

plant growth hormones which have been measured. Despite such questions, however, the consensus was that Bonner's hypothesis was so clear, and so much within the reach of available techniques, that—as Varner put it—we have no choice but to test it.

The meeting provided an excellent opportunity for a thorough comparison and evaluation of new findings in the plant hormone field. It was unanimously decided to make an effort to organize another, similar meeting after 3 or 4 years.

ANTON LANG

*MSU/AEC Plant Research Laboratory,  
Michigan State University, East Lansing*

## Calendar of Events

### National Meetings

#### August

13-16. **Soil Conservation Soc.** of America, 22nd annual meeting, Des Moines, Iowa. (7515 NE Ankeny Rd., Ankeny, Iowa 50021)

13-17. **Energy Conversion Engineering**, 2nd conf., Miami Beach, Fla. (ASME, 345 E. 47 St., New York 10017)

14-16. **Astrodynamics**, Guidance and Control, conf., Huntsville, Ala. (American Inst. of Aeronautics and Astronautics, 1290 Sixth Ave., New York 10019)

14-17. **National Medical Assoc.**, St. Louis, Mo. (S. C. Smith, 520 W St., NW, Washington, D.C. 20001)

15-18. **American Dietetic Assoc.**, Chicago, Ill. (R. M. Yakel, ADA, 620 N. Michigan Ave., Chicago)

20-23. **American Phytopathological Soc.**, Washington, D.C. (J. P. Fulton, Dept. of Plant Pathology, Univ. of Arkansas, Fayetteville 72701)

20-25. **American Crystallographic Assoc.**, Minneapolis, Minn. (T. Zoltai, Dept. of Geology and Geophysics, Univ. of Minnesota, Minneapolis 55455)

20-25. **American Soc. of Parasitologists**, 42nd annual mtg., Tucson, Ariz. (D. V. Moore, Univ. of Texas, Southwest Medical School, Dallas 75235)

21-23. **Cryogenic Engineering**, conf., Palo Alto, Calif. (K. D. Timmerhaus, c/o Engineering Center, AD 1-25, Univ. of Colorado, Boulder)

21-25. **American Assoc. of Clinical Chemists**, 18th annual mtg., Philadelphia, Pa. (M. E. Rylan, 318 Rodman Ave., Jenkintown, Pa. 19046)

21-25. **Complex Problem Solving**, conf., Andover, N.H. (S. S. Cole, Engineering Foundation, 345 E. 47 St., New York 10017)

21-25. **Poultry Science Assoc.**, 56th annual mtg., Durham, N.H. (C. B. Ryan, c/o Texas A&M Univ., College Station 77843)

23-25. **Estuarine Pollution**, natl. symp., Stanford, Calif. (R. M. Kennedy, Kennedy Engineers, 604 Mission St., San Francisco, Calif. 94105)

23-25. **Gas Dynamics Symp.**, Evanston, Ill. (The Symposium, Northwestern Univ., Evanston)

23-25. **Wave Propagation and Dynamic Properties of Earth Materials**, symp., Albuquerque, N.M. (G. E. Triandafilidis, Univ. of New Mexico, P.O. Box 188, University Station, Albuquerque 87106)

23-26. **American Physiological Soc.**, fall mtg., Washington, D.C. (Executive Secretary, 9650 Wisconsin Ave., Bethesda, Md.)

24-26. **Phytochemical Soc. of America**, annual mtg., Madison, Wis. (T. J. Mabry, Univ. of Texas, Austin 78712)

27. **American Assoc. of Electromyography and Electrodiagnosis**, annual mtg., Miami Beach, Florida. (M. K. Newman, 16861 Wyoming Ave., Detroit, Mich. 48221)

27-31. **American Soc. for Pharmacology and Experimental Therapeutics**, fall mtg., Washington, D.C. (Executive Officer, 9650 Wisconsin Ave., Bethesda, Md.)

27-1. **American Congr. of Physical Medicine and Rehabilitation**, 45th annual session, Miami Beach, Fla. (Executive Director, 30 N. Michigan Ave., Chicago, Ill.)

27-1. **American Inst. of Biological Sciences**, 18th annual mtg., College Station, Tex. (AIBS, 3900 Wisconsin Ave., NW, Washington, D.C.)

The following societies will meet in conjunction with the AIBS. Additional information is available from AIBS or from the program chairmen listed below.

**American Bryological Soc.** (Secretary Treasurer, Box 36, S.W. Missouri State College, Springfield)

**American Soc. for Horticultural Science**. (Executive Director, 615 Elm St., St. Joseph, Mich. 49085)

**American Soc. of Human Genetics**. (c/o Division of Medical Genetics, Dept. of Medicine, Johns Hopkins Hospital, Baltimore 5, Md.)

**American Soc. of Naturalists**. (Executive Director, 3900 Wisconsin Ave., NW, Washington, D.C. 20016)

**American Soc. of Plant Physiologists**. (Secretary, c/o Dept. of Biology, Yale Univ., New Haven, Conn.)

**American Soc. of Plant Taxonomists**. (Secretary, c/o Botany Dept., Univ. of California, Berkeley)

**Botanical Soc. of America**. (Secretary, c/o Botany Dept., Indiana Univ., Bloomington)

**Ecological Soc. of America**. (Secretary, c/o Ecology Section, Health Physics Div., Oak Ridge National Lab., Oak Ridge, Tenn.)

**Genetics Soc. of America**. (Executive Director, 3900 Wisconsin Ave., NW, Washington, D.C. 20016)

**Mycological Soc. of America**. (Secretary-Treasurer, c/o Pioneering Res. Div., Natick Labs., Natick, Mass.)

28-30. **Gatlinburg Conf. on Special Topics in Nuclear Education and Research**, Gatlinburg, Tenn. (J. E. Mott, Oak Ridge Associated Universities, Box 117, Oak Ridge, Tenn. 37830)

28-30. **Preparation and Properties of Electronic Materials**, 9th annual conf., New York, N.Y. (L. R. Weisberg, RCA Labs., David Sarnoff Research Center, Princeton, N.J. 08540)

# Personnel Placement

## POSITIONS WANTED

(a) **ENVIRONMENTAL SCIENCE** Ph.D.; microbiology minor; biochemistry M.S.; air pollution, waste water studies; prefers industrial research or academic position. (b) **ORGANIC CHEMISTRY** Ph.D.; biochemistry M.A.; enzyme, metabolism studies; desires academic or research appointment. **WOODWARD PERSONNEL BUREAU**, 185 North Wabash, Chicago 60601. X

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## Air Conservation

Report of the AAAS Air Conservation Commission  
348 pp., illus., bibliography, index. 1965. Price: \$8.  
AAAS members' cash orders: \$7.

"Chaired by Dr. James P. Dixon, the twelve member Commission provided an outstanding representation of the many physical, chemical and social disciplines involved in the definition and dissection of the problem of air pollution. In the course of their deliberations the Commission called upon no less than fifty-five experts; a situation which led to acknowledgments to a list of people which reads like 'Who's Who in Air Pollution.' As the result of these deliberations, this book probably represents the most thoughtful, realistic, and penetrating analysis of air pollution as a factor in the societies of today and tomorrow now available. It is a 'must' for the serious student and professional, and can be highly recommended to the interested citizen."—(*Bulletin American Meteorological Society*, December 1966)

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**Dr. B. S. Savara**, **University of Oregon Dental School**, 611 S.W. Campus Drive, Portland, Oregon 97201.

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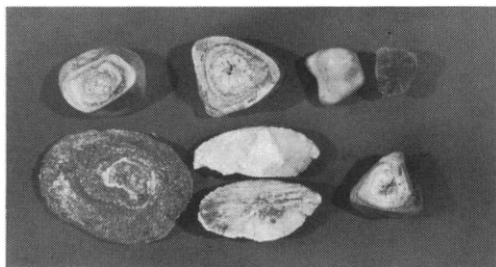
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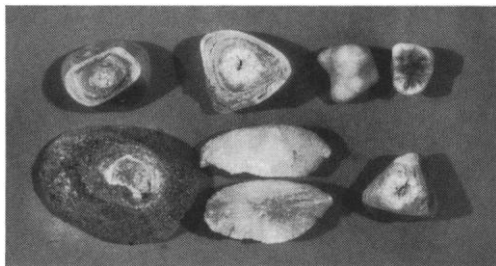
### Into the brain by infrared

Direct photography in the infrared has been making progress of late in two quite different directions: 1) exploitation of man's color perception and 2) luminescence (which exploits physics). H. Lou Gibson of Kodak has been a central figure in both. Neither technique is as easy yet as rolling off a log. If you have sufficient motivation to press on into infrared photography without assurance that everything you try will turn out perfectly the first time, get a book that Gibson has written anonymously under the title *Medical Infrared Photography*. Even if some of the medical language in the book is wasted on you, the \$2 we ask for it may still prove a profitable investment.

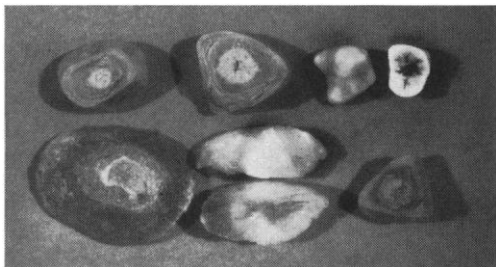
Send check with order for "Publication N-1" to Department 454, Eastman Kodak Company, Rochester, N. Y. 14650.



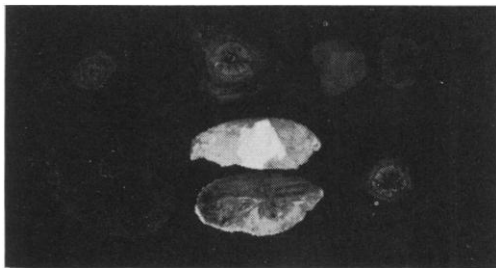
These are gallstones, as seen by ordinary panchromatic photography. The 30 years Gibson has spent in service to medicine influences his choice of illustrative subjects.



Here they are as KODAK High Speed Infrared Film sees them through a filter that cuts out everything but infrared. This, then, is infrared reflection.



Here they are on the same kind of film but with the only illumination filtered to prevent infrared from striking the subject, while filtering over the lens passes only infrared. Therefore only infrared luminescence is being recorded. Gibson invented this technique, then found it had already been described previously in Russian in Zhur. Nauch. i Priklad. Foto. i Kine. 5:274. What's more, the U.S. Post Office Department had used it in Chicago to examine questioned documents. Earlier workers had given up after extending their exposures to 1,000 times the reflection exposure. If they had gone to 20,000 times, they would have been first.



You see it is quite different from the well known fluorescence excited by ultraviolet.

Been watching that smallest gallstone?

The average eye finds little excitement in these pictures. The average eye is not accustomed to seeing by infrared, and the average photographer is not pleased with the flat, unsharp look of the infrared world as rendered in black-and-white. (The book goes into detail on how to achieve the utter evenness of lighting that infrared photography requires and that beginning students in photography are taught early to avoid.)

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The significance of those perceptions is yours to determine for your own game.

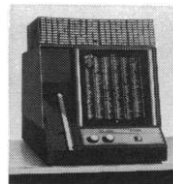
### The dye you turn on

Liquid is flowing through a transparent pipe. You want to draw a line on the flowing liquid itself and photograph the shape assumed by the line at a later instant. You must not influence the flow conditions in drawing your line. So you have in the liquid a small amount of an alcoholic solution of 2-(2,4-Dinitrobenzyl)pyridine. Its spectral absorption is then shifted by tautomerizing it with a flash of light focused as a line. A second flash microseconds or more later can then make the picture on KODAK High Contrast Copy Film. Popovich and Hummel tell of all this in *Chemical Engineering Science* 22:21.

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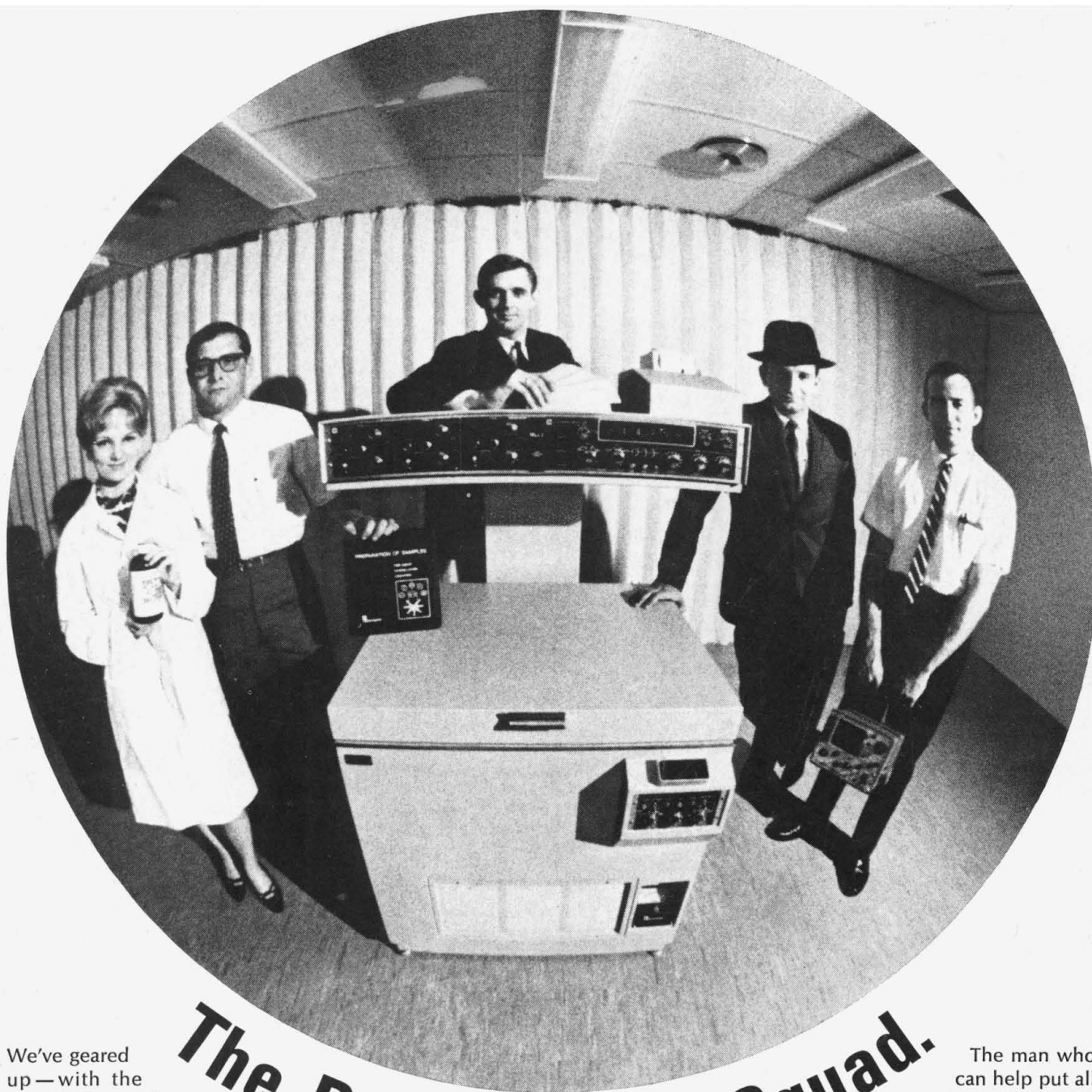


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