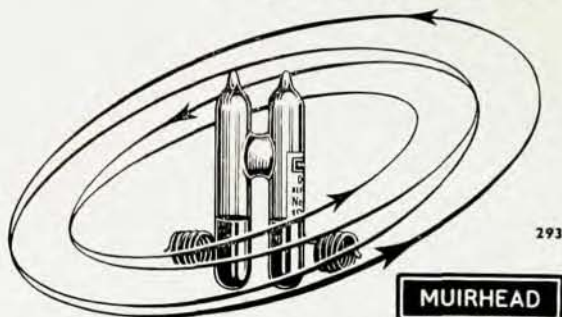


Muirhead D-845 Reference Cells



SPECIFICATION

E.M.F.	1.0193 volts absolute, Subject to manufacturing tolerance not exceeding 0.0004V (unmounted); and 0.0002V (mounted)
Temperature coefficient	Does not exceed $5 \mu\text{V}/^\circ\text{C}$ over the range $10^\circ - 40^\circ\text{C}$
Internal resistance at 25°C	Average 800 ohms maximum 1200 ohms
Temperature hysteresis	Negligible over normal operating range of temperature

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PHYSICISTS AND PHYSICAL CHEMISTS

Fundamental research program of American Viscose Corporation, a leading producer of man-made fibers and films, needs two additional PhD physicists or physical chemists. General area of interest—basic principles governing polymer behavior.

Many challenging problems remain unsolved—choice will be left to researcher. Typical problems might involve:

- Polyelectrolytes
- Viscoelasticity and melt viscosity
- Surface phenomena and adhesion
- Solution properties—thermodynamics, chain configuration and stiffness, molecular weight and molecular weight distribution

Location is in Suburban Philadelphia (Marcus Hook).

Interested chemists and physicists are invited to correspond with:

B. B. BRIGHT

American Viscose Corporation
1617 Pennsylvania Boulevard
Philadelphia 3, Pennsylvania

Coliseum Towers (26 000 square feet) has been leased. Instruction for the initial class of students was arranged through NYU's Office of Special Services to Business and Industry. Classes also reported for study in June on the campuses of Northwestern and Duke Universities. Similar groups are scheduled for Cornell, Illinois Tech, and North Carolina State during the summer. Construction of the Chicago and Winston-Salem training centers is in progress. Each of the special centers will include laboratories, libraries, study halls, classrooms, and related facilities. When in full operation, the program will involve a staff of some 65 full-time Western Electric instructors and administrative people, and about an equal number of instructors recruited on a part-time basis from cooperating universities. About 2000 of the company's employees per year will engage for periods of time in full-time off-the-job study.

An undergraduate course in nuclear engineering has been established at Lowell Technological Institute, Lowell, Mass., by a vote of the board of trustees. The four-year course, leading to the BS degree, is intended to "provide the trained men necessary to the development of atomic power, radioactive tracers for research work, radiation for medical purposes, and many other uses as yet unrealized".

Varian Associates, Palo Alto, Calif., has announced the establishment of an advanced training program designed to increase the competence of outstanding scientific and management personnel of the company through a planned course of full-time study away from the job. Robert L. Jepsen, director of the firm's tube research for the past six years, will be the first candidate under the new program. Dr. Jepsen will spend the next year as a research fellow at Harvard University, where he will do work on the microwave properties of ferrites under C. L. Hogan.

Publications

Up-to-date information on radiological, blast, and heat effects of nuclear detonations are contained in *The Effects of Nuclear Weapons*, a 579-page handbook just published by the Atomic Energy Commission as the successor to an earlier AEC volume, *The Effects of Atomic Weapons*, published seven years ago. Both publications were prepared under the editorship of Samuel Glasstone, author of several widely-known books on atomic energy. The new book was compiled by the Armed Forces Special Weapons Project of the Department of Defense at the request of the AEC and with the Commission's assistance. It contains the results of observation and experiment in laboratory work and nuclear test detonations since 1950 and was prepared in the light of Federal Civil Defense Administration requirements for information necessary for civil defense planning. Former Federal Civil Defense Administrator Val Peterson, who headed the FCDA during the period when the handbook was being prepared, endorsed the

book in the following terms: "The Federal Civil Defense Administration commends this publication as the definitive source of information on the effects of nuclear weapons for the use of organizations engaged in Civil Defense activities. Its detailed treatment of the physical phenomena associated with nuclear explosions provides the necessary technical background for development of countermeasures against all nuclear effects of Civil Defense interest." *The Effects of Nuclear Weapons* is on sale (for \$2 per copy) by the Superintendent of Documents, US Government Printing Office, Washington 25, D. C.

Monograph No. 3 of the *Journal of the Franklin Institute*, published in April, is a collection of the papers given at the Automatic Coding Symposium held January 24-25, 1957, at the Franklin Institute in Philadelphia. The symposium, which was attended by nearly three hundred persons interested in the problems of programming electronic computers, and in particular in new developments in systems of automatic coding, included eight papers and their related discussion periods dealing with a wide variety of compiling methods now used in electronic data processing procedures. The 118-page paper-back publication is priced at \$3 per copy and may be obtained by writing to AUTO CODE, Franklin Institute, Philadelphia 3, Pa.

A new editor of the *Journal of Applied Physics*, James A. Krumhansl, associate director of National Carbon Company's Parma Research Laboratories in Parma, Ohio, has been appointed by the Governing Board of the American Institute of Physics. Dr. Krumhansl, whose appointment as editor became effective on July 1st, succeeded Robert L. Sproull of Cornell University upon the latter's retirement after having served as the journal's editor since July 1954. A native of Cleveland, Dr. Krumhansl received a bachelor of science degree in electrical engineering from the University of Dayton in 1939 and his master's degree in physics from the Case Institute of Technology in 1940. He served as an instructor at Cornell University for one year after receiving his PhD in physics at Cornell in 1943. He then joined Stromberg-Carlson Co. and worked on microwave and pulse communications systems until 1946, when he became associate professor of physics and applied mathematics at Brown University. In 1948

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James A. Krumhansl, who has been named editor of the AIP's *Journal of Applied Physics*, is associate director of the Parma Research Laboratories of the National Carbon Co., Parma, Ohio.

SOVIET PHYSICS TRANSLATIONS

Published with the cooperation and support of the
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A translation of the "Journal of Acoustics" of the Academy of Sciences of the U.S.S.R. Four issues per year, approximately 500 Russian pages. Annually, \$20.00 domestic, \$22.00 foreign. Single copy—\$5.50. The 1955 issues of "Journal of Acoustics" U.S.S.R. will also be published. Will consist of two volumes, approximately 500 pages, and the subscription price will be \$20.00 for the set.

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he was named associate professor of physics at Cornell, where he remained until 1955. In that year he became assistant director of the research laboratories of the National Carbon Co., a division of Union Carbide Corp. Dr. Krumhansl, whose current field is solid-state physics, is a member of the American Physical Society.

The Atomic Energy Commission has announced the titles of more than one thousand previously-classified technical reports that are now available as open literature. This is the first group of a series of titles that will be released under the Commission's current major declassification program. Some 20 000 classified documents have been reviewed and, where possible, declassified as an aid to nuclear research and industry. Additional titles will soon be made public under the program, whose object is to place in the open literature all AEC technical data not primarily related to weapons and to certain military and production reactors. The declassification project was undertaken as a result of the greatly liberalized Declassification Guide adopted late in 1956 in a three-way agreement between the United States, Canada, and Great Britain. The first titles declassified are contained in *Report Announcement Bulletin* Nos TID-1911 and TID-1912, issued by the Technical Information Service Extension, Oak Ridge, Tenn. The *Bulletins* may be obtained free and the reports listed may be purchased from the Office of Technical Services, Department of Commerce, Washington 25, D. C. The most useful reports will be described fully in supplements to *Nuclear Science Abstracts*, which is sold by the Superintendent of Documents, US Government Printing Office, Washington 25, D. C., at a rate of 25¢ per copy or \$7.50 per year on a subscription basis.

Research Facilities

The state of Florida has authorized an appropriation of more than \$5 million to be used in support of nuclear research programs at Florida's state universities. The University of Florida (Gainesville) has been granted \$2.8 million for the continuation of its applied programs in nuclear engineering, agriculture, and medicine; \$2.3 million has been allocated for the development of a program of basic nuclear research at The Florida State University (Tallahassee); and an additional \$65 000 has been made available for nuclear studies at Florida A & M University (Tallahassee). The program at Florida State University will concentrate on fundamental research in physics and chemistry. The University, according to Alex E. S. Green, acting chairman of FSU's Department of Physics, expects delivery in late 1959 of a 10-Mev tandem-style Van de Graaff generator which has been ordered from the High Voltage Engineering Corp. Robert H. Davis, formerly of Rice Institute and the University of Wisconsin, has been appointed assistant professor of physics in connection with FSU's expanding research activities.