# Meetings

### Forthcoming Events

### August

1-12. Modulation Theory and Systems, Cambridge, Mass. (E. J. Baghdady, Dept. of Electrical Engineering, Massachusetts Inst. of Technology, Cambridge)

2-5. Poultry Science Assoc., Calif. (C. B. Ryan, PSA, Dept. of Poultry Husbandry, Texas A & M College, Col-

lege Station)

3-6. Gas Chromatography (Infrared Spectroscopy Inst.), Nashville, Tenn. (N. Fuson, Fisk Infrared Inst., Fisk Univ., Nashville 8)

3-6. Rarefied Gas Dynamics, 2nd intern. symp. (by invitation only), Berkeley, Calif. (Engineering and Science Extension, Univ. of California, 2451 Bancroft Way, Berkeley 4)

5-6. Pennsylvania Acad. of Science, summer annual, Grantham, Pa. (K. B. Hoover, Messiah College, Grantham)

6-12. International Geographical Cong., 19th, Stockholm, Sweden. (IGC, Postfach, Stockholm 6)

7-10. American Soc. of Clinical Hypnosis, Miami, Fla. (S. Hershman, 6770 N. Lincoln Ave., Chicago 46, Ill.)

7-12. Gerontology, 5th intern. cong., San Francisco, Calif. (L. Kuplan, Intern. Cong. of Gerontology, P.O. Box 2103, Sacramento 10, Calif.)

7-13. Industrial Research Conf., Harriman, N.Y. (Miss M. F. Garvey, Industrial Management Engineering Columbia Univ., New York 27)

8-11. American Astronautical Seattle, Wash. (R. M. Bridgforth, AAS, Propulsion Unit, Boeing Airplane Co., Aero-Space Div., P.O. Box 3707, Seattle)

8-12. American Inst. of Electrical Engineers, San Diego, Calif. (R. S. Gardner,

AIEE, 33 W. 39 St., New York 18) 8-13. World Federation for Mental Health, 13th annual, Edinburgh, Scotland. (Secretariat, WFMH, 19 Manchester St., London, W.1, England)

8-20. American Soc. of Criminology, London, England. (D. E. J. MacNamara, New York Inst. of Criminology, 115-117 W. 42 St., New York 36)

9-13. Hail Storms, intern conf., Verona, Italy. (H. G. M. Ligpa, American Meteorological Soc., Stanford Research Inst., Stanford, Calif.)

11-13. Rocky Mountain Radiological Soc., Denver, Colo. (J. H. Freed, 4200 E. Ninth Ave., Denver 20)

11-16. Canadian Teachers Federation, Winnipeg, Manitoba. (G. G. Croskery, 444 MacLaren St., Ottawa 4, Ontario)

14-19. American Pharmaceutical Assoc., Washington, D.C. (R. P. Fischelis, APA, 2215 Constitution Ave., NW, Washing-

14-19. International Cong. of Clinical Chemistry, Edinburgh, Scotland. (S. C. Frazer, Clinical Laboratory, Royal Infirmary, Edinburgh)

14-20. Cardiology, 6th Inter-American cong., Rio de Janeiro, Brazil. (H. Alqueres, P.O. Box 1594, Rio de Janeiro)

15-16. National Assoc. of Boards of Pharmacy, Washington, D.C. (P. H. Costello, 77 W. Washington St., Chicago, Ill.)

15-17. Heat Transfer Conf., ASME and



On May 18, 1960, in a ceremony at the

National Academy of Sciences, the first of the newly established atoms for peace awards were presented. Two of the four pioneers in nuclear reactors so honored were EUGENE P. WIGNER and

ALVIN M. WEINBERG, co-authors of THE

### PHYSICAL THEORY OF NEUTRON CHAIN RE-

**ACTORS.** Published by The University of Chicago Press in 1958, this volume was immediately hailed as "a magnificent accomplishment" (Nucleonics).

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### Table of Contents

- 1. Principal Concepts of Reactor Theory and the Uses of Reactors
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- 5. The Fission Process
- 6. Shell Structure of Nuclei and Giant
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- 20. Heterogeneous Chain Reactors: The Fast Effect
- 21. The Migration Area and Reactor Design
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- xii plus 801 pages. Many charts, graphs, and illustrations. Indexes. \$15.00

### Comments on THE PHYSICAL THEORY OF NEUTRON CHAIN REACTORS

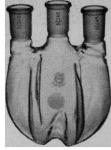
Physics Today: "Will serve as the basis for a scholarly tradition in reactor theory."

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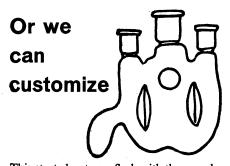
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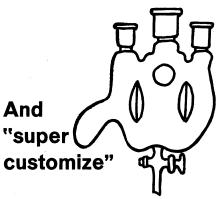
# Special flask buyers—we can satisfy



One of our special friends is the customer who's partial to exotic flasks like this stirring Morton with three necks and pinched sides. This much-sought-after flask comes in sizes from 500 to 5000 ml... and with almost as many neck-size combinations as a good selection of men's shirts. It's listed in our catalog as No. 94220.



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AICE, Buffalo, N.Y. (A. B. Conlin, Jr., ASME, 29 W. 39 St., New York 18)

15-17. Organic Scintillation Detectors, intern. conf., Albuquerque, N.M. (G. H. Daub, Chemistry Dept., Univ. of New Mexico, Albuquerque)

15-18. American Veterinary Medicine Assoc., Denver, Colo. (H. E. Kingman, Jr., 600 S. Michigan Ave., Chicago 5)
15-18. Radiation Biology, 3rd Aus-

15-18. Radiation Biology, 3rd Australian conf., Sydney, Australia. (P. Ilbery, Dept. of Preventive Medicine, Univ. of Sydney, New South Wales, Australia)

15-20. International Astronautical Federation, 11th cong., Stockholm, Sweden. (Secretariat, Intern. Astronautical Federation, 12, Bessborough Gardens, London, S.W.1, England)

15-23. Soil Science, 7th intern. cong., Madison, Wis. (R. Bradfield, Dept. of Agronomy, Cornell Univ., Ithaca, N.Y.)

15-24. Crystallography, intern. cong., Cambridge, England. (W. H. Taylor, Cavendish Laboratory, Cambridge, England)

15-25. Chemistry of Natural Products, IUPAC symp., Melbourne, Canberra, and Sydney, Australia. (Convener, Symposium Organizing Committee, Box 4331, G.P.O., Melbourne)

15-25. International Geological Cong., 21st session, Copenhagen, Denmark. (IGC, Mineralogical-Geological Museum, Univ. of Copenhagen, Øster Boldgade 7, Copenhagen K)

15-25. International Paleontological Union, Copenhagen, Denmark. (J. Roger, Service d'Information Geologique, B.R.G.-G.M., 74, rue de la Fédération, Paris 15°)

15-25. Sedimentology Cong., 6th intern., Copenhagen, Denmark. [General Secretary, IAS, c/o Institut Français du Petrole, 4, place Bir Hacheim, Rueil-Malmaison (Seine-et-Oise), France]

16-18. Biological Effects of Microwave Radiation, 4th annual conf., New York, N.Y. (M. Eisenbud, New York Univ. Post Graduate Medical School, 550 First Ave., New York 16)

16-19. Society of Automotive Engineers, San Francisco, Calif. (R. W. Crory, SAE, Meetings Operation Dept., 485 Lexington Ave., New York 17)

17-19. Hydraulics Conf., Seattle, Wash. (W. H. Wisely, American Soc. of Civil Engineers, 33 W. 39 St., New York 18) 17-19. University Nuclear Reactors, Gatlinburg, Tenn. (University Relations Div., Oak Ridge Inst. of Nuclear Studies, P.O. Box 117, Oak Ridge, Tenn.)

17-21. Ionization Phenomena in Gases, 4th intern. conf., Uppsala and Stockholm, Sweden. (A. Nilsson, Fysikum, Uppsala)

18-19. Submarine and Space Medicine, 2nd intern. symp., Stockholm, Sweden. (H. Bjurstedt, Laboratory of Aviation Medicine, Karolinska Institutet, Stockholm 60)

20. American Inst. of Ultrasonics in Medicine, Washington, D.C. (D. M. Stillwell, Dept. of Physical Medicine and Rehabilitation, Univ. of Colorado Medical Center, Denver 20)

21-24. Latin-American Cong. of Angiology, Rio de Janeiro, Brazil. (R. C. Mayall, Caixa Postal 1822, Rio de Janeiro)

(See issue of 17 June for comprehensive list)

## **New Products**

The information reported here is obtained from manufacturers and from other sources considered to be reliable. Neither Science nor the writer assumes responsibility for the accuracy of the information. All inquiries concerning items listed should be addressed to the manufacturer. Include the department number in your inquiry.

- measures 11 by 14 by 4¾ in. and is designed for use on a laboratory bench or for wall mounting. It monitors d-c signals in the 10 to 100 mv range. Repeatability is said to be better than ±0.35 percent and full-scale response time 1.0 sec. Pen travel is 5 in. The pen drive used permits use of over-size strip chart or of circular charts. (Beckman Scientific and Process Instruments Division, Dept. Sci594, 2500 Fullerton Rd., Fullerton, Calif.)
- FREQUENCY METER is a dual-range instrument reading either 396 to 440 cy/sec or 360 to 440 cy/sec from the same meter. Accuracy is said to be ±0.1 percent over the temperature range −55 to +65°C. The instrument uses semiconductor devices with no magnetic components. (Vidar Corporation, Dept. Sci604, 2107 El Camino Real, Palo Alto, Calif.)
- TIMING BOARD for actuating three stop watches simultaneously permits timing of sequential steps with zero time loss between steps and without necessity for reading timer hands while they are in motion. Timing is started with the first watch at zero, the second stopped and ready to fly back, and the third in motion. Thus each step is timed in with the same motion with which the preceding step is timed out. (Heuer Timer Corp., Dept. Sci618, 441, Lexington Ave., New York 17, N.Y.)
- PYCNOMETER permits determination of density of granular, irregular, or porous solids without use of liquids. The device operates by compressing air in two identical cylinders, one holding the sample to be measured contained in a cup. A third cylinder and piston communicating with the sample cylinder permits compensation for the effect of the volume occupied by the sample. This third cylinder is adjusted until the pressures in the two main cylinders, after compression, are equal. The motion of the third-cylinder piston required to effect the compensation is directly proportional to the volume of the sample. A choice of 50 cm<sup>8</sup> or 100 cm<sup>3</sup> sample containers is available. Accuracy of the instrument with a 50 cm<sup>3</sup> cup is said to be  $\pm 0.1$  cm<sup>3</sup>. Corporation, (Houston Instrument Dept. Sci620, P.O. Box 22234, Houston 27, Tex.)