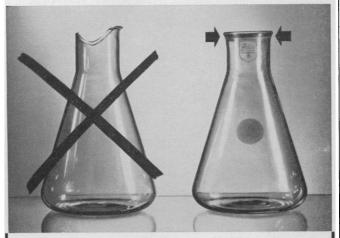
Break-Resistant Lip Erlenmeyer Flasks*



another First BY BELLCO!

- Bellco Break-Resistant Lip Flasks reduce breakage losses from 42% to 3% . . . based on actual field tests.
- Danger of lacerated fingers eliminated.
- Saves fire-polishing, repair expense and inconvenience.
- Made of Pyrex Brand Glass.
- · Available in wide and narrow mouth.

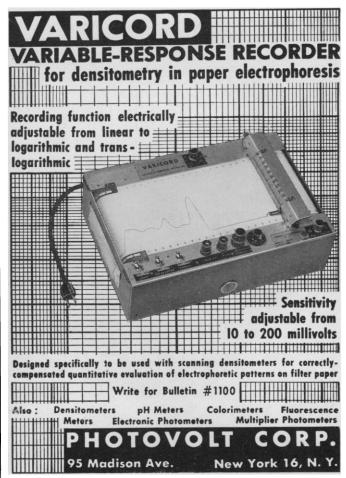
Write for descriptive literature and prices

BELLCO GLASS INC. VINELAND, N.J.

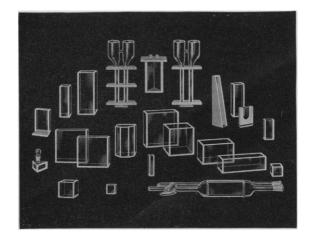
"Research deserves the best"

* Pats. applied for





GLASS ABSORPTION CELLS made by KLETT



Makers of Complete Electrophoresus Apparatus

Klett-Summerson Photoelectric Colorimeters— Colorimeters— Nephelometers— Fluorimeters— Bio-Colorimeters— Comparators— Glass Standards—Klett Reagents.

Klett Manufacturing Co.
179 East 87 Street, New York, New York

31 JANUARY 1958 251

EQUIPMENT NEWS

The information reported here is obtained from manufacturers and from other sources considered to be reliable. Science does not assume responsibility for the accuracy of the information. All inquiries concerning items listed should be addressed to Science, Room 740, 11 W. 42 St., New York 36, N.Y. Include the name(s) of the manufacturer(s) and the department number(s).

■ STERILIZER uses a combination of ethylene oxide and carbon dioxide to sterilize finished packaged material as $w\epsilon ll$ as heat- and moisture-sensitive products.

The gas is said to penetrate sealed cardboard, polyvinyl, or paper containers to sterilize the contents. Operation is completely automatic. All phases of the sterilization cycle are indicated visually and recorded on a two-pen pressure-temperature graph. (Wilmot Castle Company, Dept. S852)

■ HYGROGRAPH uses a diaphragm of animal membrane as the humidity-sensitive element. Sensitivity of 1 percent and accuracy ±3 percent are said to be achieved. Operating range is from 15-to 95-percent relative humidity at tem-

peratures from 32° to 130°F. Humidity is recorded on a 12 by 6 in. chart. (Serdex Inc., Dept. S875)

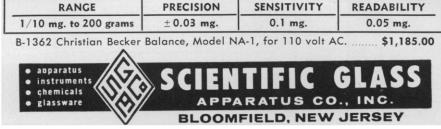
- CORROSION TEST CHAMBER of Swiss manufacture exposes materials to be tested to aerosols of constant characteristics. In addition to providing the advantage of controlled particle size, the method avoids the air currents characteristic of sprays produced by nozzles. Aerosols are produced by disc rotors. The entire apparatus is made of corrosion-proof plastic. To prevent the corrosive atmosphere from escaping from the chamber, the aerosols are entrapped in air leaving the apparatus in Raschigring-filled flues. (Spectrographic Specialties Inc., Dept. S867)
- PULSE MODULATOR tests high-power pulse tranformers by simulating actual operating conditions. Transformers having ratings up to 30 Mw peak, and 60 kw average power, may be tested. Banks of pulse-forming components may be selected by means of patch-cord connections to produce pulses of from 0.5- to 8-µsec duration. Repetition frequency is continuously variable from 50 to 1800 pulses per second. Maximum duty cycle is 0.002. Peak pulse output is 200 kv into 1300 ohm. (Manson Laboratories, Inc., Dept. S865)
- SELENIUM GLASS transmits infrared radiation to 25 μ. The material handles similarly to optical glass, lending itself to conventional molding and polishing techniques. Rigidity is retained after 15 hr at 70°C, with no evidence of optical breakdown or change in power. Transparency is high at all wavelengths detectable by infrared detectors in use today in military applications. The material is available either in the form of finished optical parts or as molded blanks. (Eastman Kodak Co., Dept. S869)
- UNIVERSAL BRIDGE provides facilities for two-, three-, or four-terminal measurements of impedance or transfer admittance at operating frequency of 1592 cy/sec. Ranges covered are: capacitance, 0.0002 μμf to 11 μf in seven ranges; conductance, 10⁻¹ to 10⁻⁸ mho, in seven ranges; inductance, 1 mh to infinity in seven ranges. Measurement is not affected by the impedance of the test leads. A low-impedance adapter provides four additional ranges. (Robertshaw-Fulton Controls Co., Dept. S872)
- SOLENOID DEWAR FLASKS are designed for study of the effect of magnetic fields on properties of materials at liquid-helium temperatures. A variety of sizes and of materials of construction are available. (Hofman Laboratories, Dept. S878)



Everything you have ever wanted in an analytical balance is incorporated in the design of this new *Christian Becker* model—ease of operation, speed, accuracy, craftsmanship. Even an unskilled operator with very little practice can obtain final readings within 15 seconds on objects weighing from 1/10 mg. to 200 grams.

A new concept in reticles and verniers makes the balance easy to read and reduces eye fatigue. Instead of staring at a hazy projected image while adjusting the weight loaders, eye level amber lights indicate which way the weight control knobs should be turned. Small red and green lights located at the base show whether the balance is on "rough" or "fine" weighing beams.

Other features include: temperature compensation . . . longer "pan to stirrup" dimension . . . conveniently placed weight control knobs . . . built-in stainless steel weights (adjusted to better than Class M tolerances) . . . oil damping, plus many others. Write for new descriptive brochure.



- VIBRATION PICKUP is of a magnetic type capable of continuous operation from -65° to $+500^{\circ}$ F. Frequency range is 40 to 2000 cy/sec with linearity ± 4 percent of reading for constant frequency. Output is directly proportional to velocity. The spring suspension of the seismicmass magnet prevents contact with the coil at all mounting positions. Separate magnets are used to control sensitivity and damping. Maximum safe acceleration range is 50 g. (Consolidated Electrodynamics Corp., Dept. S876)
- x-y recorder is quantized to move in discrete increments of 0.01 in. at a maximum speed of 200 increments per second. An aluminum drum carries the paper, its rotation providing one of the recording axes. Accuracy is better than ±0.005 in. for full travel on either axis. Input is supplied to the recorder in the form of electrical pulses of varying rate. A uniform pulse-rate input on one axis provides a time axis. Replacement of the recording pen with an accessory attachment permits the instrument to be operated as a curve follower. Maximum paper size accommodated by the drum is 11 by 17 in. (California Computer Products, Dept. S884)
- CATHODE-RAY POLAROGRAPH, manufactured by Southern Instruments Computer Division, Camberley, Surrey, England, is called the "Polarotrace." In this instrument the entire change of potential is effected during the lifetime of a single mercury drop. The potential sweep is applied through a load resistor in series with the cell by means of a compensation circuit which maintains a constant rate of change of potential across the cell. The amplified potential difference across the cell is applied to the horizontal axis of a long-persistence cathoderay tube. The voltage drop across the load resistor, proportional to current, is applied to the vertical axis. Thus the polarographic curve is traced on the screen. By varying the load resistor, 20 full-scale current ranges from 2×10^{-8} to 1.25×10^{-4} amp may be obtained. A differentiating circuit permits the derivative curve to be displayed. The polarogram is reproduced once every 7 sec. The curve differs from that produced by conventional means in that the current rises to a peak value before it falls exponentially to a constant value. This peak height is proportional to concentration. The shape of the wave does not lend itself to accurate determination of half-wave potential, but the potential at which the peak occurs is characteristic of a given reduction. Waves differing in half-wave potential by as little as 0.1 v may be measured separately. (Standard Scientific Supply Corp., Dept. S883)

JOSHUA STERN

National Bureau of Standards

PERSONNEL PLACEMENT

CLASSIFIED: 25¢ per word, minimum charge \$4.25. Use of Box Number counts as 10 additional words. Payment in advance is required.

COPY for classified ads must reach SCIENCE 2 weeks before date of issue (Friday of every week).

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For PROOFS on display ads, copy must reach SCIENCE 4 weeks before date of issue (Friday of every week).

Replies to blind ads should be addressed as follows:

Box (give number)

Science 1515 Massachusetts Ave., NW Washington 5, D.C.

POSITIONS WANTED

Biochemist; Ph.D. June 1958. Four years post M.S. research experience in experimental endocrinology and metabolism using stable and radioactive isotopes. Publications. Academic radioactive isotopes, Publications, Academic position preferred. Box 19, SCIENCE. X

Botanist, Ph.D., taxonomy, ecology, morphology. Desires academic position. Box 24, SCI-ENCE.

Chemist (major, general chemistry; minor, biochemistry); 6 years, associate professor, biochemistry, one of leading universities; 8 years, director of research, pharmaceutical company. Medical Bureau, Burneice Larson, Director, 900 North Michigan, Chicago.

Chemist/Technical Translator, British, 32; 4 years experience analytical food chemistry, 4 years technical translation x-rays and electromedicine, seeks suitable position. G. Wall, Schleifmühlweg 66, Erlangen, Germany.

Endocrinologist, Ph.D., 35. Presently assistant professor teaching-research in endocrinology and general physiology. Publications. Desires to relocate. Academic or research. Box 20, SCIENCE.

Industrial Biochemist, Ph.D., 22 years experience. Age 43. Seeking academic position in medical institution as means of supporting family while studying for M.D. degree. Box 25, SCI-ENCE.

Microbiologist, Ph.D.; with experience in medical bacteriology and mycology, immunology and chemotherapy. Desires challenging research position. Box 23, SCIENCE.

Pharmacologist, Ph.D., 44; associate professor research project leader. Wants position offering real opportunity for advancement. Experience in teaching, research and administration. Box 22, SCIENCE.

Plant Physiologist, Ph.D., 1950, California; background in nutrition, enzymology, surface biochemistry, radiation, radioisotopes and instrumentation development. Administrative experience. Desires responsible position in research, teaching, or development. Box 18, SCI-ENCE.

POSITIONS OPEN

(a) Bacteriologist; Ph.D. preferred to head department, very large general hospital unit, important university medical school; important southeastern city. (b) Chemists; B.S., M.S., experienced micromethods, clinical biochemistry for pediatric microbiochemistry laboratory of 300-bed university hospital; clinical, research opportunities; popular western city. (c) Bacteriologist; M.S., Ph.D., to head superbly equipped, well-staffed department; all new laboratory, 300-bed general hospital; to \$7500; Chicago vicinity. (d) Biochemist; B.S., M.S. experienced blood work with emphasis coagulation; duties principally biological assays; minimum \$4800; important eastern pharmaceutical concern. Woodward Medical Bureau, Ann Woodward, Director, 185 N. Wabash Avenue, Chicago.

POSITIONS OPEN

BACTERIOLOGISTS (Male or Female)

Recent B.S. or M.S. graduate in bacteriology to perform basic research work in chemotherapy. Requires a great deal of animal work, including autopsy. Good starting salary. Modern laboratory; 37½-hour week. Employee benefits. Send résumé to hour wee

> Employment Manager Ortho Pharmaceutical Corporation Route 202 Raritan, N.J.

Botanist, male, Ph.D. Broad training with competence in taxonomy and morphology. Field of research unrestricted.

Geneticist, male, Ph.D. Plant, animal, or microbial. Permanent university positions with graduate and undergraduate teaching and research. Box 8, SCIENCE.

1/31; 2/7, 14

(a) Director, Department of Biological Sciences; duties involve scientific leadership of established group of professional and supporting personnel; should be specialist in one of biological sciences, Ph.D. or M.D.; major research organization; East. (b) Biochemist or Nutritionist with some experience as science writer; duties include surveying literature for various departments, pharmaceutical company; \$7000-\$10,000; Midwest. (c) Chemist or Biochemist; medical school research department; should be interested in working on protein fractionation project; if Ph.D., \$8000; West. (d) Physician trained in pharmacology; executive position, large pharmaceutical company; experienced pharmaceutical field desirable; duties at first consist of managing clinical projects, working with scientific personnel in design of research projects; East. S1-5 Medical Bureau, Burneice Larson, Director, 900 North Michigan, Chicago.

GEOPHYSICIST University of Toronto Department of Physics

Department of Physics

Applications are invited from geophysicists (not over 35 years old) for appointment to the teaching staff of this department. Duties to commence 1 September 1958. Salary and rank to be arranged according to qualifications and experience, and consistent with the university's salary scale. Applicants should have research interest and experience in some aspect of the physics of the earth. Write not later than 1 March to Dr. W. H. Watson, Professor and Head of the Department of Physics, stating age, marital status, academic record and scientific career and naming two referees.

GRADUATE RESEARCH SCHOLARSHIPS

SCHOLARSHIPS

Department of Biology, McMaster University
Applications for graduate research scholarships are invited from qualified students wishing to work towards the M.Sc. and Ph.D. degrees. The minimum annual stipend for a 12-month period is \$1500.

Research in progress: Ecology and physiology of acquatic and bloodsucking insects; population dynamics of grasshoppers (D. M. Davies). Formation of lake bottom seediments; sensory physiology in fish (H. Kleerekoper). Viruses in wild plants; cytological studies (W. D. MacClement). Physiology of yeast sporulation; ecology of soil microflora (J. J. Miller). Experimental embryogeny; organic terrain organization; palaeobotany and developmental morphology; applied palaeobotany and palynology (N. W. Radforth).

Applications should be sent before 15 March 1958, accompanied by university transcript and letters of recommendation from two professors to Dr. H. Kleerekoper, Chairman, Department of Biology, Hamilton, Ontario, Canada. 2/7, 14

Microbiologist. Preferably a recent Ph.D. to participate in a long-range research program concerning immunological and biochemical aspects of mycology in a large California university. Major training in either mycology, bacteriology, or virology, and minor training in biochemistry desirable. Applicants should reply to Box 21, SCIENCE.

PERSONNEL PLACEMENT

POSITIONS OPEN

Medical Writer

To work with Scientific Information Group in compilation of medical data and preparation of manuscripts for medical journal publication. B.S. or M.S. with background in chemical or biological sciences. Previous experience essential. Write stating qualifications and salary desired to

> Personnel Department Wveth Box 8299, Philadelphia 1, Pa.

NEUROPHARMACOLOGY NEUROBIOCHEMISTRY

Unusual research opportunity for creative investigator at Ph.D. level in each field. If you are seeking a responsible position with challenging work in an expanding pharmaceutical organization, write to:

L. H. Watson

Smith, Kline & French Laboratories 150 Spring Garden Street Philadelphia 1, Pa.

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UNIVERSITY OF ALBERTA

UNIVERSITY OF ALBERTA

The University of Alberta invites applications for vacancies in the Department of Mathematics, at the levels of lecturer and assistant professor, in pure or applied mathematics.

The starting salary will range from \$5000 upwards to \$7000, depending on qualifications and experience. Annual increments are normally given within each rank.

Appointments will date from 1 September 1958, and may be made permanent after 2 years' satisfactory service. A grant to help cover removal expenses may be made, up to 1 month's salary for a single man or 2 months' for a married man, in the case of persons coming to Canada from overseas, and up to 1 month's salary for a married man residing in North America. The appointments are pensionable, with the University and the staff member both contributing to a retirement fund.

Further details may be obtained from Professor E. S. Keeping, Head of the Mathematics Department, University of Alberta, Applicants should send transcripts of their academic record, a statement of teaching experience, a list of publications, and a recent snapshot, to Dr. D. E. Smith, Dean, Faculty of Arts and Science, University of Alberta, Edmonton, Alberta, and should also supply the names of at least two responsible referees.

POSITIONS OPEN

Research Associate. Collaborate with investigators, experimental research in immunologic aspects of cancer. Include details of experience, references. Write Dr. I. Davidsohn, Mount Sinai Medical Research Foundation, 2755 West 15th Street, Chicago, Illinois. 2/7, 14, 21

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The Market Place

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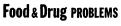
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Price lists on request DAN ROLFSMEYER CO. Ph. ALpine 6-6149 Route 3, Syene Road, Madison, Wisconsin

STAINLESS STEEL LABORATORY WARE



ROUND TANKS

The Daigger round tanks are the finest in construction and finish and the easiest to keep clean.

The lip of each tank is double formed for maximum rigidity and complete safety. Included is a graduated dip stick for accurate gauging of liquid level.

Available with rubber hose drain or with stainless steel sanitary faucet.

ROUND TANKS

Size	With Faucet		With Drain		Steel Stand* Price	Cover
Gals.	No. Price		No. Price			
10	110	125.00	H110	95.00	34.00	17.00
15	115	140.00	H115	110.00	34.00	17.00
20	120	160.00	H120	130.00	38.00	22.00
25	125	175.00	H125	145.00	38.00	22.00
30	130	205.00	H130	175.00	38.00	22.00
50	150	297.00	H150	266.00	53.00	32.00

*Stainless steel stands also available.

• GRADUATED MEASURE

Legibly graduated on inside in both ounces and cubic centimeters.

Cat. No.	Oz.	MI.	Each
4186	8	250	4.00
4187	16	500	5.50
4189	32	1000	7.30



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Built to last a lifetime. Never any problem of warping or breaking, they're gleaming and easy to clean.

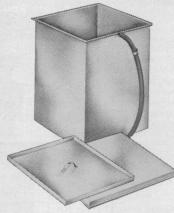
Cat. No.	Size	Depth	Cap'y Gals.	Each
8000	12 x 16"	5"	2	27.50
8001	16 x 19"	3"	4	29.60
8002	16 x 19"	5"	6	35.50
8004	18 x 22"	5"	8	43.50
8005	24 x 30"	5"	15	68.50
8006	22 x 26"	3"	7	39.50
8007	22 x 26"	5"	12	51.20
8008	24 x 30"	3"	9	52.50
8009	24 x 30"	5"	14	68.50
8010	32 x 42"	3"	161/2	85.70
8012	32 × 42"	5"	20	100 00

We can supply special sizes and designs to order.

★ Lifetime equipment made of heavy type 316 stainless steel

★ Heli-arc welded, strong clean, will not crack or corrode

SQUARE TANKS



Where space is limited — DAIGGER square tanks are the answer. A ½" rim all around the tank eliminates dripping. Available with rubber hose drain or with stainless steel faucet. Complete with cover.

Cap'y		Tank With Drain		With Faucet	
Gals.	Size	No.	Price	No.	Price
5	10 x 10 x 14" deep	H5	50.00	F5	80.00
10	12 x 12 x 17 1/2"	H10	70.00	F10	100.00
25	17 x 17 x 22"	H25	120.00	F25	150.00

\$6595 Portable mixer electric

76.00

· PAILS

For Mixing, Storing or Transferring Corrosive Liquids

Cat. No.	Cap'y Qts.	Top Dia.	Depth	Each
*1000	8	8"	91/2"	13.10
1012	13	113/8"	93/8"	15.60
1016	16	117/8"	93/4"	19.00
1020	20	125/8"	121/2"	27.70

*Straight sided.





• FUNNELS

Come in 7
Convenient Sizes

SEAMLESS:

JEANIELSS.					
Cat. No.	Cap'y Oz.	Dia.	Each		
9000	21/2	3"	3.20		
9001	61/2	4"	3.70		
9002	13	5"	4.20		
9003	22	6"	4 50		

SEAMED:

Cat. No.	Cap'y Qt.	Dia.	Each
9004	1	61/2"	9.50
9005	2	8"	10.50
9006	4	10"	12.00

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Your choice of interchangeable horse-shoe base with double-plano mirror in fork mount, or built-in base illuminator.

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