Meetings and Societies

Preview of Programs at AAAS **Indianapolis Meeting**

Some of the programs to be presented at the 1957 AAAS meeting in Indianapolis are given here. Others will be announced in subsequent issues.

Mathematics

Section A. Vice-presidential addresses, "Mathematicians in the Market Place, by Mina Rees, Hunter College; and "Mathematical Programming," by A. W. Tucker, Princeton University, 26 Dec., afternoon; C. C. MacDuffee, University of Wisconsin, presiding.

Symposium, cosponsored by the National Council of Teachers of Mathematics and the AAAS Cooperative Committee on the Teaching of Science and Mathematics: "Mathematics Instruction"; arranged by John R. Mayor, American Association for the Advancement of Science, who will preside; 27 Dec., morning. "The Committee on the Undergraduate Program of the Mathematical Association of America," Robert L. Davis, University of Virginia; "The Commission on Mathematics of the College Entrance Examination Board," A. W. Tucker, Princeton University; "The University of Illinois Study on School Mathematics," Max Beberman, University of Illinois; "Mathematics curriculum in perspective," C. C. MacDuffee, University of Wisconsin.

Invited papers: "The Mathematics of Guided Missiles"; 28 Dec., morning; A. W. Tucker, presiding. "Optimal filtering in missile guidance," A. George Carlton, Johns Hopkins University; "Some mathematics and physics of artificial earth satellites," Homer E. Newell, Jr., U.S. Naval Research Laboratory; "Mathematics and ballistic missiles-an overview," Robert W. Rector, Ramo-

Wooldridge Corporation.

Association for Computing Machinery. Symposium, cosponsored by Section A: "Computer Research and Applications"; arranged by Jim Douglas, Jr., Rice Institute; 28 Dec., afternoon; Marshall Wrubel, Indiana University, presiding. "Logical engines and education in the sciences," Wallace Givens, Wayne State University; "Development of research effort in the automatic programming of

numerically controlled machine tools," Douglas T. Ross, Massachusetts Institute of Technology; "On the design of accelerators and the use of computers by MURA (Midwestern Universities Research Association)," James N. Snyder, University of Illinois; a fourth paper, H. R. J. Grosch, General Electric Com-

National Council of Teachers of Mathematics. Invited papers, cosponsored by Section A: "The Teaching of Mathematics"; arranged by Philip Peak, Indiana University; 27 Dec., afternoon; Marie Wilcox, Howe High School, Indianapolis, Ind., presiding. "The mathematics of the stars," Marshall Wrubel; "Progress report on the Curriculum Study of the Commission on Mathematics," A. W. Tucker; "Progress report on the Curriculum Study of the National Council of Teachers of Mathematics," Lynwood Wren, George Peabody College for Teachers.

Physics

Section B. All symposia are being cosponsored by Sigma Pi Sigma: "Wavelength Standards and Problems of Vacuum Ultraviolet Spectroscopy"; arranged by K. W. Meissner, Purdue University, who will preside; 27 Dec., morning. "The future primary standard of length," K. W. Meissner; "Secondary standards of wavelength," William F. Meggers, National Bureau of Standards; "Recent progress in vacuum ultraviolet spectroscopy," P. G. Wilkinson, University of Chicago; "Lamb shifts in hydrogen and helium," G. Herzberg, National Research Council of Canada; "Solar spectrum in the vacuum ultraviolet," R. Tousey, Naval Research Laboratory.

Vice-presidential address, "Reminiscences in Spectroscopy," by William F. Meggers, 27 Dec., evening; Raymond T. Birge, University of California, presid-

Symposium: "Spectra of Lanthanides and Actinides: Isotope Shift," arranged by K. W. Meissner; 28 Dec., morning; Raymond T. Birge, University of California, presiding. "Special techniques for the investigation of the spectra of lan-thanides and actinides," Frank S. Tomkins, Argonne National Laboratory; "Spectra of rare earths—a challenge to spectroscopists," Charlotte M. Sitterly, National Bureau of Standards; "The spectra of the actinides," Mark Fred, Argonne National Laboratory; "Isotope shift for elements near the middle of the periodic table," Julian E. Mack, University of Wisconsin.

Symposium: "Theory of Spectra: Applied Spectroscopy"; arranged by K. W. Meissner; 28 Dec., afternoon; William F. Meggers, presiding. "Electronic configurations, states, and spectra of some diatomic molecules," R. S. Mulliken, University of Chicago; "Recent progress in the theory of atomic spectra, Rohrlich, State University of Iowa; "The role of spectroscopy in thermonuclear research," J. Rand McNally, Jr., Oak Ridge National Laboratory; "Emission spectroscopic determination of oxygen, nitrogen, and hydrogen in metals," V. A. Fassel and W. A. Gordon, Iowa State

Symposium: "Some Recent Advances in Physics"; arranged by J. H. McMillen, National Science Foundation; 28 Dec., afternoon; Allan C. G. Mitchell, Indiana University, presiding. "The role of the neutrino in physics," Frederick Reines, Los Alamos Scientific Laboratory; "Some recent advances in solid state physics," Park H. Miller, General Dynamics; "High-temperature plasmas," Alan C. Kolb, Naval Research Labora-

Chemistry

Section C. Contributed papers; 27 Dec., morning; Ed F. Degering, Quartermaster Research and Development Laboratories, presiding.

Two-session symposium: "Acetylene Chemistry"; arranged by G. F. Hennion, University of Notre Dame, who will preside; 28 Dec., morning and afternoon. Part I: "Introductory remarks," G. F. Hennion; "Commercial acetylene production," C. K. McLane, Linde Company; "Acetylenic carbinols," G. F. Hennion; "Acetylene derivatives as hydrochloric acid corrosion inhibitors," R. F. Monroe, Dow Chemical Company; "Agricultural uses for acetylene derivatives," Fred J. Lowes, Dow Chemical Company. Part II: "A review of the pharmacology of acetylenic compounds," William R. Gibson, Eli Lilly and Company; "The stereochemistry of nucleophilic additions to acetylenes," W. E. Truce, M. M. Boudakian, J. A. Simms, R. F. Heine, and R. Kassinger, Purdue University; "The acetylene-allene rearrangement," Thomas L. Jacobs, University of California; "Acetylene in the synthesis of pyridines," W. R. Wheeler and F. A. Karnatz, Reilly Tar & Chemical Corporation.

Two-session symposium: "Pyridine Chemistry"; arranged by F. E. Cislak, Reilly Tar & Chemical Corporation,

who will preside; 29 Dec., morning and afternoon. Part I: "Introductory remarks," F. E. Cislak; "Recovery of pyridine from coal products," J. H. Wells, United States Steel Corporation; "The chemistry of vinylpyridines," Robert Levine, University of Pittsburgh; "Derivatives of vinylpyridine," Allan P. Gray, Irwin, Neisler & Company; "Pyridine-metal salt complexes for clathration separation of aromatic isomers," W. D. Schaeffer, W. S. Dorsey, D. A. Skinner, and C. G. Christian, Union Oil Company of California. Part II: "The synthesis and reactions of sterically hindered pyridine bases," Harold Podall, Ethyl Corporation, and Herbert C. Brown, Purdue University; "Chemistry of pyridine-N-oxide," E. C. Taylor, Jr., Princeton University; "Preparation of the pyridolacetones and the inductive effect of nitrogen on the dehydration of the intermediate aldols," John K. Stille, State University of Iowa, and C. S. Marvel, University of Illinois; "Pyrophthalones derived from picolines as intermediates for medicinal agents," C. H. Tilford and G. L. Krueger, William S. Merrell Company, and E. D. Amstutz, D. G. Manly, A. Richardson, Jr., and M. Stock Lebish University; "The A. M. Stock, Lehigh University; "The chemistry of picolines," F. E. Cislak.

American Association of Clinical

Chemists. General session I; 27 Dec., morning; Donald E. Bowman, Indiana University, presiding.

Annual dinner and speaker: Michael Somogyi, Jewish Hospital of St. Louis.

Symposium: "Significant Trends in the Chemistry of Disease"; arranged by Alfred H. Free, Miles-Ames Research Laboratory, who will preside; 28 Dec., morning, "Electrolytes and acid-base morning, "Electrolytes and acid-base balance," Harry Weisberg, Chicago Medical School and the Little Company of Mary Hospital; "Chemical changes involved in the use of artificial organs," Jack R. Leonards, Western Reserve University Medical School; "Recent advances in the understanding of hormonal factors in disease," Ralph I. Dorfman, Worcester Foundation for Experimental Biology; "Use of serum transaminase activities in clinical biochemistry," Clarence Cohn, Michael Reese Hospital.

General session II; 28 Dec., afternoon; Oliver H. Gaebler, Henry Ford Hospital, presiding

Astronomy

American Astronomical Society. Astronomers' Dinner and address of retiring vice president of Section D: "Facets of Astronomy," by Peter van de Kamp, Swarthmore College; 28 Dec., evening. Symposium, with Section D: "The

Cepheid Variable Stars"; 29 Dec., afternoon; Allan R. Sandage, Mount Wilson and Palomar Observatories, presiding. "Cepheid variables in the small Magellanic cloud," Halton C. Arp, Mount Wilson and Palomar Observatories; "Photoelectric photometry of southern cepheids," John Irwin Goethe Link Observatory; "The spectra of the cepheids in the two stellar populations," Robert Kraft, Goethe Link Observatory; "Comments on the present status of the pulsation theory," Charles Whitney, Smithsonian Astrophysical Observatory.

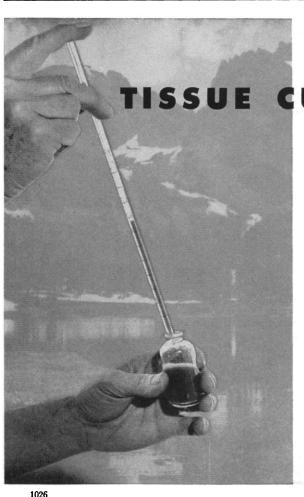
Helen B. Warner Lecture, joint with Section D: "Unsolved Problems in the Ouest for the Extragalactic Scale," by Allan R. Sandage; 29 Dec., evening.

Astronomical League. General meeting, cosponsored by the Indiana Astronomical Society; 26 Dec., afternoon; arranged by Wilhelm Garnatz.

Geology and Geography

Section E. Contributed papers, joint session with the Association of American Geographers, East Lakes and West Lakes Divisions, and the Geological Society of America; 27 Dec., morning; Alfred H. Meyer, Valparaiso University, presiding.

Vice-presidential address, "Uranium Emplacement in the Colorado Plateau,"



We supply...

NON-TOXIC, TESTED HORSE SERUM FOR CULTURE RESEARCH

Research investigators in the tissue culture field are pleased that COLORADO SERUM CO. has extended its experience to the diagnostic reagent field, since this means a reliable source of supply of non-toxic, tested Horse Serum.

We are able to offer an unusually wide range of sterile serums. We have experience in producing effective serums, a competent staff of veterinarians and bacteriologists, and maintain our own animals, under optimum conditions, including horses, cattle, sheep, chickens, rabbits, swine, mice, rats, pigeons, hamsters and guinea pigs.

For over 35 years, COLORADO SERUM COMPANY has produced veterinary serums and biologicals, and now extends its facilties to those requiring reliable diagnostic reagents.

· Bloods Serums

Anti-Precipitins

 Hemolysin Complement

WRITE FOR THIS FREE CATALOG TODAY!



4950 YORK STREET . DENVER 16, COLORADO . MAin 3-5373

SCIENCE, VOL. 126

by Paul F. Kerr, Columbia University; Robert R. Schrock, Massachusetts Institute of Technology, presiding; followed by Section E Smoker; 27 Dec., evening. Four-session symposium, joint with the Association of American Geographers, East Lakes and West Lakes Divisions, and the Geological Society of America: "Continental Glaciation and Its Geographic Importance as an Environmental Factor"; 28 Dec., morning and afternoon, and 29 Dec., morning and afternoon; Parts I-IV arranged by Frank C. Whitmore, Jr., and Louis L. Ray, U.S. Geological Survey. Part I, William D. Thornbury, Indiana University, presiding. "Present status of glacial geology in Indiana," William D. Thornbury; "Glacial deposits of central and western Ohio," Jane L. Forsyth, Ohio Geological Survey; "Wisconsin glacial deposits of northeastern Ohio," George W. White, University of Illinois; "Present status of glacial geology in Illinois," M. M. Leighton, Illinois Geological Survey; "Present status of glacial geology in Michigan,' W. N. Melhorn, Purdue University. Part II, George W. White, University of Illinois, presiding. "Glacial deposits of northwestern Pennsylvania," George W. White and J. B. Droste, Indiana University, R. F. Sitler, Kent State University, and V. C. Shepps, Pennsylvania Geological Survey; "Glacial geology of western and central New York," Ernest H. Muller, Cornell University; "Wisconsin glaciation of the Indianapolis, Indiana, area," Philip W. Harrison, Indiana Geological Survey; "Problems along the margin of the Wisconsin drift in Putnam County, west and central Indiana," C. L. Bieber, DePauw University; "Buried valley systems in parts of northeastern Ohio," John D. Winslow, U.S. Geological Survey; "Pre-Wisconsin peat in Millbury, Massachusetts," Richard J. Lougee, Clark University; "Petrography of Wisconsin tills in oriented sections," Robert F. Sitler, Kent State University. Part III, Paul B. Sears, Yale University, presiding. "Indiana's probable climate during the glacial period," Stephen S. Visher, Indiana University; "Pleistocene climatic change recorded by ice-wedge polygon casts of Cary age at River Falls, Wisconsin," Robert F. Black, University of Wisconsin; "Pleistocene-Wisconsin deposits and soils of Upper Whitewater Basin, Indiana-Ohio," James Thorp, Ansel M. Gooding, and Erling S. Gamble, Earlham College; "Interglacial and lateglacial vegetation of the north central United States," William S. Benninghoff, University of Michigan; "Postglacial vegetation of the north central United States," Theodor Just, Chicago Natural History Museum; "Late Pleistocene biotic changes in Indiana," William J. Wayne, Indiana Geological Survey. Part IV, Louis O. Quam, Office of Naval Research, presiding. "Subsurface sources



for RESEARCH in

METABOLISM and ENZYME SYSTEMS

ADENOSINE PHOSPHATES

NUCLEIC ACIDS and METALLIC NUCLEATES

NUCLEOTIDES and NUCLEOSIDES

PURINES and PYRIMIDINES

SUGARS and SUGAR PHOSPHATES

GLUTATHIONE COMPOUNDS

SULFHYDRYL REAGENTS

THYMIDINE

L- and D-AMINO ACIDS, Optically Standardized

COZYMASE

RADIOCHEMICALS. Isotopically Labeled with C^{14} , S^{35} or P^{32}

These Schwarz fine chemicals satisfy the exacting requirements of products intended for laboratory and biochemical use.

To assure the user of highest quality and purity, rigid specifications in accordance with latest literature are established for each product, each lot is carefully analyzed and checked before shipment, complete records are permanently kept, and an analysis is furnished the user if desired.

Quantity production resulting from the wide preference and demand for Schwarz high-quality biochemicals provides ample supplies at low cost. Write for informative technical bulletins, specifications, references to literature, and latest complete price list.

SCHWARZ LABORATORIES, INC.

Leading Manufacturers of Yeast Biochemicals and Fine Chemicals
230 WASHINGTON STREET, MOUNT VERNON, NEW YORK
SLASS

of water in the glacial drift of Indiana," Claude M. Roberts, U.S. Geological Survey; "Glacial deposits: a major source of groundwater in the central United States," George B. Maxey and James E. Hackett, Illinois Geological Survey; "Sand and gravel resources of Indiana," Robert L. Schuster, Purdue University; "Glaciers and human activities," Charles G. Morrison, American Geographical Society.

Two-session symposium, jointly with the Geological Society of America: "Mississippian and Pennsylvanian Rocks of the Midwest"; 28 Dec., morning and afternoon; arranged by Henry H. Gray, Indiana Geological Survey, and David H. Swann, Illinois Geological Survey, both of whom will preside. Part I. "Pennsylvanian rocks and basal unconformity in Wayne County, Ohio," H. G. Multer, College of Wooster; "Distinguishing features of Chester and Lower Pennsylvanian rocks in the Illinois Basin," Elwood Atherton, Grover H. Emrich, Herbert D. Glass, Paul E. Potter, and David H. Swann, Illinois Geological Survey; "Stratigraphy of Renault limestone and 'Basin aux Vases' in Indiana subsurface," Arthur P. Pinsak, Indiana Geological Survey; "A correlation and structural interpretation of the Missourian and Virgilian series in southwestern Iowa," T. L. Welp, Iowa State Highway Commission, and L. A.

Thomas, Iowa State College; "Late Pennsylvanian facies of north central Oklahoma," Carl C. Branson, University of Oklahoma; "Pennsylvanian conglomerates and tectonic history of the Arbuckle Mountain region," William E. Ham, Oklahoma Geological Survey; "Pennsylvanian history of the Criner Hills area," E. A. Frederickson, University of Oklahoma; "Mississippian stratigraphy and tectonics of the Oklahoma Ozark area," George G. Huffman, University of Oklahoma; "The relationships of the Waynesburg, Hockingport, and Antiquity sandstones of the Dunkard Basin," Wayne D. Martin and William I. Mushake, Miami University, Ohio. Part II. "Crossbedding and sandstone trends in the Chester rocks of the Illinois Basin," Paul E. Potter, Illinois Geological Survey, Edmund Nosow, Kentucky Geological Survey, Ned E. Smith, Indiana Geological Survey, David H. Swann, Illinois Geological Survey, and Frank H. Walker, Kentucky Geological Survey; "Types of Pennsylvanian channel sandstones in Indiana," S. A. Friedman, Indiana Geological Survey; "Geology and petrology of the Anvil rock sandstone of the Illinois Basin," M. E. Hopkins, University of Tulsa, and P. E. Potter and J. A. Simon, Illinois Geological Survey; "Pennsylvanian limestone textures in southwestern Illinois," Russell B. Lennon, Shell Oil Company, and

Harold R. Wanless, University of Illinois; "Postulates employed in a Pennsylvanian paleoecological study," Eugene S. Richardson, Jr., and Rainer Zangerl, Chicago Natural History Museum; "Desmoinesian Brachiopoda and Mollusca from southwest Missouri," Richard D. Hoare, Bowling Green State University; "Upper Mississippian and Lower Pennsylvanian megaspores," Marcia R. Winslow, Illinois Geological Survey; "Mississippian smaller Foraminifera of east-central United States," James E. Conkin, University of Louisville; "Arenaceous Foraminifera from the Rockford limestone of northern Indiana," R. C. Gutschick and John Treckman, University of Notre Dame; "The genus Agassizocrinus as a stratigraphic marker," R. C. Gutschick, University of Notre Dame, and Edmund Nosow, Kentucky Geological Survey.

Symposium, jointly with the National Speleological Society and the Geological Society of America: "Karst Phenomena"; 30 Dec., morning; arranged by William E. Davies, U.S. Geological Survey, who will preside. "Karst areas of the United States," George W. Moore, Yale University; "Geomorphic aspects of karst," William E. Davies; "Karst features of Swago Creek area, West Virginia," William B. White, Mellon Institute for Industrial Research; "Pseudokarst of the western United States," William R. Halliday, Seattle, Washington; "Pitdome complex in Flint Ridge, Kentucky," R. A. Watson, Cave Research Foundation, Inc.

National Geographic Society. Annual lecture and color film: "The Bounty and Pitcairn Island," by Luis Marden, National Geographic Magazine; 29 Dec., evening; Paul A. Scherer, Carnegie Institution of Washington, presiding.

National Speleological Society. Contributed papers, 28 Dec., morning.

Symposium: "Cave Fauna of the Ohio River Valley"; arranged by Thomas C. Barr, Jr., Texas Technological College; 28 Dec., afternoon. "Cave harvestmen (Phalangodidae) of the Ohio River Valley," Clarence J. Goodnight, Purdue University; "Millipedes from Tennessee caves," Nell B. Causey, University of "Cavernicolous pselaphid Arkansas; beetles of the Ohio River Valley," Orlando Park, Northwestern University: "Anophthalmid beetles of southern Indiana," Carl H. Krekeler, Valparaiso University; "Cavernicolous anophthalmid and silphid beetles from Tennessee and Kentucky caves," Thomas C. Barr,

"bettering" the Best

NALGENE WASH BOTTLES . . . completely leakproof . . . able to expel a drop or a stream . . . have long been indispensable items in every well-equipped laboratory. Now with an improved design, a new screwcap and a more flexible dispensing tube they are better than ever. New 16 oz. bottle is only 2% in diameter. Taller . . . thinner . . . it's easier to handle . . . better to use.

CAP. OZS.	4	6	8	16
NO. IN CASE	48	36	36	24
PRICE EACH	.65	.70	.75	.85
PER CASE	24.96	20.16	21.60	16.32

he NALGE CO. Inc.

WORLD'S LARGEST PRODUCER OF POLYETHYLENE LABORATORY WARE!

Forthcoming Events

December

13-14. Association for Research in Nervous and Mental Disease, 37th annual, New York, N.Y. (R. J. Masselink, 700 W. 168 St., New York 32.)

INDUSTRIAL APPLICATIONS OF RADIOISOTOPES WITH THE NEW AUTOMATIC TRI-CARB SPECTROMETER

Tracer Research involving industrial organic compounds — oil and gasoline, solvents, pharmaceuticals, plastics.

Ground Water Studies—large scale water distribution problems, such as pollution and waste disposal.

Large Scale Tagging of plant operation with safety and economy of radioactive materials.



Tri-Carb Liquid Scintillation Counting has opened many new possibilities for industrial applications of radioisotopes by making low level counting of soft beta emitters a simple routine procedure. Consider the following facts to see how this method might be applied to your own work.

Every single organic compound can be uniquely identified with the radioactive isotopes of hydrogen and carbon. These isotopes ... Tritium and Carbon-14 . . . are readily available and simple to use. They emit very soft beta radiation which cannot penetrate even a thin glass container. Other common soft beta emitters that are now being successfully used in industrial applications are Sulphur-35 and Calcium-45.

Although the Tri-Carb Liquid Scintillation Spectrometer is sensitive enough to be used for natural radiocarbon dating of preserved organic materials that are over 40,000 years old, it is still simple enough to be used for counting hundreds of ordinary samples per day. Obviously the possibilities for practical industrial applications of radioactive tracers are greatly enhanced now that measuring equipment with this inherent sensitivity is available for routine use. Costs, safety, etc., cease to be limiting factors, and even the labeling of consumer products becomes a practical consideration.

For additional general information re-

quest Bulletin 314. For specific information on your requirements, provide application details.



INSTRUMENT COMPANY

P. O. Box 428 . LA GRANGE, ILLINOIS

15-18. American Soc. of Agricultural Engineers, Chicago, Ill. (J. L. Butt, ASAE, St. Joseph, Mich.)

16-18. Air Traffic Control Symp., Philadelphia, Pa. (Air Traffic Symp., Franklin Inst. Labs., 20th St. and Parkway, Philadelphia 3.)

17-19. Nuclear Sizes and Density Distributions Conference, Stanford, Calif. (R. Hofstadter, Stanford Univ., Stanford, Calif.)

19-21. American Physical Soc., Stanford, Calif. (W. A. Nierenberg, Univ. of California, Berkeley 4.)

26-27. Northwest Scientific Assoc., annual, Spokane, Wash. (W. B. Merriam, Geography Dept., State College of Washington, Pullman.)

26-30. American Assoc. for the Advancement of Science, annual, Indianapolis, Ind. (R. L. Taylor, AAAS, 1515 Massachusetts Ave., NW, Washington 5.)

The following 44 meetings are being held in conjunction with the AAAS annual meeting.

AAAS Acad. Conference, annual (Father P. H. Yancey, Spring Hill College, Mobile, Ala.). 28 Dec.

AAAS Cooperative Committee on the Teaching of Science and Mathematics (F. B. Dutton, Dept. of Chemistry, Michigan State Univ., East Lansing). 27 Dec.

Alpha Epsilon Delta (M. L. Moore, 7 Brookside Circle, Bronxville, N.Y.). 28 Dec.

American Astronomical Soc. (J. A. Hynek, Smithsonian Astrophysical Observatory, 60 Garden St., Cambridge 38, Mass.). 27-30 Dec.

American Geophysical Union (E. M. Brooks, Dept. of Geophysics, St. Louis Univ., St. Louis 8, Mo.).

American Medical Assoc. Committee on Cosmetics (Mrs. V. L. Conley, AMA, 535 N. Dearborn St., Chicago, Ill.). 28-29 Dec.

American Meteorological Soc. (K. C. Spengler, AMS, 3 Joy St., Boston, Mass.).

American Nature Study Soc., annual (R. L. Weaver, School of Natural Resources, Univ. of Michigan, Ann Arbor). 26-30 Dec.

American Physiological Soc. (F. A. Hitchcock, Dept. of Physiology, Ohio State Univ., Columbus 10.)

American Political Science Assoc. (C. S. Hyneman, Dept. of Government, Indiana Univ., Bloomington). 29 Dec.

American Psychiatric Assoc. Greenblatt, Massachusetts Mental Health Center, 74 Fenwood Rd., Boston 15). 29-

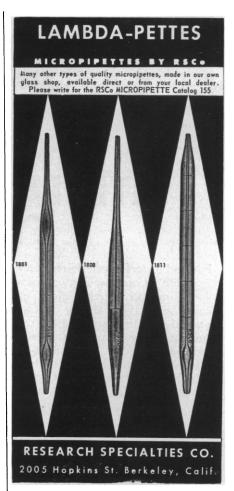
American Soc. of Hospital Pharmacists (G. E. Archambault, Pharmacy Branch, U.S. Public Health Service, Washington 25).

American Soc. of Naturalists (B. Wallace, Biological Lab., Cold Spring Harbor, Long Island, N.Y.).

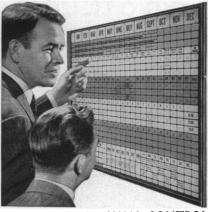
American Sociological Soc. (V. H. Whitney, Brown Univ., Providence, R.I.).

American Statistical Assoc. (V. L. Anderson, Statistical Lab., Purdue Univ., Lafayette, Ind.).

Association of American Geographers (L. L. Ray, U.S. Geological Survey, Washington 25).



How To Get Things Done Better And Faster



BOARDMASTER VISUAL CONTROL

- ★ Gives Graphic Picture Saves Time, Saves Money, Prevents Errors
- Simple to operate -– Type or Write on Cards, Snap in Grooves
 * Ideal for Production, Traffic, Inventory,
- Scheduling, Sales, Etc.

 ★ Made of Metal Compact and Attractive.
- Over 200,000 in Use

\$4950 Full price with cards 24-PAGE BOOKLET NO. BF-10 Without Obligation

Write for Your Copy Today GRAPHIC SYSTEMS 55 West 42nd St. • New York 36, N. Y.

SCIENCE, VOL. 126

Association for Computing Machinery (J. E. Robertson, Digital Computer Lab., Univ. of Illinois, Urbana).
Astronomical League (W.

2506 South East St., Indianapolis).

Beta Beta Beta (Mrs. F. G. Brooks, P.O. Box 336, Madison Sq. Station, New York 10). 27 Dec.

Biometric Soc., ENAR (T. A. Bancroft, Dept. of Statistics, Iowa State College, Ames).

Conference on Scientific Editorial Problems, annual (G. L. Seielstad, Applied Physics Lab., Johns Hopkins Univ., Silver Spring, Md.). 26-30 Dec.

Conference on Scientific Manpower, annual (T. J. Mills, National Science Foundation, Washington 25). 30 Dec.

Ecological Soc. of America (A. A. Lindsey, Dept. of Biological Sciences, Purdue Univ., Lafayette, Ind.). 27-29 Dec.

Metric Assoc. (J. T. Johnson, 694 West

11 St., Claremont, Calif.).

National Acad. of Economics and Political Science (D. P. Ray, Hall of Gov-Washington Univ., ernment, George Washington, D.C.).

National Assoc. of Biology Teachers, annual (Miss I. Hollenbeck, Southern Oregon College of Education, Ashland). 26-31 Dec.

National Assoc. for Research in Science Teaching (G. G. Mallinson, Western Michigan College, Kalamazoo). 26-30 Dec.

National Assoc. of Science Writers (J. Troan, Pittsburgh Press, Pittsburgh, Pa.).

National Council of Teachers of Mathematics (P. Peak, College of Education, Indiana Univ., Bloomington). 27 Dec.

National Foundation for Junior Museums (J. R. Forbes, NFJM, 114 E. 30 St., New York 16). 26, 28 Dec.

National Geographic Soc. (W. R. Gray, NCS, 16th and M Sts., NW, Washington 6). 29 Dec.

National Science Teachers Assoc. (R. W. Schulz, Emmerich Manual Training High School, 2405 Madison Ave., Indianapolis 25). 26-30 Dec.

National Speleological Soc. (Brother G. Nicholas, LaSalle College, 20th and Olney Aves., Philadelphia 41, Pa.) 28 Dec.

Philosophy of Science Assoc. (C. W. Churchman, Case Inst. of Technology, Cleveland, Ohio).

Scientific Research Soc. of America, annual (D. B. Prentice, 56 Hillhouse Ave., New Haven 11, Conn.). 27 Dec.

Sigma Delta Epsilon, annual (Miss M. Chalmers, Dept. of Chemistry, Purdue Univ., Lafayette, Ind.). 26-30 Dec.

Sigma Pi Sigma (M. W. White, Pennsylvania State Univ., University Park).

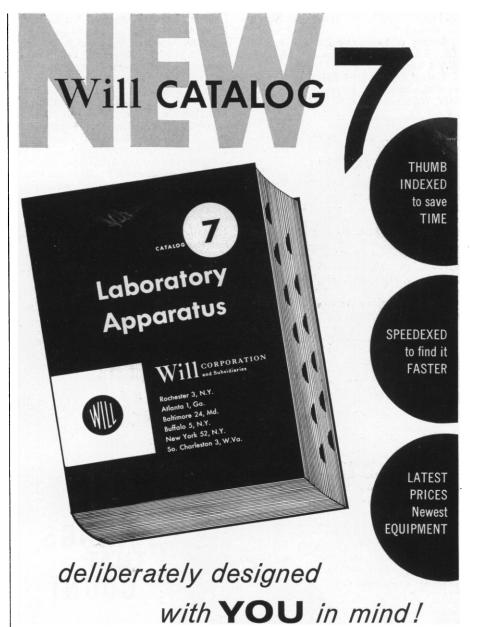
Society for the Advancement of Criminology (D. E. J. MacNamara, New York Inst. of Criminology, 40 E. 40 St., New York 16). 27-28 Dec.

Society for General Systems Research, annual (R. L. Meier, Mental Health Research Inst., Ann Arbor, Mich.).

Society for Industrial Microbiology, Washington Section (W. N. Ezekiel, Bureau of Mines, Washington 25).

Society for Investigative Dermatology (H. Beerman, Univ. of Pennsylvania School of Medicine, Philadelphia 3), 28-29 Dec.

Society of the Sigma Xi, annual (T. T.



It's different . . . more than just a collection of new apparatus! It's a buying guide to help you select the right equipment

Open the cover . . . Speedex instantly leads you to the section of your choice . . . at the head of each section, a Subindex. There are dozens of comparison charts, reference tables, buying hints throughout. Listings are concise, tabulated when possible; features are headlined; and it's up-todate, even includes KIMAX, the new "hard" glassware by Kimble.

We're sure you'll make No. 7 your lab apparatus guide . . . we deliberately planned it for you.

If you haven't received your copy, write us on your company letterhead.

CORPORATION and aubaidiaries

quickly!

Specialists in

Scientific Supply

ROCHESTER 3, N.Y. • ATLANTA 1, GA. • NEW YORK 12, N.Y. • BALTIMORE 24, MD. • BUFFALO 5, N.Y.

SO. CHARLESTON 3, W. VIRGINIA

Holme, 56 Hillhouse Ave., New Haven 11, Conn.). 27 Dec.

Society of Systematic Zoology, annual (R. E. Blackwelder, Box 500, Victor, N.Y.). 26-31 Dec.

United Chapters of Phi Beta Kappa, annual address (C. Billman, 1811 Q St., NW, Washington, D.C.). 27 Dec.

27. Association for Symbolic Logic., Cambridge, Mass. (J. Barlaz, Rutgers Univ., New Brunswick, N.J.)

27-28. Linguistic Soc. of America, Chicago, Ill. (A. A. Hill, Box 7790, University Station, Austin 12, Tex.)

27-30. American Finance Assoc., annual, Philadelphia, Pa. (G. E. Hassett, Jr., New York Univ., 90 Trinity Pl., New York 6.)

28-29. American Folklore Soc., annual, Chicago, Ill. (M. Leach, Box 5, Bennett Hall, Univ. of Pennsylvania, Philadelphia 4, Pa.)

28-30. American Anthropological Assoc., annual, Chicago, Ill. (W. S. God-

frey, Jr., Logan Museum, Beloit College, Beloit, Wis.)

28-30. American Economic Assoc., annual, Philadelphia, Pa. (J. W. Bell, Northwestern Univ., Evanston, Ill.)

28-30. Archaeological Inst. of America, annual, Washington, D.C. (C. Boulter, 608, Univ. of Cincinnati Library, Cincinnati 21, Ohio.)

28-30. Econometric Soc., Philadelphia, Pa. (R. Ruggles, Dept. of Economics, Yale Univ., New Haven, Conn.)

28-30. History of Science Soc., annual, New York, N.Y. (Miss M. Boas, Brandeis Univ., Waltham 54, Mass.)

January

6-8. Reliability and Quality Control, 4th natl. symp., Washington, D.C. (C. M. Ryerson, RCA Bldg. 10-6, Camden 2, N I)

N.J.)
7-10. Radioactive Isotopes in Clinical Application and Research) 3rd internatl. symp., Bad Gastein, Austria. (Second Medical Clinic, Vienna Univ., Vienna, Austria.)

8-10. Northeastern Weed Control Conf., 12th annual, New York. (R. J. Aldrich, Farm Crops Dept., Rutgers Univ., New Brunswick, N.J.)

13-17. Society of Automotive Engineers, annual, Detroit, Mich. (Meetings Div., SAE, 29 W. 39 St., New York 18.)

22-24. American Council of Learned Societies, 39th annual, Bloomington, Ind. (ACLS, 2101 R St., NW, Washington 8.)

22-25. American Group Psychotherapy Assoc., 15th annual, New York. (M. Berger, 50 E. 72 St., New York 21.)

27-28. Scintillation Counter Symp., Washington, D.C. (G. A. Morton, Radio Corporation of America, Princeton, N.J.)

27-29. American Soc. of Heating and Air-Conditioning Engineers, Pittsburgh, Pa. (A. V. Hutchinson, ASHAE, 62 Worth St., New York 13.)

27-30. American Meteorological Soc., 163rd natl., New York. (K. C. Spengler, AMS, 3 Joy St., Boston 8, Mass.)

27-31. Institute of Aeronautical Sciences, 26th annual, New York, N.Y. (S. P. Johnston, IAS, 2 E. 64 St., New York 21.)

28-30. Aging, 4th Ciba Foundation Colloquium (by invitation), London, England. (G. E. W. Wolstenholme, 41 Portland Pl., London, W.1.)

28-30. American Mathematical Soc., 64th annual, Cincinnati, Ohio. (J. H. Curtiss, AMS, 190 Hope St., Providence 6, R.I.)

29-1. American Physical Soc., annual, New York, N.Y. (K. K. Darrow, Columbia Univ., New York 27.)

30-31. College-Industry Conf., American Soc. for Engineering Education, 10th annual, Ann Arbor, Mich. (W. D. Mc-Ilvaine, College of Engineering, Ann Arbor.)

30-1. American Assoc. of Physics Teachers, New York. (F. Verbrugge, Univ. of Minnesota, Minneapolis.)

30-1. Western Soc. for Clinical Research, 11th annual, Carmel-by-the-Sea, Calif. (A. J. Seaman, Univ. of Oregon Medical School, Portland 1.)

31. Mathematical Assoc. of America, annual, Cincinnati, Ohio. (H. M. Gehman, Univ. of Buffalo, Buffalo 14, N.Y.)

February

1-14. Pan American Assoc. of Ophthalmology, Caribbean cruise cong., sailing from New York, N.Y. (L. V. Arnold, 33 Washington Sq. W., New York 11.)

3-4. Progress and Trends in Chemical and Petroleum Instrumentation, Wilmington, Del. (H. S. Kindler, Instrument Soc. of America, 313 Sixth Ave., Pittsburgh 22, Pa.)

3-7. American Inst. of Electrical Engineers, winter genl., New York, N.Y. (N. S. Hibshman, AIEE, 33 W. 39 St., New York 18.)

10-14. American Soc. for Testing Materials, St. Louis, Mo. (F. F. Van Atta, ASTM, 1916 Race St., Philadelphia 3, Pa.)

16-20. American Inst. of Mining, Metallurgical and Petroleum Engineers, annual, New York. (E. O. Kirkendall, AIME, 29 W. 39 St., New York 18.)

20-21. Transistor and Solid State Circuits Conf., Philadelphia, Pa. (J. H. Milligan, Jr., Dept. of Electrical Engr., New York Univ., New York 53.)

