullough, Bessie Tift College, Forsyth, Georgia, has been appointed associate professor of botany, Howard College, Birmingham, Alabama.

Ira H. Cram, geologist, Pure Oil Company, Chicago, and past-president, American Association of Petroleum Geologists, gave the annual petroleum geology lectures at the University of Michigan, May 1 and 2.

Andrew Ellicott Douglass, director emeritus, Steward Observatory, and professor of astronomy and dendrochronology, University of Arizona, was recently honored at a dinner given in observance of his approaching 80th birthday. At that time, a group of his colleagues and associates presented to the University a bronze plaque to mark the extensive State Museum exhibit of Dr. Douglass' researches in climatology and dendrochronology.

John L. Bray, head, School of Chemical and Metallurgical Engineering, Purdue University, since 1935, will retire September 1, and will be succeeded by **R. Norris Shreve,** professor of chemical engineering. Dr. Bray will continue as professor of metallurgical engineering.

M. A. Basoco, Department of Mathematics and Astronomy, University of Nebraska, has been appointed chairman of that Department, succeeding **Ralph Hull,** who will resign August 31 to become mathematician in the Physical Research Unit, Boeing Aircraft Company, Seattle, Washington.

David L. Thomson, dean, Faculty of Graduate Studies and Research, McGill University, has been appointed Gilman Cheney professor of biochemistry, succeeding **J. B. Collip,** who has resigned to become dean, Faculty of Medicine, University of Western Ontario.

Otto Storch, after much suffering under the Nazi regime in Austria, has recently been appointed director of the Zoological Institute, University of Vienna, according to word received from Paul Weiss, University of Chicago. Prof. Storch would greatly appreciate receiving from American zoologists reprints of their articles published since 1940.

Grants and Awards

Grants-in-aid to enable 47 outstanding scientists to attend the 6th International Congress for Experimental Cytology, meeting in Stockholm, July 10–17, were announced by UNESCO June 20. Recipients from the United States include: F. Nord, professor of chemistry, Fordham University, New York City; S. Speigelman, Washington University School of Medicine, St. Louis, Missouri; and Paul Weiss, professor of zoology, University of Chicago.

A. Remington Kellogg, curator, Division of Mammals, U. S. National

Museum, was the recipient of the University of Kansas Alumni Association Award for Distinguished Service, June 16.

Rufus A. Lyman, founder and editor, *The American Journal of Pharmaceutical Education*, and retired dean, Pharmacy College, University of Nebraska, was recently awarded the Remington Medal for outstanding work in pharmacy, presented by the American Pharmaceutical Association.

Harry A. Waisman, formerly research associate, Department of Biochemistry, University of Wisconsin, received the Borden Award for Research in Medicine at the University of Wisconsin. The award is given annually to the senior medical student who has completed the most research while in medical school.

Summer Programs

The University of Nebraska Laboratory of Anthropology will be field headquarters for the Missouri River Basin Archaeological Program for 1947, which was started early in June. The program is under the direction of the Smithsonian Institution, in cooperation with the Bureau of Reclamation, the Corps of Engineers, the National Park Service, and local institutions in the 10-state basin area. The work this summer, which will consist of continued surveys and some test excavations at about 33 sites of multipurpose dams and reservoirs having a "high priority" in the Missouri River Basin flood control and reclamation program, will be directed by Waldo R. Wedel, Wesley L. Bliss, Joseph Bauxar, Paul Cooper, John Hughes, and Marvin Kivett, archaeologists, and Theodore White, paleontologist.

Union College, Schenectady, New York, has awarded 50 six-week, all-expense General Electric Science Fellowships for summer study to high school science teachers in eight northeastern states. The 17 women and 33 men will be taught the theory behind scientific discoveries made during the war years in physics and chemistry and will witness these discoveries in actual use through visits to modern industrial laboratories.

The fellowship program, now in its third year, also emphasizes development of new techniques for teaching scientific concepts. Fellows will study under the college faculties of physics and chemistry. Nine members of the General Electric Company laboratory and engineering staffs will assist in presentation of the course and demonstrations.

Meetings

The Annual Symposium of the Society for the Study of Development and Growth will be held at the University of Connecticut, Storrs, August 26–29. The program will include papers by Alexandre Rothen, Rockefeller Institute for Medical Research, on "Long-Range Forces Between Macromolecules"; Robley C. Williams, University of Michigan, "Electron Microscopy in Biology"; Jacques Monod, Pasteur Institute, Paris, "Enzymatic Adaptation and Its Bearing on Problems of Cell Physiology, Genetics, and Differentiation"; Tracy M. Sonneborn, Indiana University, "Mechanisms Determining Persistent Intraclonal Diversities in Paramecium"; Jean Brachet, University of Brussels, Belgium, "Biochemical and Physiological Interrelations Between Nucleus and Cytoplasm"; Armin C. Braun, Rockefeller Institute for Medical Research, "The Physiology of Tumor Inception in Crown Gall Disease of Plants"; Alexander Haddow, Chester Beatty Research Institute, Royal Cancer Hospital, London, "The Mode of Action of Chemical Carcinogens, and Its Possible Relation to the Origin of Viruses"; and Hermann Lisco, University of Chicago, "The Relation of Atomic Energy to the Pathology of Growth and Development." Further information may be obtained from Walter Landauer, University of Connecticut, Storrs, Connecticut.

The New England Association of Chemistry Teachers extends a cordial invitation to teachers of science to attend the 9th Summer Conference at Wellesley College, August 18–23. The program features two symposia, one on Development of Atomic Structure, under the chairmanship of Alfred S. Brown, Colgate University, and another on Selected Topics From Introductory Chemistry, with Hubert N. Alyea, Princeton University, as chairman. Other papers to be presented include: "Science Fights in the Front Lines," Charles E. Waring, University of Connecticut; "New Chemical Processes of Interest to Chemistry Teachers," Emil R. Riegel, University of Buffalo; "The College Board Examinations," William W. Turnbull, CEEB; "European Problems," Samuel Van Valkenburg, Clark University; "Metal Hydrides," representative of Metal Hydrides, Inc.; "Minerals, Fun and Profit," John B. Lucke, University of Connecticut; "Role of Chemistry in the Treatment of Modern Textiles," Donald H. Powers, Monsanto Chemical Company; "*Drench* and Fire Control," Mr. Parker, Arnold, Hoffman & Company; "Crystal Structure," Charles Stillwell, Dennison Manufacturing Company; "Fluorine and Tooth Decay," Joseph F. Volker, Tufts College Dental School; "Acetyl Derivatives of 3,5-Dichlorosulfanilamide," Margaret K. Seikel, Wellesley College; "Commercial Production of Fluorine and Its New Uses," John T. Pinkston, Harshaw Chemical Company; "Flight Over Bikini," Royal M. Frye, Boston University; "Recent Developments in Powder Metallurgy," Alden M. Burghardt, Watertown Arsenal; and "Glass for Science" (motion picture), representative of Corning Glass Works.

Information concerning registration and accommodations can be obtained from the registrar of the Summer Conference Committee: Pearle R. Putnam, Dean Academy and Junior College, Franklin, Massachusetts.

Elections

The Kansas Academy of Science elected the following officers for 1947–48 at its annual meeting at Lawrence, Kansas: J. C. Peterson, Kansas State College, president; F. W. Albertson, Ft. Hays Kansas State College, president-elect; Paul G. Murphy, Kansas State Teachers College, Pittsburg, vice-president; F. C. Gates, Kansas State College, secretary; S. V. Dalton, Ft. Hays Kansas State College, treasurer; A. B. Leonard, University of Kansas, P. S. Albright, University of Wichita, and A. C. Carpenter, Ottawa, Executive Council members; D. J. Ameel, Kansas State College, librarian; Robert Taft, University of Kansas, editor of *Transactions;* W. H. Schoewe, University of Kansas, associate editor, geology; and F. C. Gates, Kansas State College, associate editor, botany.

The 79th annual meeting was presided over by Claude W. Hibbard, who also gave the retiring presidential address on "Pleistocene Vertebrate Faunas of Kansas." A public address was given by Waldo Wedel, U. S. National Museum, on "Prehistory and the Missouri Basin Development Program (see Summer Programs, *News and Notes*).

The Academy is scheduled to meet at Pittsburg, Kansas, in 1948; at Manhattan, Kansas, in 1949; and at Wichita, Kansas, in 1950.

The Chicago Academy of Sciences, at its 90th annual meeting, May 12, elected the following officers for the coming year: Nathan Smith Davis, president; William F. Henderson, first vice-president; Leslie Brainerd Arey, second vice-president; Hulburd Johnston, secretary; Herbert Edwin Bradley and Louis Ellsworth Laflin, Jr., new trustees; and William E. Powers, scientific governor.

NRC News

Fellowships and Senior Fellowships in Cancer Research, supported by the American Cancer Society and administered for the Society by the Committee on Growth of the NRC, are offered for advanced training and experience in any field of investigation pertaining to the problem of cancer, including the various biological, chemical, and physical sciences and clinical investigative medicine. Senior Fellowships are intended for men or women who already have demonstrated unusual competence in research and are designed to provide an opportunity for a prolonged period of advanced training in the field of growth. Their tenure ordinarily is three years. In occasional instances, predoctoral fellowships also have been awarded.

Twenty-four fellowships have been awarded for the year 1947–48, and five have been renewed. In addition, four fellows, awarded Senior Fellowships during 1946, will be serving their second year during 1947–48. The recipients are:

Christian B. Anfinsen, Jr., Boston, Massachusetts, to work on protein synthesis in normal and pathological tissues at the Medical Nobel Institute, Stockholm, Sweden (Senior Fellowship).

Narcisse R. Bothereau, South Pasadena, California, to work on the problem of the early diagnosis of cancer at the University of California Medical School, San Francisco.

Joseph H. Burchenal, Milford, Delaware, to work on new methods in the chemotherapy of cancer at Memorial Hospital, New York City (Senior Fellowship).

Thomas H. Coleman, Madison, Wisconsin, to work on the biology of thyroid tumors at the Massachusetts General Hospital, Boston.

Clarence M. Connelly, Ithaca, New York, to work in biophysics at the University of Pennsylvania, Philadelphia (Predoctoral Fellowship, renewal).

Arthur R. T. Denues, Bruceton, Pennsylvania, to carry on biological research at the Massachusetts Institute of Technology.

George C. Escher, New York City, to work on newer methods in cancer therapy at Memorial Hospital, New York City.

Peter Flesch, Chicago, Illinois, to work on the metabolism of human skin in relation to malignancy at the University of Chicago.

Howard Gest, St. Louis, Missouri, to work in the field of enzyme chemistry at Washington University, St. Louis (Predoctoral Fellowship).

Allan L. Grafflin, Cambridge, Massachusetts, to work on problems of quantitative cytochemistry at the College of Physicians and Surgeons, Columbia University (Senior Fellowship).

Richard M. Halpern, Los Angeles, California, to work on the immunological aspects of cancer at Memorial Hospital, New York City.

Charles M. Huguley, Atlanta, Georgia, to work on newer methods in the chemotherapy of the leukemias and related blood disorders at the University of Utah Medical School, Salt Lake City (renewal).

William McK. Jefferies, Richmond, Virginia, to work on the biology of thyroid tumors at the Massachusetts General Hospital.

Nathan Kaliss, New York City, to work on the genetic aspects of cancer at the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine (Senior Fellowship).

Fred Karush, Elmhurst, New York, to work on the specificity of protein interactions at New York University College of Medicine, New York City (Senior Fellowship).

Roger A. Lewis, Bethesda, Maryland, to work on the influence of hormones upon growth and development at Johns Hopkins University School of Medicine, Baltimore (Senior Fellowship).

Saul Malkiel, Brookline, Massachusetts, to work on the immunochemistry of viruses at the Rockefeller Institute for Medical Research, Princeton, New Jersey (Senior Fellowship, second year).

Robert C. Mellors, Rye, New York, to work on the endocrine and histochemical aspects of cancer at Memorial Hospital, New York City (Senior Fellowship).

William L. Money, Cambridge, Massachusetts, to work on factors influencing the release and action of the thyroid-stimulating hormone at the Massachusetts General Hospital.

James J. Nickson, Chicago, Illinois, to work on radiation therapy of cancer at Memorial Hospital, New York City (Senior Fellowship).

David Pressman, Los Angeles, California, to work on the immunochemistry of normal and malignant tissues at the California Institute of Technology, Pasadena (Senior Fellowship, second year).

Paul B. Reaser, New Orleans, Louisiana, to work on the use of isotopic tracers in biological research at Tulane University, New Orleans (Senior Fellowship).

John M. Reiner, St. Louis, Missouri, to work on problems of enzyme synthesis at Washington University, St. Louis.

Robert L. Sinsheimer, Cambridge, Massachusetts, to work in the field of biophysics at the Massachusetts Institute of Technology (Predoctoral Fellowship, renewal).

Wilson R. Slaunwhite, Winthrop, Massachusetts, to work in the field of organic chemistry at the Massachusetts Institute of Technology (Predoctoral Fellowship, renewal).

Arnold H. Sparrow, Cambridge, Massachusetts, to work on the use of tracer methods in cytological studies at the Massachusetts Institute of Technology (Senior Fellowship).

Morris A. Spirtes, New York City, to work on the chemotherapy of cancer at Johns Hopkins University School of Medicine, Baltimore.

Lotti M. Steinitz, New York City, for a cytophysiological study of growth in plants at the University of Wisconsin.

Henry J. Tagnon, Brookline, Massachusetts, for a clinical study of cancer patients at Memorial Hospital, New York City (Senior Fellowship, second year).

Timothy R. Talbot, Bala Cynwyd, Pennsylvania, to work on the use of tracer techniques in the study of blood diseases at Evans Memorial Hospital, Boston (renewal).

Irving A. Tittler, Brooklyn, New York, to work on the effects of carcinogenic

Hopkins Marine Station of Stanford University, Pacific Grove, California.

Richard B. Turner, New Haven, Connecticut, to work on the synthesis of steroid hormones at Harvard University (Senior Fellowship, second year).

Donald B. Zilversmit, Oakland, California, to work on phospholipid synthesis by animal tissues in normal and pathological states at the University of California, Berkeley (Predoctoral Fellowship).

The membership of the Committee on Growth is as follows: C. P. Rhoads, Memorial Hospital, chairman; Willard M. Allen, Washington University; R. Keith Cannan, New York University; A. R. Dochez, Columbia University; E. Newton Harvey, Princeton University; Charles Huggins, University of Chicago; Frank B. Jewett, National Academy of Sciences; Allan T. Kenyon, University of Chicago; C. C. Little, Roscoe B. Jackson Memorial Laboratory; Perrin H. Long, Johns Hopkins University; John J. Morton, Jr., University of Rochester; James B. Murphy, Rockefeller Institute; Eugene P. Pendergrass, University of Pennsylvania; John M. Russell, The John and Mary R. Markle Foundation; Florence R. Sabin, member emeritus, Rockefeller Institute; E. W. Sinnott, Yale University; M. A. Tuve, Carnegie Institution of Washington; and M. C. Winternitz, Yale University. Drs. Rhoads, Cannan, Harvey, Kenyon, Long, and Tuve and Mr. Russell serve also as a Fellowship Section, of which the latter is chairman.

Recent Deaths

Charles H. Taft, 56, associate professor of pharmacology, University of Texas School of Medicine, died suddenly in his office of cerebral hemorrhage on April 3.

Julio Cesar Tello, 67, director, Peruvian Archaeological Museum, and professor of archaeology and anthropology, San Marcos University, died June 4.

Jules Charles Abels, 33, cancer research specialist and assistant attending physician, Memorial Hospital, Center for Cancer and Allied Diseases, died June 13 of a heart ailment in his home in New York City.

Arthur J. Walscheid, 72, founder and chief gynecologist, North Hudson Hospital, Weehawken, New Jersey, died June 14 in the hospital after a brief illness.

Jean Capart, 70, onetime director of the Brussels Royal Museums of Art and History, Belgium, and advisory curator of Egyptology at the Brooklyn Museum, died June 16 in Brussels.

F. E. Chidester, 62, consultant in nutrition and endocrinology, and formerly professor, Extension Division, New York State College of Forestry, Syracuse, New York, died suddenly June 19 in Newark Valley, New York.

Many works of Mayan art spanning seven or eight centuries have been recovered from burials in a single mound near the village of Nebaj, in the little-known northern highlands of Guatemala, by archaeologists of the Carnegie Institution of Washington during excavations recently brought to an end by the onset of the rainy season. Included among the finds are a jadeite plaque or breast ornament, the finest example of Maya jade carving yet discovered; an urn with a human head on the cover; pendants of jade; a perfectly shaped thin alabaster jar; a vase of plumbate pottery; an elaborate pottery whistle; and many other items of value. All of the artifacts and works of art discovered at Nebaj this year have been placed in the Guatemala National Museum, Guatemala City, in accordance with agreements between the Government of Guatemala and the Carnegie Institution. The investigation is contributing valuable knowledge of the Maya, whose position as the most brilliant exponent of higher aboriginal culture in the western world in the days before Columbus is uncontested.

The American Mathematical Society will publish the Collected Mathematical Papers of the late George David Birkhoff. The Papers, totaling approximately 1,800 pages, will be published in three quarto-size volumes by the photo-offset process. A tentative price of $18 has been set for the three volumes. Members of the Society making a pre-publication subscription will be offered a 30 per cent discount. Contributions and subscriptions are urgently needed at this time to assure the success of the project. The Society will begin publication when $6,000, half the estimated cost of publishing, has been pledged. Contributions and prepublication subscriptions should be sent to J. R. Kline, Secretary, American Mathematical Society, University of Pennsylvania, Philadelphia 4, Pennsylvania.

The Imperial Bureau of Pastures and Forage Crops, Great Britain, has become the Imperial Bureau of Pastures and Field Crops, directed by R. O. Whyte. In its expanded form, it will publish a second abstracting journal, in addition to *Herbage Abstracts*, and will cover literature on the following crops not already covered by the Bureaus of Plant Breeding and Genetics, or Soil Science: all cereals, field root crops, pulses, groundnuts, cotton and other fiber crops grown on a field scale, sugar beets and sugar cane. Continued attention will be given to those aspects of plant biological research which refer to the crops now covered. Research workers, institutes, and departments are invited to send their publications and reports concerned with these crops to the Bureau of Pastures and Field Crops, Penglais, Aberystwyth, Wales, England, for review in the new abstracting journal.

UNESCO is distributing a collection of files of scientific periodicals which was offered by the University of the Witwatersrand, Johannesburg, South Africa, among war-devastated libraries of Europe. Twenty-six sets of these periodicals have now been allocated to eight libraries in Belgium, Denmark, and Poland.

The New York Botanical Garden announces the appointment of P. P. Pirone, associate professor of plant pathology, Rutgers University, as plant pathologist, succeeding B. O. Dodge. Richard A. Howard will also join the staff August 1 as assistant curator, specializing in tropical botany. Donald Philip Rogers, University of Hawaii, will become curator in the cryptogamic herbarium September 1.

The Korean Society for Scientific Agriculture was organized June 7, 1947 at Seoul, Korea. Active membership in the Society is open to graduates in agriculture, forestry, sericulture, and fisheries, and to persons who have made outstanding contributions to agriculture and the associated sciences. H. K. Lee, director, Department of Agriculture, was elected chairman and V. H. Florell,

chemicals on growth in protozoa at the agronomist, U. S. Military Government in Korea, vice-chairman. Branch societies, one each in Kyonggi Do and Kang Won Do provinces, were organized earlier and have been holding regular meetings.

The New York Academy of Medicine has recently organized a Section on Microbiology. The main objectives of this section will be the encouragement of the exchange of information among microbiologists and the promotion of ready contacts between clinical and laboratory investigators. The Fellowship of the section will be broad, including not only those who have a direct interest in microbiology, but also those who deal with microbiology in their primary functions as clinicians or scientists in other branches. The officers of the new section are: Gregory Shwartzman, Mount Sinai Hospital, chairman; Harry Most, New York University College of Medicine, secretary; and René J. Dubos, Rockefeller Institute for Medical Research, Frank L. Horsfall, Jr., Rockefeller Institute for Medical Research, Colin M. MacLeod, New York University College of Medicine, Ralph S. Muckenfuss, Research Laboratories, New York City Health Department, and John G. Kidd, Cornell Medical College, advisory committee.

Chicago Natural History Museum has acquired a large and important collection of plants from Ecuador, assembled and presented by M. Acosta Solis of that country. According to Julian A. Steyermark, assistant curator of the herbarium, this is the largest collection from Ecuador so far received by any institution. It is also one of the largest from a South American country to have reached the Museum.

Make Plans for—

Fifth International Pediatrics Congress, July 14–17, Waldorf-Astoria Hotel, New York City.

Symposium on Sound, July 21–22, University of Utah, Salt Lake City.

Conference on Algebra, July 25–28, University of Michigan, Ann Arbor.

American Association for the Advancement of Science, 114th Meeting, December 26–31, Chicago, Illinois.

COMMENTS *by Readers*

Perhaps no words are more often used incorrectly by systematists and their colleagues than *availability* and *validity*. The words are often erroneously used interchangeably and even with still a third meaning. Actually, three clear-cut concepts are involved: (1) simple proposals of names, whether in compliance with "legal" requirements or not; (2) "legally" acceptable proposals; and (3) "legally" acceptable proposals which can be recognized. An understanding of these concepts and the proper expression for each would greatly simplify and clarify nomenclatural discussions. The frequency with which they are inadequately distinguished has led to almost endless confusion.

For example, all of the following are occupied: *Scincus americanus* Petiver 1711, *Henicognathus annulata cyclura* Cope 1886, *Coluber novae Hispaniae* Gmelin 1788, *Bascanium semilineatum* Cope 1891, *Coluber arizonae* Boulenger 1894, and *Salvadora grahamiae* Baird and Girard 1853. All have been published in journals or books generally available to the public. Accordingly, *any name, once published, is occupied;* it may be available and/or valid or not.

However, *Scincus americanus* Petiver 1711, *Henicognathus annulata cyclura* Cope 1886, and *Coluber novae Hispaniae* Gmelin 1788 are not available (and therefore cannot be valid), since each violates at least one requirement of the International Rules of Zoological Nomenclature. The first name is pre-Linnaean (acceptable names must have been proposed after January 1, 1758); the second is a *nomen nudum* (no diagnosis or definition accompanied the name); and the third is not binomial (acceptable names must be proposed in a binomial system of nomenclature, although they may be trinomial). *Any name published in accordance with the International Rules of Zoological Nomenclature is both occupied and available,* whether valid or not.

Of the remaining names, only *Salvadora grahamiae* Baird and Girard 1853 is valid; it was properly proposed and is a synonym of no other name. *Bascanium semilineatum* Cope 1891 is a zoological synonym of *Masticophis bilineatus* Jan 1863, and *Coluber arizonae* Boulenger 1894 is a nomenclatural synonym of *Arizona elegans* Kennicott 1859. *Only an available name whose "title" to a species is clear* (*i.e.* which is neither a synonym nor a homonym of an earlier name) *can be valid.*

It is obvious that, at any one time, there can be only one valid name for a species, although there may be several available names and even more occupied names. Likewise, it is apparent that while all available names are occupied, not all occupied names are available. (HOBART M. SMITH, *Department of Zoology, University of Illinois, Urbana.*)

Recently, Traub and Slattery (*Plant Physiol.*, 1947, **22,** 77–87) observed that the invertase of bottom fermentation yeast differed markedly from that of top yeast in the effectiveness with which it hydrolyzed the levulins in the residue of the 89 per cent ethanol extract of guayule plants, *Parthenium argentatum* A. Gray. It is of interest to compare this observation on the hydrolysis of levulins with reports of earlier work with inulin in which it had been stated that enzymic hydrolysis of inulin [β-D-furanofructosidase activity] was an aspect of the invertase (sucrase or saccharase) of autolyzed yeast (Lindner. *Wschr. Braeu.*, 1900, **17,** 713–716, 762–765; Kuhn. In Hoppe-Seyler's *Z. physiol. Chem.*, 1923, **129,** 59–63; and especially Weidenhagen, as cited by Bamann and Myrbraeck in *Die Methoden der Fermentforschung*, 1940, p. 1900). Weidenhagen identified inulase as β-h-fructosidase, although he found that his preparation hydrolyzed sucrose 5,000 times as actively as it did inulin.

The data presented by Traub and Slattery show that under the experimental conditions top invertase hydrolyzed from 30 to 65 per cent more of the levulins present than were similarly hydrolyzed by bottom invertase. The ratio of the two kinds of activity in invertase preparations from top fermentation yeast differed from the analogous