

# **Experimental Design: Theory and Application**

By  
**WALTER T. FEDERER**

Presenting subject matter and techniques currently unavailable in other texts, Professor Federer discusses thoroughly and comprehensively the advantages, disadvantages, experimental lay-out and analysis of various types of design. In most cases, a numerical example and variations in the basic design are included, along with a list of problems and citations to numerous examples of the design.

*Published in the Late Fall*

# **Methods In Numerical Analysis**

By  
**KAJ L. NIELSON**

With an emphasis on the most recent developments in the field of numerical analysis, Dr. Nielson considers the analysis of tabulated data and the numerical methods of finding the solutions to equations. The text includes illustrative examples, valuable schematics and tables of necessary mathematical constants.

*To be published Early 1956*

# **Physics**

By  
**J. S. MARSHALL  
and E. R. POUNDER**

This text offers a thorough introduction to the elements of physics, sufficiently rigorous and quantitative to develop the sense of proportion essential to further study in engineering and the physical sciences. The authors utilize atomic theory throughout the book to explain large-scale phenomena of physics. In addition, they have included a final chapter dealing exclusively with atomic and nuclear physics.

*Ready in Spring, 1956*

*The Macmillan Company*

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28-30. American Philosophical Assoc., Eastern Div., Boston, Mass. (W. H. Hay, Dept. of Philosophy, Univ. of Wisconsin, Madison.)

28-30. American Physical Soc., winter meeting, Los Angeles, Calif. (K. K. Darrow, Columbia Univ., New York 27.)

28-30. Econometric Soc., New York, N.Y. (R. Ruggles, Box 1264, Yale Station, Yale Univ., New Haven, Conn.)

28-30. Low Temperature Physics and Chemistry, Baton Rouge, La. (J. G. Daunt, Dept. of Physics, Ohio State Univ., Columbus 10.)

28-30. Western Soc. of Naturalists, Davis, Calif. (D. Davenport, Univ. of California, Santa Barbara.)

29. Metric Assoc., Inc., annual, Washington, D.C. (V. G. Shinkle, 1916 Eye St., NW, Washington 6.)

29-30. American Folklore Soc., Washington, D.C. (M. Leach, Bennett Hall, Univ. of Pennsylvania, Philadelphia 4.)

29-30. History of Science Soc., Washington, D.C. (T. S. Kuhn, 74 Buckingham St., Cambridge 38, Mass.)

30. Mathematical Assoc. of America, 39th annual, Houston, Tex. (H. M. Gehman, Univ. of Buffalo, Buffalo 14, N.Y.)

### January

9-10. National Symposium on Reliability and Quality Control in Electronics, 2nd, Washington, D.C. (J. W. Greer, Bureau of Ships, Navy Dept. Code 815, Washington 25.)

9-10. Operations Research Soc. of America, 8th national, Ottawa, Ont., Canada. (J. Abrams, Dept. of National Defense, Ottawa.)

9-14. Pan American Cong. of Ophthalmology, 5th, Santiago, Chile. (T. D. Allen, 575 Lincoln St., Winnetka, Ill.)

10. American Ethnological Soc., New York, N. Y. (A. G. James, 695 Park Ave., New York 21.)

10-11. Calcium and Phosphorous Metabolism in Man and Animals with Special Reference to Pregnancy and Lactation, New York, N.Y. (R. R. Marshak, Craigie Hill Rd., Springfield, Vt.)

12. American Genetic Assoc., Washington, D.C. (S. L. Emsweller, Plant Industry Sta., Beltsville, Md.)

12-14. Use of Isotopes in Agriculture, East Lansing, Mich. (E. W. Phelan, Argonne National Lab., Lemont, Ill.)

16-18. Documentation Conf., Cleveland, Ohio. (J. H. Shera, School of Library Science, Western Reserve Univ., Cleveland 6.)

17-20. American Pomological Soc., Rochester, N.Y. (R. B. Tukey, Horticulture Dept., Purdue Univ., Lafayette, Ind.)

20-27. Pan American Cong. of Gastro-Enterology, 5th, Havana, Cuba. (N. M. Stapler, 1267 J. E. Uriburu, Buenos Aires, Argentina.)

23-26. American Soc. of Heating and Air-Conditioning Engineers, Cincinnati, Ohio. (A. V. Hutchinson, ASHAE, 62 Worth St., New York 13.)

23-27. Inst. of Aeronautical Sciences,

New York, N.Y. (S. P. Johnston, IAS, 2 E. 64 St., New York 21.)

26-27. Western Spectroscopy Assoc. 3rd annual, Berkeley, Calif. (J. W. Otvos, Shell Development Co., Emeryville, Calif.)

30-1. International Conf. on Fatigue in Aircraft Structures, New York, N.Y. (A. M. Freudenthal, 716 Engineering, Columbia Univ., New York 27.)

30-3. American Inst. of Electrical Engineers, New York, N.Y. (N. S. Hibshman, AIEE, 33 W. 39 St., New York 18.)

31-3. American Soc. of Sugar Beet Technologists, 9th biennial conf., San Francisco, Calif. (Western Beet Sugar Producers, Inc., 461 Market St., San Francisco 5.)

31-4. American Physical Soc., New York, N.Y. (K. K. Darrow, Columbia Univ., New York 27.)

### February

1-2. Armour Research Foundation Midwest Welding Conf., Chicago, Ill. (H. Schwartzbart, Armour Research Foundation, Illinois Inst. of Technology, Chicago.)

1-3. Case Studies in Operations Research, Cleveland, Ohio. (Operations Research Group, Dept. of Engineering Administration, Case Inst. of Technology, 10900 Euclid Ave., Cleveland 6.)

2-3. National Symposium on Microwave Techniques, Philadelphia, Pa. (S. M. King, Inst. of Radio Engineers, 1 E. 79 St., New York 21.)

(See 18 Nov. issue for comprehensive list)

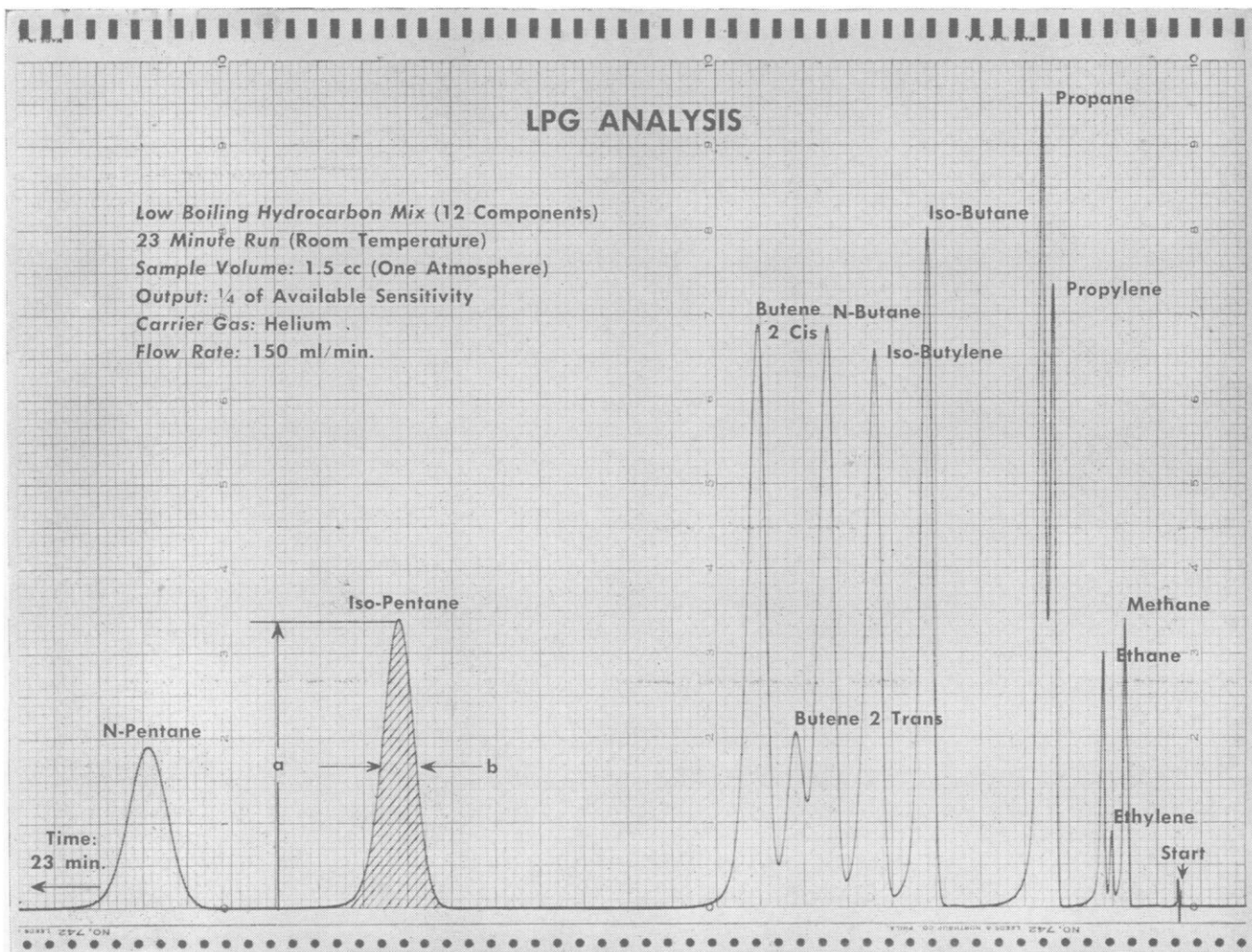


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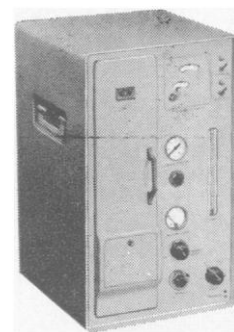
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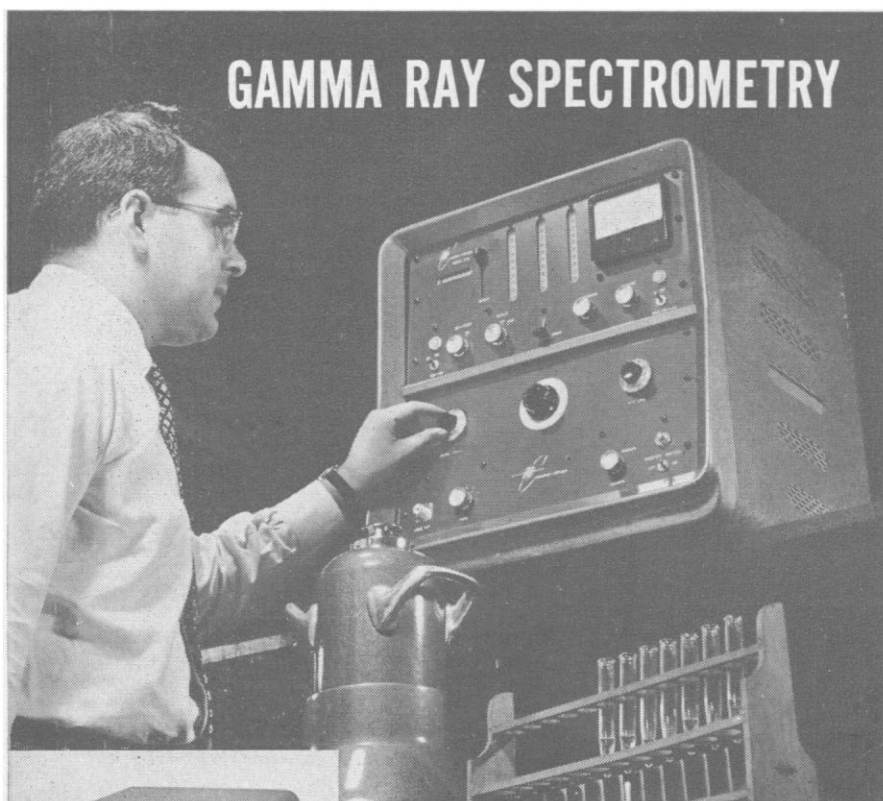


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■ **MULTI-PURPOSE BATHS** are mechanically refrigerated and heated. They have a self-contained circulation system and provide both outside and inside circulation simultaneously. Temperature sensitivity is  $\pm 0.02^\circ\text{C}$ ; no coils are mounted in the cabinet. Bulletin 755. (Forma-Scientific, Inc., Dept. Sci., Box 332, Marietta, Ohio)

■ **MOLYBDENUM CATALYSTS** are described in a 24-page booklet, "Molybdenum catalysts for industrial processes," that was recently published by Climax Molybdenum Company. Reactions that research and pilot plant work indicate may be advantageously catalyzed by molybdenum compounds, as well as commercial processes using molybdenum catalysts, are reviewed in the booklet. The commercial reactions include oxidation, hydrogenation, dehydrogenation, isomerization, cyclization, chlorination, and condensation. Those not yet on a production basis include dehydration, polymerization and alkylation. In addition to a discussion of each type of reaction, the booklet contains a table of typical reactions and conditions, and one section is devoted to the factors that must be considered in choosing a specific molybdenum catalyst. Copies are available. (Climax Molybdenum Co., Dept. L., Sci., 500 Fifth Ave., New York 36.)

■ **BEAKERS and GRADUATED CYLINDERS** made of polyethylene are now being produced by American Agile. Use of polyethylene, the company reports, assures products free from foreign matter, thereby assuring excellent chemical resistance to most acids, alkalis, salt solutions, and a large number of organic chemicals, all at temperatures up to  $175^\circ\text{F}$ . The beakers and cylinders are leakproof. Some sizes are of one-piece molded construction; others are molded, then welded. Standard beaker sizes range from 250-ml to 4000-ml capacity. Standard sizes of the graduated cylinders range from 25-ml to 1000-ml capacity. (American Agile Corp., Dept. Sci., P. O. Box 168, Bedford, Ohio.)

■ **FREEZE DRYING UNIT** model 3505 is designed for unattended, high-vacuum drying of frozen specimens in the laboratory. The unit does not contain a cold trap, a feature that is made possible by the NRC rotary gas ballast pump, which can handle 100-percent water vapor without loss of capacity. The specimen is visible through a bell jar; a direct-reading ionization vacuum gage shows total pressure of the system to an accuracy of  $\pm 5$  percent. (Naresco Equipment Corp., Dept. Sci., 160 Charlemont St., Newton Highlands 61, Mass.)