Recently, hematoporphyrin derivative (H.D.) has been reported to be an important agent in tumor detection.

By utilizing H.D. and a proper activating and viewing system, one can detect malignancy by fluorescence. Hematoporphyrin tends to accumulate in tumors (1) and its red fluorescence can be utilized in the delineation of neoplastic tissue. (2).

Lipson, et. al. have demonstrated that with a single intravenous dose of 0.05 mg/gm body weight of H.D., the tumor exhibited good differentiation within 3 hours after administration. They further report that the amount of H.D. required is well within the range of safety for the body. (3)

NBCo offers stat service on H.D. Phone collect 216-662-0212 (USA only). NBCo will process your order and guarantee shipment within 60 minutes of your call; one-day delivery anywhere in the continental USA, 80 hours anywhere in the world. Send for our free catalog containing more than 3000 items.

**PRICE SCHEDULE:**

<table>
<thead>
<tr>
<th>Size</th>
<th>Hematoporphyrin Derivative</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 gram bottle</td>
<td>gm. $4.25</td>
</tr>
<tr>
<td>10 gram bottle</td>
<td>gm. $4.50</td>
</tr>
<tr>
<td>5 gram bottle</td>
<td>gm. $4.75</td>
</tr>
<tr>
<td>1 gram bottle</td>
<td>$4.90</td>
</tr>
</tbody>
</table>

Nobel Prize winner John C. Kendrew is your guide through the complex world of DNA, "the molecule of life." Writing in a witty and lucid style specifically for the layman and non-specialist, he discusses how DNA works and examines prospects for future developments in a field in which he is still a pioneer: whether through molecular biology we can control hereditary disease, manipulate living creatures (including man), and combat cancer. 142 pages 52 illustrations $4.00

What Wheeler did for ants, Evans does for the nyssonine wasps. He covers all aspects of their ethology in such a distinguished manner that his book will be classed with Wheeler's as a major contribution to entomological literature. 576 pages 262 illustrations $15.00

This book is written for those biologists and biochemists who use yeasts in their work, yet may have little familiarity with the vast array of yeast species and their fascinating diversity in metabolic, biochemical, nutritional, and genetic properties. Industrial uses and a description of yeast taxonomy are included. Harvard Books in Biology, #5. 208 pages Illustrated $5.50

Others in the Harvard Books in Biology series:

HEREDITY AND EVOLUTION IN HUMAN POPULATIONS
by L. C. Dunn $3.50

COMMUNICATION AMONG SOCIAL BEES
by Martin Lindauer $4.75

THE INTEGRITY OF THE BODY:
A Discussion of Modern Immunological Ideas
by F. M. Burnet $4.75

NERVE CELLS AND INSECT BEHAVIOR
by Kenneth D. Roeder $4.75

HARVARD UNIVERSITY PRESS
79 Garden Street
Cambridge, Massachusetts 02138
**Geographic Criteria for Grants**

One accomplishment of federal research and development has been the geographic spread of science and the rise of the state universities. Though the growth of the state university system has been sustained by legislative support and prompted by the pressure of student enrollment, excellence in science has been fostered by federal research grants. In the Midwest and Northwest, in Texas, California, and increasingly in the Southeast, federal grants to state universities have achieved some counterbalance to the splendid, but criticized, growth of private universities in the Northeast and California.

In view of this geographic spread, it is unfitness and ill-advised for scientists and administrators to lobby against the regional concentration of research funds or to urge their congressional representatives to insure a wider geographic distribution. Planned geographic distribution inevitably leads to political allocation in which merit and potential become secondary considerations. The aspiring university which pressures Washington for regional development overlooks the aspirations of its weaker neighbors who will inevitably demand their full share. Congressional pressure for geographic distribution of federal research funds in Congress is directly attributable to the demands of university administrators and scientists whose greed has overcome their judgment.

Institutional development programs are being considered by several federal agencies, and a science development program has already been inaugurated by the National Science Foundation. If selection is made by merit and potential, these programs will encourage the rise of new “centers of excellence,” which should be concerned with the needs of growing populations and regional development and located only where initiative and quality already exist. Wider eligibility, not geographic distribution, should be the major goal, and university administrators must subordinate their individual interests and unite to protect federal programs from political intrusion. Guidelines can also be set for broader programs of federal support of universities in nonscience fields.

**Frank W. Putnam**
Division of Biological Sciences, Indiana University, Bloomington 47401

---

**Our signal averager uses all its data points for better resolution.**

*More usable data points.* In a signal averager, resolution is a function of the number of data points that can be placed within a region of interest. Resolution can, therefore, be a problem in any signal averager with a minimum dwell-time per data point of longer than the 39 μsec. of our Model 7100 Data Retrieval Computer (15.6 msec. for 400 data points, display A, above). Many other signal averagers have a minimum dwell-time per data point as long as 78 μsec. (31.25 msec. for 400 data points, display B, above). Our signal averager, the DRC, uses all of its data points for signals that occur within as little as 15.6 μsec. Result: the DRC gives you better resolution.

*Pre- and post-analysis interval control.* Another way to improve resolution is to average only meaningful signals. The DRC provides wide-range control of both pre- and post-analysis delay intervals. No data points are wasted on signals occurring between stimulus and response or during recovery after response.

*Performance plus versatility.* The DRC also has an input sensitivity of 20 millivolts—requiring no pre-amplification for many applications. Besides transient-averaging, the DRC will perform time- and interval-histogram analysis, without add-on modules. Now, all of the DRC’s performance and versatility is available at a new, lower price.

---

**NEW NALGENE® UNBREAKABLE BUCHNER FUNNELS...**

Strong, light in weight, with a tough polypropylene top and a flexible polyallomer bottom. These funnel handle hot filtrations to 275°F, won't collapse with high vacuum, can't break. Light in weight—less chance of tipping the funnel and flask...losing contents. They're the newest in the full line of Nalgene unbreakable funnels— Buchners, analytical, powder, utility, heavy-weight, large and the unique separatory funnels; every one precision molded of premium resins to provide maximum performance in the specific applications for which they are intended.

Assortable with other Nalgene labware for maximum discounts. Order from your lab supply dealer or write for our Catalog P-166, Dept. 21341, The Nalge Co., Inc. Rochester, N. Y. 14602.

*Another Product of Nalge Research*

---

**For ECONOMY’S SAKE...**

---

**NALGENE® LABWARE**

---

**THE NALGE CO., INC.**

---

**A subsidiary of Ritter Pfauider Corporation**

---

**462**

---

**NAUCRAL-CHICAGO CORPORATION**

---

**340 E. Howard Ave., Des Plaines, Ill. 60018 U.S.A.**

---

**Donker Curtiusstraat 7, Amsterdam W.**

---

**SCIENCE, VOL. 154**

---

**For more information on the DRC and its exciting new price, consult your local Nuclear-Chicago sales engineer. Or write to us.**

---

**The Model 7100 Data Retrieval Computer.**

---

**0233-00400**
Job Hunting by Chain Letter

During my brief career as a biochemist I have noticed that information concerning available job opportunities is not efficiently circulated to those who need it. I would like to try an experiment to bring about effective distribution of job information in the sciences. Basically, my proposal is an attempt to update the familiar "grapevine" to serve the needs of an enormously expanded scientific community.

For the time being I have a job, and I am also in the unusual position of having a list of about 15 available positions in biochemistry. I will give this list to anyone who writes to me and includes a stamped, self-addressed envelope. The only other requirement is that each correspondent include a descriptive list of available positions he knows about but does not want. The number of positions does not matter, but each correspondent should try to include all the information he would like to know if he were seeking a position. I will add the positions I receive to my own list and send the expanded list back to each correspondent.

I am confident that each person who contributes can receive perhaps dozens of positions in return for the few he sends in, thus increasing his probability of making a rational choice. All participants should, of course, feel honor-bound to pass their list along to others when they are finished with it.

Those who are not biochemists can also participate, although, at the moment, I have no list of my own to offer them. They can write to me on the chance that others in their field may have sent in lists. Try again later, if only your own list is returned to you.

Employers may also find this service useful. They may submit advertisements. These will be intermingled with all the listed positions. Blind ads will not be accepted. Perhaps by establishing this "job intelligence network" on a permanent basis, we can discourage the unfortunate practices of advertising-between-friends and non-advertising, a practice which served earlier generations well but is now obsolete and frequently unfair.

Peter L. Petarakis
Department of Biochemistry,
University of California,
Berkeley

28 OCTOBER 1966
YOU PROBABLY MISSED SOMETHING IMPORTANT LAST WEEK

WHAT WAS IT?

Several thousand scientific and technical articles were published last week. It's safe to say that several of these articles contained information of interest to you.

Why didn't you see those articles? Blame the "information explosion." Too much scientific information. Too little time to read it. Too few libraries to store it. And not enough information scientists to process it.

Perhaps there's another explanation.

Despite the deluge of scientific and technical papers, only a small fraction falls within the area of each individual's specific interests. Rather than too much information, there is often too little that is relevant to a scientist's particular needs. So your problem may not be one of information overload at all. You may actually have a shortage of information.

How do you solve this problem? You don't. We do.

ISI's revolutionary multidisciplinary approach to information processing brings the benefits of relevant information to those scientists who recognize the value of ISI services. We make it our job to see that you probably won't miss anything important next week . . . or any week.

For a brochure describing ISI and its activities, just write Department 29-15. We'd like to show you what you've been missing.

Thousands of scientists throughout the world regularly utilize such original ISI services as: Current Contents of Chemical, Pharmaco-Medical & Life Sciences • Current Contents of Space, Electronic & Physical Sciences • Index Chemicus • Science Citation Index • ASCA (Automatic Subject Citation Alert) • ISI Magnetic Tapes • OATS (Original Article Tear Sheets) • ISI Search Service.
THIS PACKARD APPLICATIONS ENGINEER IS EXPLAINING THE OPERATION OF THE GAS CHROMATOGRAPH HE HAS JUST INSTALLED.

Every customer gets this service, free

We want every one of our customers to get the most from his Packard Gas Chromatograph. No instruction manual—not even the very complete one we supply—can tell him everything. That's why every gas chromatograph we deliver is installed by a trained specialist who then explains its features. Features such as the easily-removable column/detector assembly that permits column changes outside the heated oven; electronically programmed temperature control, separate heat controls at inlet, outlet and detector; interchangeable detectors, and the water-cooled oven. Dual-column Packard Gas Chromatographs are ready to use for simultaneous analysis of different samples... or for stream splitting with different types of detectors to give general and specific responses from the same sample. Modular design of all systems allows choice of detector and expansion from single to dual channel, or isothermal to programmed temperature operation. For complete information ask your Packard Sales Engineer for Bulletin 105U, or write to Packard Instrument Company, Inc., 2200 Warrenville Road, Downers Grove, Illinois 60515.
The American Society for Microbiology Announces Publication of

JOURNAL OF VIROLOGY

Journal of Virology, a new official publication of the American Society for Microbiology, will be "devoted to the advancement and dissemination of fundamental knowledge concerning viruses of bacteria, plants, and animals." Journal content will be drawn from original laboratory research in all areas of basic virology—biochemistry, biophysics, genetics, immunology, morphology, and physiology.

The Journal is indeed fortunate in having three distinguished virologists as its editors: Robert R. Wagner, M.D., Professor of Microbiology at the Johns Hopkins Medical School, is the Editor-in-Chief. Dr. Wagner is ably assisted by Norma P. Saltman, Ph.D., Chief of the Cell Biology Section of the National Institute of Allergy and Infectious Diseases, and Lloyd M. Kedigoff, Ph.D., Professor of Microbiology at the University of Colorado Medical Center in Denver.

Journal of Virology will be published bimonthly, one volume a year, beginning in February, 1967. Subscription cost per year is $20.00 in the United States and overseas. There is no postage charge for subscriptions outside the U.S.A.

Note: ASM members should subscribe through the Society.

Subscription Agent:
THE WILLIAMS & WILKINS CO.
428 EAST PRESTON STREET
BALTIMORE, MD. 21202


Invertebrate Zoology
By Paul A. Meglitsch, Drake University
This introduction to invertebrate zoology describes the basic processes of the invertebrates, with considerable attention to comparative physiology, and provides classification and coverage of invertebrate life from the Protozoans through Insects and Myriapods. Flexibly organized, the work may be used in either the one-semester or full-year course. An abundant selection of meaningful illustrations enhances the book. Glossary, references, and an index are included.
January 1967 990 pp. illus. prob. $11.00

Vertebrates: Their Structure and Life
By W. B. Yapp, University of Birmingham, England
"A very impressive, fresh view of the vertebrates, using examples that are not standardly used in the existing textbooks of comparative anatomy."—Ralph M. Wetzel, University of Connecticut
1965 544 pp. illus. $8.50

Inorganic Chemistry
By C. S. G. Phillips and R. J. P. Williams, Oxford University
"Both Volume I and Volume II represent major contributions to the pedagogy and practice of modern inorganic chemistry. They represent clear, penetrating, and interesting expositions of a field of major importance."—James N. Pitts, Jr., University of California, Riverside
Volume I: Non-Metals
1965 700 pp. illus. $8.00
Volume II: Metals
1966 696 pp. illus. $8.00

Applied Climatology: An Introduction
By John F. Griffiths, Texas A. & M. University
A two part study, this book first discusses applied climatology, introducing the concept of the standard continent and outlining the climate of representative stations of the world in the framework of Köppen's classification. Part Two considers the application of climatology in various environmental studies and includes the planning work which is now an important feature of civil engineering and building.
1966 128 pp. illus. $6.00