

## Forthcoming Events

### November

7-9. Society for Experimental Stress Analysis, fall mtg., Pittsburgh, Pa. (Executive Secretary, 21 Bridge Square, Westport, Conn. 06882)

7-10. Displays for Command and Control Centers, symp., Munich, Germany. (Avionics Panel, Advisory Group for Aerospace Research and Development, 64, rue de Varenne, Paris 7, France)

8-10. Computers, fall joint conf., American Federation of Information Processing Socs., San Francisco, Calif. (W. H. Davidow, P.O. Box 2208, Menlo Park, Calif. 94025)

9-11. Society of Aerospace Material and Process Engineers, 10th natl. symp., "Advanced Fibrous Reinforced Composites," San Diego, Calif. (The Society, P.O. Box 613, Azusa, Calif.)

9-11. Pittsburgh Diffraction conf., Pittsburgh, Pa. (P. R. Swann, U.S. Steel Corp., Fundamental Research Lab., Monroeville, Pa. 15146)

10-11. Mind as a Tissue, 5th Lankenau intern. research conf., Lankenau Hospital, Philadelphia, Pa. (Div. of Research, Lankenau Hospital, Lancaster and City Line Ave., Philadelphia 19151)

10-11. Thiamine, mtg., Ciba Foundation study group, London, England. (Ciba, 41 Portland Pl., London, W.1)

10-12. American Soc. of Cytology, 14th annual scientific mtg., Milwaukee, Wis. (W. R. Lang, 1025 Walnut St., Philadelphia, Pa. 19107)

10-12. Newtonian Studies, intern. conf., Univ. of Texas, Austin. (R. Palter, Philosophy Dept., Univ. of Texas, Austin)

11. Joint Commission on Applied Radioactivity, annual mtg., Budapest, Hungary. (C. Fisher, Commissariat à l'Energie Atomique, Centre d'Etudes de Saclay, Boite Postale 2, Gif-sur-Yvette, France)

11-12. New England Psychological Assoc., annual mtg., Boston, Mass. (M. M. Riggs, New Hampshire Child Guidance Clinics, 121 S. Fruit St., Concord, N.H.)

11-12. Psychosomatic Disorders, 10th annual conf., London, England. (A. H. Crisp, Academic Psychiatric Unit, Middlesex Hospital, London, W.1)

11-13. Association of Clinical Scientists, annual mtg., Washington, D.C. (The Association, 300 N. State Street, No. 5322, Chicago, Ill. 60610)

12. Petroleum, 6th Arab congr., Baghdad. (League of Arab States, Midan Al Tahrir, Cairo, UAR)

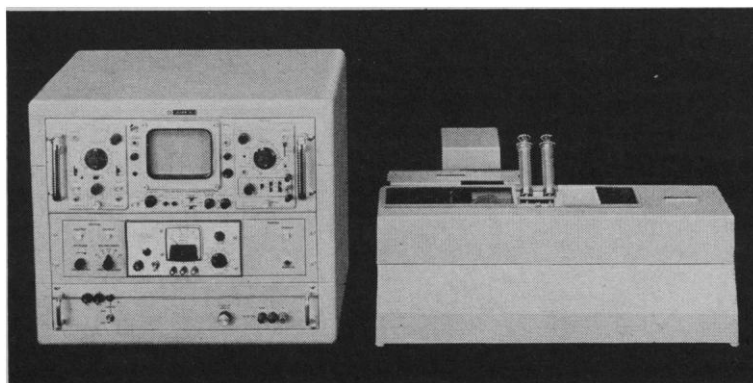
13-16. Education in the Neurological Sciences, conf., White Sulphur Springs, W.Va. (J. L. O'Leary, Dept. of Neurology, Washington Univ. School of Medicine, St. Louis, Mo. 63110)

13-16. Otorhinolaryngology, 6th Latin American congr., Mexico, D.F. (F. Hernandez Orozco, Amsterdam 295, Mexico, D.F., Mexico)

14. Organic Solid State, 4th annual symp., Franklin Inst. Research Laboratories, Philadelphia, Pa. 19103)

14-15. Association for the Study of Nerve Adjustments, annual conf., East Berlin. (K. Hecht, Wiltbergstr. 50, 1115 Berlin-Buch, East Germany)

## DURRUM STOPPED-FLOW SPECTROPHOTOMETER



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### TYPICAL APPLICATIONS

Enzyme-substrate reactions, catalytic studies, metal-ligand reactions, bioluminescence, concentration jump, fluorescence, and absorption measurements are a few potential applications for the instrument.

### FOR FURTHER INFORMATION

Write Durrum for references, four page price list of systems and accessories, and new illustrated brochure describing the instrument.

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# Personnel Placement

## POSITIONS WANTED

**Business Administrator**, life-science research and college financial management, building, personnel, accounting. Box 227, SCIENCE. X

**Cellular Biologist**, Ph.D. Experienced. Publications. Background of zoology, histology, and electron microscopy. Desires academic teaching-research position. Box 215, SCIENCE X

**Medical Translator (German/English)** accepts freelance assignments. Prompt service. Reasonable rates. Please write: 68-43 Groton Street, Forest Hills, N.Y. 11375. X

**Microbiologist** with extensive research background in microbiology, immunology, and serology, virology and tissue culture, cancer research desires university, industry, research institute position. Available 1 November. Box 220, SCIENCE. X

**Microbiologist**, Ph.D., age 39, academic position with research desired. A Senior Research Microbiologist, supervising a group of 20 on diverse projects. Must relocate for health reasons in a clean air area. Sixteen years of pharmaceutical research in antibiotics, steroid transformations, automation of bioassay, fermentation analyses, and data processing; 16 publications; 8 patents. Box S 429, 125 W. 41 St., New York 10036.

## POSITIONS OPEN

### BIOCHEMIST

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CNA engages in operations research and systems analysis for the U.S. Navy and Marine Corps. Good salary, fringe benefits, stimulating environment, research opportunities. See the results of your work in action . . . establish yourself in a permanent career . . . perform a vital defense function.

For an interview, send letter with resume to:

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## BACTERIOLOGIST

Union Carbide's expanding programs in the life science area have created a career position for a research bacteriologist in our Biological Research Laboratory at Tonawanda, New York. Candidates must have a Ph.D., a record of research accomplishments and course work or experience in industrial microbiology.

The successful applicant will assume responsibility for the bacteriological aspects of a broadly based, fundamental research program on the effects of modified gaseous environments on living systems. In addition, he will be expected to develop independent, creative research programs concerned with microbiological problems in such areas as food storage, water treatment, closed environmental systems, bacteriological assay procedures or mining operations.

Please reply by mail, including resume of training, experience and current earnings to Mr. D. B. Turner, Manager Technical Employment, Dept. 5644.



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## POSITIONS OPEN

### SENIOR VETERINARY TOXICOLOGIST

One of the nation's foremost pharmaceutical companies offers an excellent opportunity at its INSTITUTE FOR MEDICAL RESEARCH in suburban New Brunswick, New Jersey.

A DVM is needed in our Dept. of Toxicology to aid in the care of animal colony to determine drug toxicity in various species and to assist in the development of methods in toxicologic research.

This opening affords an excellent opportunity to work in a newly completed laboratory and animal facility.

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### VETERINARY PATHOLOGIST

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### Physical or Social Scientist

Institute of scientists providing public with information on science-related social issues needs a **Field Director** to coordinate activities of local committees of scientists. Based in N.Y.C. Extensive travel. Degree not required. Opportunity for person interested in social impact of science. Resume, S.I.P.I., 30 E. 68 St., New York 10021.

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Please send a complete resume including training, experience and salary requirements, to:

Professional Employment

**Bristol Laboratories**

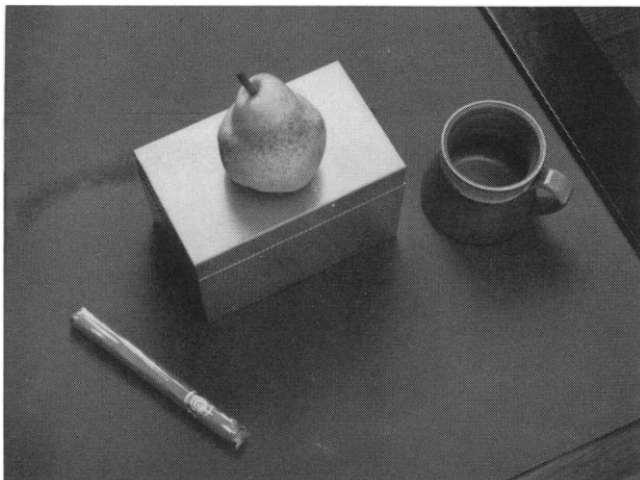
Division of Bristol-Myers Company

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## Clean out your paper

The little box can hold 49,000 pages of reports, journal articles, and whatever other forms of technical information normally



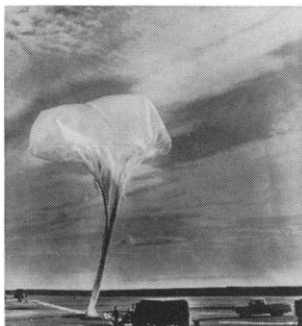
stuff bookcases and cabinets when on paper. Inside the little box, it is on sheets of film around  $4\frac{1}{4}$ " x 6", known as filmcards or microfiches. The upper part of each microfiche may carry an abstract of the item that can be read comfortably without optical aid, while the lower part carries the complete text and illustrations for reading on devices that we offer in a range between \$147.95 and \$212.50. The exact dimensions and arrangement of the material can conform to the COSATI specification now required for all Federal agencies and their contractors, or to any other specification you please.

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## Higher than a kite, cheaper than a satellite

We smile at the number of tons of a certain polyolefin formulation which Winzen Research, Inc. of Minneapolis has just ordered from us. The size of the order, considered in relation to the frequency of UFO reports and the unit weight and nature of Winzen's products (one of which is seen here being launched from Fort Churchill in Canada with a 292-pound payload for a university physics department), may make others smile, too.



Physicists, geophysicists, environmental scientists—Win-

zen's customers all—enjoy their objectivity as buyers even more than do the squeezers of bread offered on food market shelves in extruded polyolefin also. It is not necessarily the same formulation, however. Winzen and we have invested considerable effort together to find a formulation which, when extruded  $\frac{1}{2}$ -mil thick by Winzen's own processes, can withstand such solar UV and cracking cold at 148,000 feet as need never worry bakers. The effort has succeeded.

*If a little altitude can gain you desired access to the cheap fluxes of space, talk to Winzen at 401 West 84th Street, Minneapolis, Minn. 55420. Material bearing their trademark "Strato-Film" bears our trademark "Tenite" before Winzen works it over. If it's advice you need on specialized plastic formulations for purposes other than altitude, write Eastman Chemical Products, Inc., Plastics Division, Kingsport, Tenn. 37662 (Subsidiary of Eastman Kodak Company).*

## Hardly worth mentioning

Osmium has many distinctions. Long considered the heaviest substance known, it has had a metallurgical career in which it has written billions of words on the tips of pens and has done duty in lamp filaments and in standards of weight and measure.  $\text{OsO}_4$ , its most prominent compound, surprises by being quite volatile and smelling bad, a fact which gave the element its name. Through this highly toxic compound, osmium has had a second and perhaps more important role as a stain and hardening agent in microscopy. The light microscopists had familiarized themselves with  $\text{OsO}_4$  so that it was ready for the electron microscopists, who need it worse for its electron-stopping power.

Now (*Biochemistry*, 5:2283) there is news about it that ties it into the fashionable subject of genetic code-reading and the possibility of doing so by the electron microscope.  $\text{OsO}_4$ , which reacts with denatured DNA but not with double-stranded DNA, can differentiate between nucleotides. It attacks desoxythymidine quantitatively. Investigating this reaction, the authors turned to thin-layer chromatography on flexible, scissor-

able EASTMAN CHROMAGRAM Sheet. What pleases us is that they don't say why they chose to do their TLC on our product. Obviously they did not consider the point pertinent but only a matter of laboratory efficiency, as compared with coating one's own plates uniformly by hand.\*

We observe this more and more, as at a mycological meeting where neither of two independent investigators of fungal pigments saw any point in mentioning until asked that they were doing their separations on CHROMAGRAM Sheet.

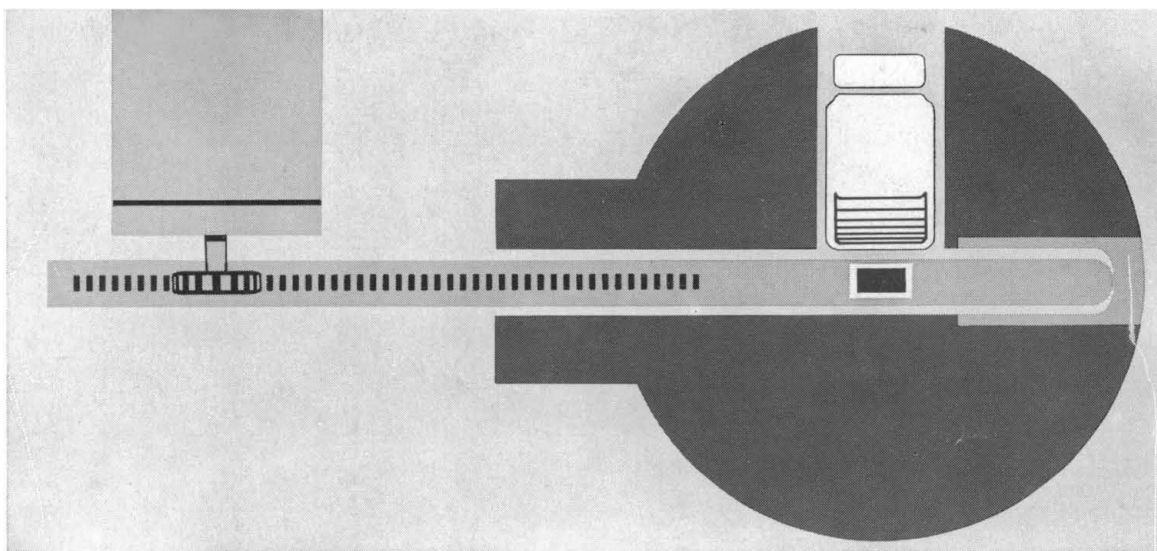
*Whether for reaction-following or analytical separations, twenty 8" x 8" sheets of EASTMAN CHROMAGRAM Sheet (silica gel or alumina, please specify) for \$17.60 and the EASTMAN CHROMAGRAM Developing Apparatus for \$35.50 can be ordered (f.o.b. Rochester, N. Y.) from Distillation Products Industries, Rochester, N. Y. 14603 (Division of Eastman Kodak Company). Or ask one of the lab supply houses that stocks EASTMAN Organic Chemicals.*

\*They do mention both ultraviolet and visible-light photography of their chromatograms. This subject draws us many questions, most of which we have tried to answer in Data Release No. M-23, available free from Eastman Kodak Company, Special Applications, Rochester, N. Y. 14650.

Prices subject to change without notice.

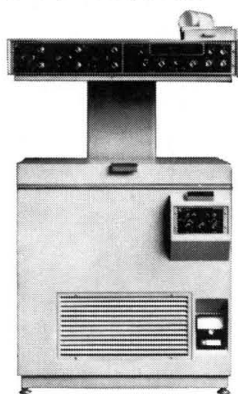
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G-O external standardization in the Mark I is available with either a barium-133 or a radium-226 standard. And you can also use other accepted methods of quench correction—internal standardization, channels ratio, and combined channels ratio/external standardization. The Mark I will perform with all methods to the highest possible accuracy. (A 45-rpm record discussing quench correction and counting efficiency is yours for the asking. Just drop us a line.)

Exclusive features like G-O external standardization, true electronic data computation, and much more make the Mark I the most advanced liquid scintillation system of all. Find out more about the Mark I—consult your Nuclear-Chicago sales engineer. Or write directly to us.

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