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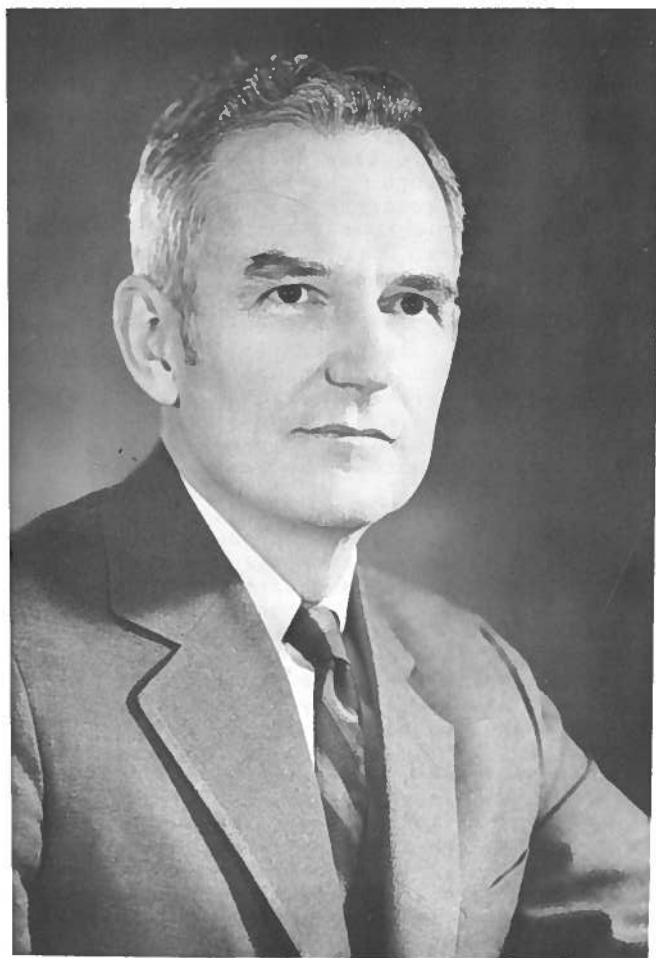
CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XXXII

DECEMBER, 1976

NUMBER 9



THE MARYLAND CHEMIST OF THE YEAR

THE EDITOR'S FIST



COMMITTEES, NOBEL, NOBLE, AND NOTABLE

Some years ago, when Bob Parr was chairman of the JHU Chemistry Department, and thus automatically chairman of the Remsen Award Committee, he remarked that it was easy to select a distinguished chemist for the Remsen Lecture -- any recent Nobel Laureate would do fine. The trick, he added, was to pick a chemist who would be a Nobel Laureate within the next five years. By this token, the 1976 Committee did a superlative job. How prescient can a committee be!

Nowadays we find ourselves too weary to bother attending a chemistry lecture merely because the lecturer is distinguished. The one really essential criterion for a lecturer is that he give an outstanding lecture. No feat of memory is required to recall earlier Remsen lecturers who failed this test. On the other hand, Professor Lipscomb's enthralling talk was one of the best in recent years. Truly, the 1976 Remsen Award Committee was thrice blessed.

Committees are much despised these days. When "appoint a committee" is so often a bureaucratic (academic as well as governmental) ploy for burying an unpleasant topic in hopes that it will sink from view, the reason is easily understood. But it need not be so! A small committee (less than 12, following Parkinson's law) with a specific assignment and a good chairman can often accomplish great things.

It would be easy to fill a page discussing suitable versus unsuitable topics for committees, productive working conditions, and the like. But of all the requirements, the most important one is having a chairman who knows how to delegate responsibility. Many successful committees actually work because the chairman does most of it alone. But the very best in committee activities occurs on those rare occasions when the chairman understands the problem, sees how the pieces fit together, and has the ability to parcel out the tasks and keep after the members until the job is done.

In this Bicentennial Year, it is worth noting that the Constitution of the United States was produced by a committee. One might wish that certain changes had been made in it, but who can say now that they would have been acceptable? This notion leads to an interesting definition for a committee (when it is not being used just as a graveyard); namely, a non-linear programming technique for achieving an optimum solution to a complex problem subject to numerous, possibly inconsistent, constraints.



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The Maryland Chemist

of the Year

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GRADUATE PROGRAM IN MEDICINAL CHEMISTRY

SCHOOL OF PHARMACY

UNIVERSITY OF MARYLAND AT BALTIMORE

The Department of Medicinal Chemistry of the University of Maryland offers graduate programs leading to the degrees of Master of Science and Doctor of Philosophy in medicinal chemistry. Current research emphasis is on drug metabolism and on the development of radiopharmaceuticals, but research in analytical and synthetic medicinal chemistry is also in progress. The goal of the department's graduate program is to prepare medicinal chemists for academic, industrial, or government careers. Applications are preferred from candidates with a strong background in chemistry, biology, or pharmaceutical sciences.

The Department, an administrative unit of the School of Pharmacy, is located in modern air conditioned facilities. The specialized laboratories of the department are equipped with the appropriate instrumentation (e.g. mass spectrometer) to carry out the ongoing research programs of the department. A computer center and the Health Sciences Library are located within one block of the Department.

Research and tuition-free teaching assistantships and fellowships will be available in September 1977 to qualified students. Address requests for information and application forms to Dr. Nicolas Zenker, Chairman, Department of Medicinal Chemistry, School of Pharmacy, University of Maryland, 636 W. Lombard Street, Baltimore, Maryland 21201, or telephone (301) 528-7440.

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Baltimore, MD 21204

ESSEX DEDICATES COOKE SCIENCE BLDG.

The Essex Community College of Baltimore County dedicated its new Science/Allied Health Building in honor of Dr. Giles B. Cooke, a former faculty member, at ceremonies held on the campus on October 2.

The eight story Science/Allied Health Building completed in 1975 is the sixth of eight major buildings to be constructed on campus. The total development cost of \$3,442,000 provides a facility of 74,000 gross square feet containing 22 general classrooms and 26 laboratories and support spaces for nursing, biology, chemistry and health sciences.

Also included are special facilities for an animal laboratory and animal storage facilities, preparation area for a future greenhouse, a radiology lab, and offices for the Science and Allied Health Divisions.

Approximately two thirds of the Science/Math Program is housed in this facility occupying 75 percent of the building, with the Allied Health Division utilizing about 25 percent and both divisions mutually sharing many labs. A distinct and important advantage of the two divisions' combined use of this facility is the availability for mutual use of biology and chemistry laboratories, space needed for key instructional requirements of both divisions' programs. The Allied Health programs being run in this facility besides nursing are medical laboratory technician, physician's assistant, radiologic technology, mental health associate, podiatric assistant and health planning assistant.

The structure also has a rooftop observation deck used for astronomy classes. It provides a clear view of the Chesapeake Bay since it's one of the highest points in Eastern Baltimore County and a natural location for excellent astronomical observations.

Dr. Giles Buckner Cooke was one of the most distinguished members of the Essex Community College faculty for seven years. He was named Professor Emeritus of Chemistry in 1967, was the first faculty member to hold the rank of Professor in the Baltimore Country Community College System, and was Chairman of the Division of Science and Mathematics.

Prior to his tenure at Essex Community College, he taught at Goucher College, was a high school principal in several Virginia communities, and worked in a number of capacities for Crown, Cork & Seal Co. and for Armstrong Cork Co. He was active in many professional organizations including the American Chemical Society, the Society of Food Technologists, the Soft Drink Society of America, the National Farm Chemurgic Council and the National Geographic Society. He was the Chairman of the American Chemical Society's Maryland Section and Editor of *The Chesapeake Chemist*.

While working at Crown, Cork and Seal Co., he established a national name for himself in cork research and had several articles published on cork and rubber. He held twenty-one

... continued on p. 10

DECEMBER MEETING

THE MARYLAND CHEMIST — 1976

Dr. Richard L. Hall, an internationally recognized expert in food and flavor chemistry, will receive the Maryland Chemist Award for 1976 at the Section's December meeting.

Dr. Hall received his S.B. *cum laude* (1943), A.M. (1948) and Ph.D. (1950) degrees in chemistry from Harvard University. His industrial career started in 1950 when he accepted a position as research chemist with McCormick & Company, Inc. He has progressed steadily within McCormick (Director, Research and Development, 1957-58; Vice-President, Research and Development, 1968-75) to his present position as Vice-President for Science and Technology.

Throughout his career, Dr. Hall has devoted most of his activities to the area of food additives. This area of food and flavor chemistry has profited significantly from his involvement. Through his many publications and speaking engagements, he has become internationally known as one of the world's leading experts on food additives and food safety. He has served as Chairman of the Safety Evaluation Committee (1974 on) of the Flavor and Extract Manufacturers' Association and President of this organization from 1970 to 1972. He was Vice-Chairman of the Panel on Food Quality of the White House Conference on Food, Nutrition, and Health in 1969, and a member of the President's Science Advisory Committee Panel on Chemicals and Health.

Internationally, he has served as Chairman of the Third International Congress of Food Science and Technology. He was a member of the 11th Joint FAO/WHO Expert Committee on Food Additives (1967), and is currently a member of the Executive Committee as well as IFT delegate to the International Union of Food Science and Technology.

Furthermore, he has been very active in the Maryland Section of the ACS. He was business manager of *The Chesapeake Chemist* from 1956 to 1959, and has held a number of other important offices, including that of Chairman in 1961. Through his direct encouragement and example, the Maryland Section has always enjoyed and benefited from the full cooperation and participation of McCormick chemists in local section affairs.

Dr. Hall is a former member of the Advisory Board of *The Journal of Agricultural and Food Chemistry*. Among his honors are a Citation from the Flavor and Extract Manufacturers' Association for leadership and services rendered as Chairman of the Food Additives Committee, 1969-70, and the Department of Defense Civilian Award in 1968. He is a Fellow of the American Association for the Advancement of Science and of the Institute of Food Technologists.

DATE:

Wednesday, December 15, 1976

PLACE:

Knott Science Center
The College of Notre Dame
of Maryland
North Charles Street
(See map on p. 11)

SPEAKER & TOPIC:

8:30 pm
THE MARYLAND CHEMIST
AWARD ADDRESS
Dr. Richard L. Hall
McCormick & Company, Inc.
"Some Naturally Occurring
Food Toxicants"

SOCIAL HOUR:

There will be a social hour
after the meeting.
Refreshments will be served.

COCKTAILS AND DINNER:

Doyle Building Dining Room
College of Notre Dame of
Maryland

Cocktails 6:30 - 7:15 (cash
bar)

Hot buffet dinner (7:15)
\$6.25 per person. Retired
chemists, students, and
their spouses may attend
the dinner at \$4.25 each.
Reservations are necessary
for the dinner and should
be made no later than
December 10 with

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It is not necessary to be a member of the American Chemical Society to attend the dinner or the talk. The talk may be attended without going to the dinner. You are invited to bring your spouse and friends to both the meeting and the dinner.

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Enclosed is \$ _____ (\$6.25 per person)* for dinner reservations at the College of Notre Dame for the following persons**:

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*Please make check payable to Maryland Section, ACS, and mail together with reservation form to Dr. Ernest Silversmith, 2607 Taney Road, Baltimore, MD 21209. Or phone 444-3216 (8-5 only), or 358-0619 (nights and weekends).

Return by December 10, 1976

AUDIO TAPES AVAILABLE

The Maryland Section, ACS, through its Education Committee has available for loan, for *brief periods*, the audio tapes which are listed below. All tapes are in cassette format. They may be borrowed by either individuals or groups. For further information contact: Melvin P. Miller, Loyola College, 4501 N. Charles Street, Baltimore, MD 21210. Phone: 323-1010 ext. 235.

- | | |
|---|---|
| 1. ENERGY & INDUSTRY
A. Waterland
ENERGY & ENVIRONMENT
Dr. S. Manahan | 10. DATA ANALYSIS IN THE CHEMICAL
LAB |
| 2. NATURE'S OWN TOXICANTS IN FOODS
Dr. J.M. Coon
ADDED, NOT INTENDED
Dr. H. Kraybill | 11. USE OF ENZYMES IN IMMUNOLOGY |
| 2. THE NITROGEN FIXER
Dr. Eugene van Tamelen
PROSTAGLANDINS: A POTENT FUTURE
Dr. E.J. Corey & Dr. S. Bergstrom | 12. BIOANALYSIS WITH MEMBRANE
ELECTRODE PROBES |
| 4. WINE FROM NATIVE AMERICAN
GRAPES-I
Dr. A. Rice
WINE FROM NATIVE AMERICAN
GRAPES-II
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| 5. NEW SOLID WASTE DISPOSAL
PROCESSES
New Processes ready to go
commercial (2 tapes) | 14. DRUG ANALYSIS BY DIRECT MULTIPLE-
ION DETECTION |
| 6. HERBICIDES & PESTICIDES-POLICIES
& PERSPECTIVES - Government,
industry officials air views
(2 tapes) | 15. PHARMACOLOGIC STUDIES USING
GS-MS |
| 7. NUTRITION & PUBLIC POLICY-THE
ISSUES (2 tapes) | 16. ELECTROCHEMICAL APPROACHES TO
CLINICAL INSTRUMENTATION |
| 8. NUTRITION & PUBLIC POLICY-FOOD
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A subject of growing concern
(2 tapes) | 17. STANDARDIZATION OF PROTEIN &
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| 9. CONSERVATION OF ORBITAL SYMMETRY
R.B. Woodward & R. Hoffmann
(2 tapes) | 18. METHOD EVALUATION IN CLINICAL
ANALYSES |
| | 19. KINETIC ASSAY OF ENZYME ACTIVITY |
| | 20. THERMOCHEMICAL ANALYSIS IN
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| | 21. NEW DEVELOPMENTS IN MEASUREMENT
OF PROTEINS |
| | 22. FOODS FOR THE FUTURE
Dr. R. Wiley
SUGAR FROM CELLULOSE
Dr. M. Mandels |
| | 23. Short course on ION-SELECTIVE
MEMBRANE ELECTRODES (2 tapes)
G.A. Rechnitz |

BEST WISHES FOR A

Happy Holiday Season

AND THE NEW YEAR



SOME NATURALLY OCCURRING FOOD TOXICANTS

Dr. Richard L. Hall

McCormick & Company, Inc.

Abstract

Our food contains many toxic substances naturally present from biosynthesis in the plant or animal, or as a result of the nutrient intake of the organism.

There are several reasons for the study of these interesting substances. Some have been, or even now are actual health hazards to man. Once identified, their reduction or elimination has been possible through education, a more varied and plentiful diet, applied genetics, and food processing.

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NO MALES NEED APPLY

Iota Sigma Pi, National Honor Society for Women in Chemistry, is soliciting nominations for the Iota Sigma Pi National Undergraduate Award for Excellence in Chemistry. Senior women chemistry students from accredited colleges and universities are eligible. For details write to Dr. Anne Sherren, Department of Chemistry, North Central College, Naperville, Illinois 60540. The deadline for nominations for the 1977 Award is February 1, 1977.

Iota Sigma Pi membership is open to women chemistry students, and professional women who meet the membership qualifications. For details write to Dr. Anne Sherren.

The 1976 Iota Sigma Pi National Award for Excellence in Chemistry was presented to Janet A. Lindsey who was nominated by the Houston Baptist University of Houston, Texas. Ms. Lindsey is now pursuing medical studies at Baylor University College of Medicine.

A MODEST PROPOSAL FOR SOLVING THE ENERGY PROBLEM

(Editor's Note: The following piece is taken from a travel book by Dean J. Swift. Although he is best known for his writing on travel, the Rev. Mr. Swift is also the author of numerous studies on theology, politics, and the Irish population problem. The present extract concerns his visit to the principal scientific academy and research institute of a well-known foreign country.)

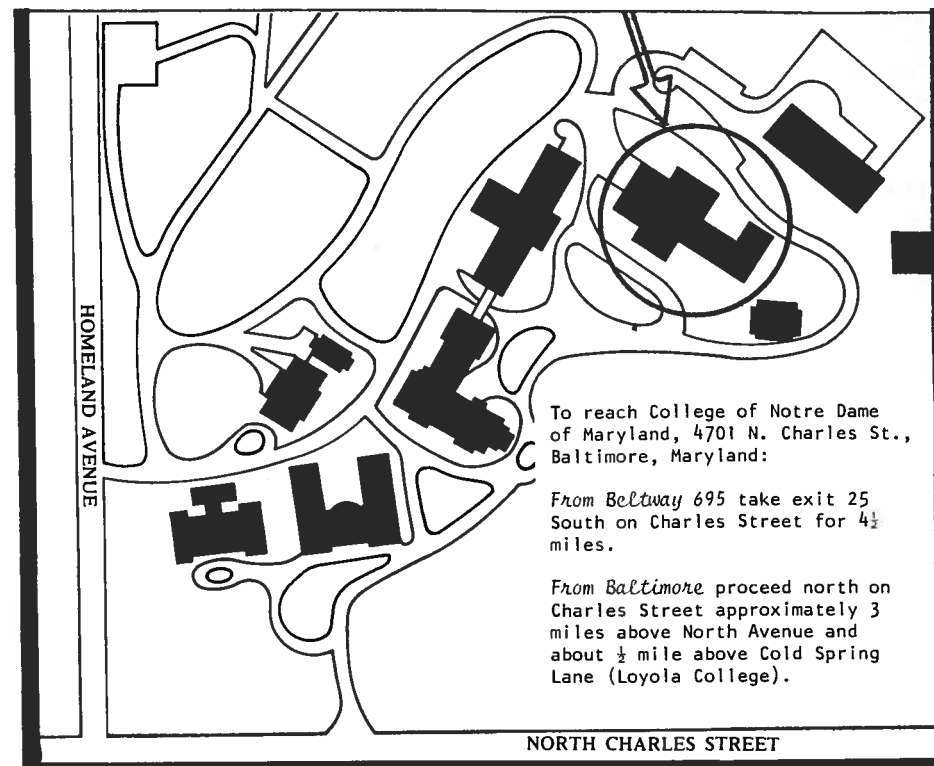
The first man I saw was of a meager aspect, with sooty hands and face, his hair and beard long, ragged and singed in several places. His clothes, shirt, and skin were all of the same color. He had been eight years upon a project for extracting sunbeams out of cucumbers, which were to be put into vials hermetically sealed, and let out to warm the air in raw inclement summers. He told me, he did not doubt in eight years more, he should be able to supply the Governor's gardens with sunshine at a reasonable rate; but he complained that his stock was low, and entreated me to give him something as an encouragement to ingenuity, especially since this had been a very dear season for cucumbers. I made him a small present, for my guide had furnished me with money on purpose, because he knew their practice of begging from all who go to see them.

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... continued from p. 5

United States patents in the field of food and beverage packaging. In 1961, while on the Essex faculty, he published the book *Cork and the Cork Tree*. He was also a contributor to the *Handbook of Chemistry and Physics*.

Dr. Cooke was always viewed as an outstanding and concerned educator by both his colleagues and his students. Essex Community College is proud and honored to add to his numerous accomplishments by dedicating its Science and Allied Health Building in his memory.



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