PU

LIBRARY

JAN 22

UNIVERSITY OF WASHINGTON

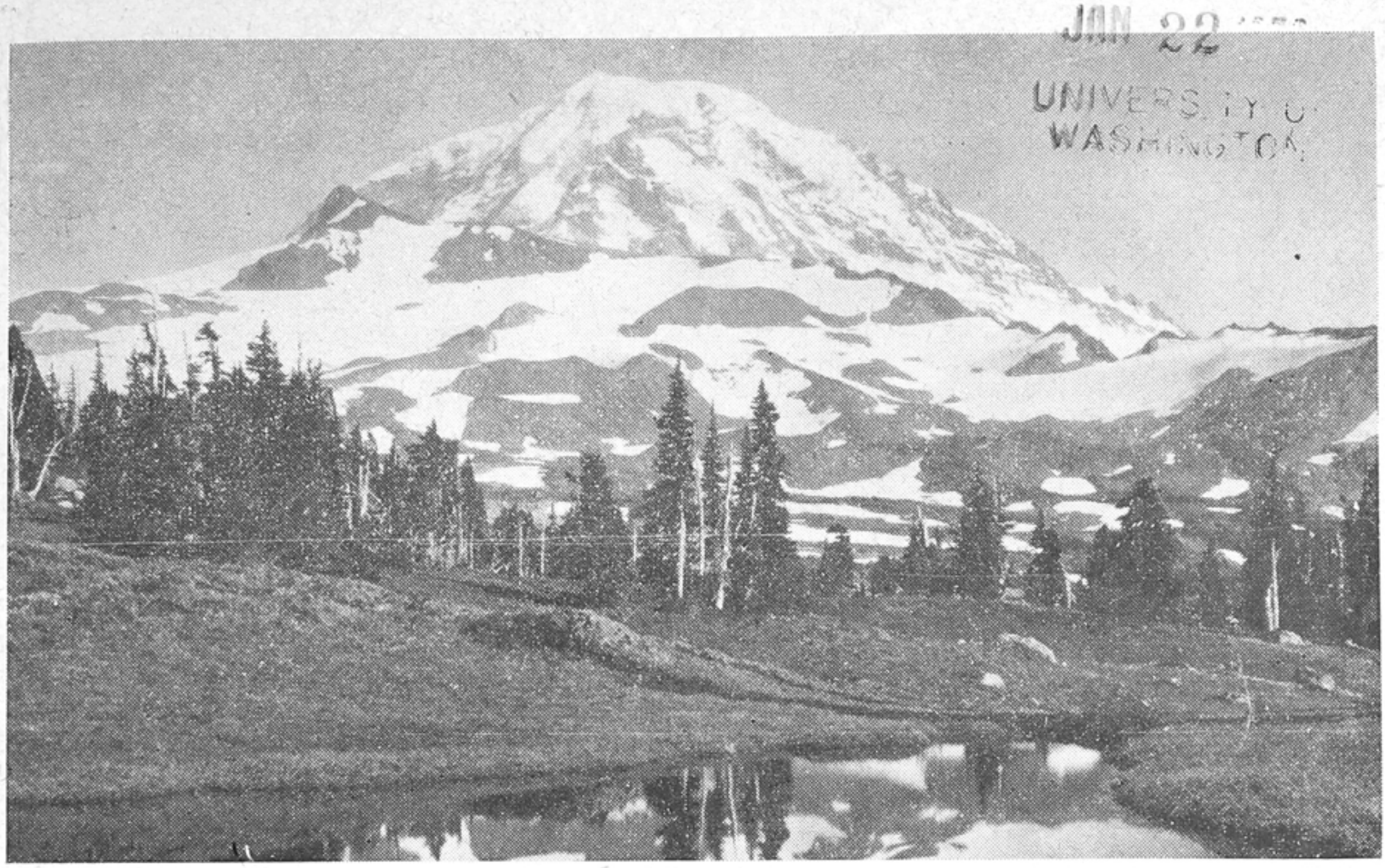


TABLE OF CONTENTS

The

PUGET SOUND CHEMIST

BULLETIN OF THE PUGET SOUND SECTION OF THE AMERICAN CHEMICAL SOCIETY

JANUARY, 1952

STEEL CHEMISTS...

SPEED UP TESTS with 'Baker Analyzed' POTASSIUM META-PERIODATE low in Manganese

Today, increased civilian as well as military demands keep the steel industry going at full tilt. With time a vital factor in making determinations, most steel chemists favor 'Baker Analyzed' Reagents with **the actual lot analysis on the label.**

These dependable laboratory chemicals, with defined purity to the decimal, enable chemists to operate at top speed and to check their calculations quickly. Featured is 'Baker Analyzed' Potassium meta-Periodate, low in Manganese.

Below are a few other 'Baker Analyzed' Reagents with extremely low indexes of impurities so important to steel chemists.

It is no surprise that 'Baker Analyzed' Reagents are held in such high esteem by the steel chemist. Surveys show that 'Baker Analyzed' Reagents are preferred by practically every industry where raw materials are controlled and finished products are searchingly analyzed.

Order your supply of 'Baker Analyzed' Reagents from your favorite laboratory supply house There is a Baker distributor near you who will give you quick, efficient service.

For a copy of Baker's recent Specification Catalog, write J. T. Baker Chemical Co., Phillipsburg, New Jersey.

Other 'Baker Analyzed' Reagents of interest to Steel Chemists

- Ammonium Persulfate
- Hydrochloric Acid
- Hydrofluoric Acid
- Molybdic Acid
- Perchloric Acid
- Sodium Chlorate
- Sodium Peroxide
- Tin, Granular, 20 or 30 mesh

Baker CHEMICAL

Baker Chemicals

REAGENT • FINE • INDUSTRIAL

'BAKER ANALYZED' REAGENTS ARE SOLD IN YOUR AREA BY:

SCIENTIFIC SUPPLIES CO., 122 Jackson Street, Seattle, Washington

The PUGET SOUND CHEMIST

Published by the Puget Sound Section of the American Chemical Society

Monthly from September through June. Non-member subscription rates, $1.50 year. For non-receipt of copies or change of address, notify Puget Sound Section Secretary. The Puget Sound Section of the A. C. S. assumes no responsibility for the statements and opinions advanced by contributors to its publication. Views expressed in the editorials are those of the editors.

4

Editor and Business Manager—Eric Reaville, Monsanto Chemical Co., 911 Western Ave., MA. 4203

Advertising Manager—Charles V. Smith, Northwest Laboratories, Second Avenue and James Street, Seattle; MAin 0680.

Associate Editors—Ted Niedo, WEst 6519; H. Cheung; H. Techlenburg

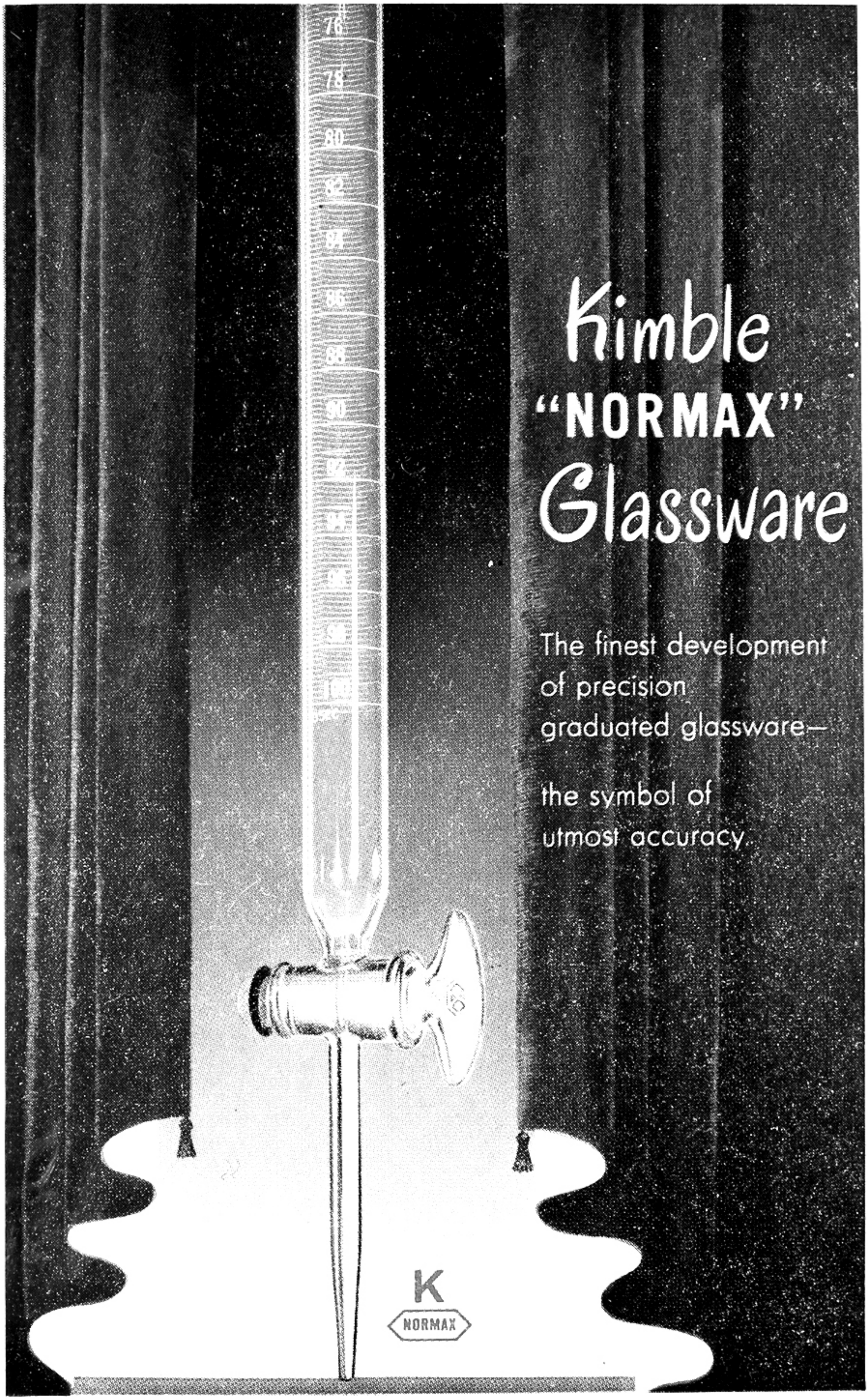
Photographer—G. Otto Orth, Jr., VErmont 6961.

EXECUTIVE SECTION OF THE PUGET SOUND SECTION FOR THE YEAR 1952

Chairman—Charles V. Smith, Northwest Laboratories, Second Avenue and James Street, MAin 0680.
Chairman-Elect—Paul C. Cross, University of Washington, MElrose 0630.
Secretary—Jim C. Drury, Lyle Branchflower Co., DExter 4500.
Treasurer—Robert G. Paquette, Oceanographic Laboratories, University of Washington, MElrose 0630.
Councilors—A. J. Norton, and E. L. Lovell.
Alternate Councilors—E. Grey King, and P. C. Cross.
Immediate Past Chairman—E. C. Lingafelter.
Editor Puget Sound Chemist—Eric Reaville

COMMITTEE CHAIRMEN (1951)

Program—C. V. Smith.
Membership—C. E. Higer.
Public Relations—G. O. Orth, Jr.
Finance—A. E. Markham.
Social—D. Verhagen.
Professional Practice—D. M. Ritter.
Employment—R. W. Moulton.
Regional Activities—W. R. Benson.
Representative to Puget Sound Engineering Council—L. P. Callahan.


76
78
80
82
84
Kimble
"NORMAX"
Glassware
The finest development
of precision
graduated glassware—
the symbol of
utmost accuracy.
K
NORMAX

JANUARY SPEAKER

G. FREDERICK SMITH

BIOGRAPHY

G. Frederick Smith

G. Frederick Smith was the fourth of nine children born in Lucasville (near Portsmouth), Ohio on July 29, 1891, the third of six sons born to a country school teacher. He was raised in Columbus, Ohio through the early schooling and by 1912 had completed 2 years at Ohio State University.

The period of college education was broken into at this time and resumed in 1915 at the University of Michigan and the first degree earned in the class of 1917. The next two years were spent in the service of the General Electric Co., at Nela Park, Cleveland, Ohio, and during the last six months of World War I in the army as a private.

From 1919 to 1922 was spent in the graduate school at the University of Michigan where the Ph. D. degree was earned under the supervision of Professor H. H. Willard.

Dr. Smith completed 30 years of teaching of analytical chemistry at the University of Illinois in September, 1951 passing through the various stages of promotion including a professorship in 1939.

Published research includes approximately 150 major literature contributions describing original investigations. The major fields of research included work with perchloric acid and its salts, improved procedure in the application of Ce (IV) H_5IO_6, HIO_3 and H_6BrO_3 in analysis. Fifteen years of original research in the field of redox indicators including the phenanthroline type compounds forms the basis of the lecture given in this tour.

Professor Smith organized the chemical company bearing his name in 1923 which has continued since that date to market specialty analytical reagents including perchloric acid and its salts, the various cerium salts besides many organic reagents such as cupferron, the phenanthrolines and many other indispensible analytical reagents.

From the G. Frederick Smith Chemical Company there developed the much larger company of which he is also president, The Aeration Processes Company of Columbus, Ohio, which distributes nation-wide the product known as "Instantwhip." There are 50 small plants throughout the country bottling and distributing this product and for 16 years their product has predominated in this field although there are scores of imitators, The yearly output is approximately 15 million units of "Instantwhip."

Professor Smith has retired from active duty teaching at the age of 60 and now devotes his entire energies to fundamental research and his business interests. He is the owner of numerous patents, the author of a number of books and has held numerous appointments in connection with the American Chemical including the chairmanship of the Division of Physical and Inorganic Chemistry in 1940. He is a member of Phi Lambda Upsilon, Alpha Chi Sigma, and Sigma XI. He is a 32 degree Mason and a Shriner.

(Continued on Page 6)

Biography (continued)

He believes in the American system of free enterprise, the unfailing applicability of the law of supply and demand, and that the backbone of the whole intricate structure of the history and development of modern chemistry is intimately associated with progess made in the development of analytical chemistry over the same period.

The scientific affiliations are the American Chemical Society, the A. S. T. M., the American Ceramic Society, the American Leather Chemists Association, the Society of Chemical Industry and the Electrochemical Society.

Professor Smith has raised three children—Ruby Mae, J. C. Clifton, and Mary Ellenore — Ruby Mae Harding, Urbana, Illinois; Mary Ellenore Weaver, of San Antonio, Texas; and J. C. Clifton, Evanston, Illinois.

★

Controlled Modification Of Organic Analytical Reagents Having Same Functional Group

By G. Frederick Smith

Organic compounds used as analytical reagents are classified into types with specific functional groups upon which their properties depend. For example, the dioximes, the substituted quinolines, the di—and tri—pyridines and the 1,10-phenanthrolines and substituted phenanthrolines are of this group of compounds.

It has heretofore been considered impossible to modify such compounds outside the functional group and predict, at the same time, resultant property changes of a physical or chemical nature. By this study of more than 50 modified type organic functional group chemical compounds of the phenanthroline series this goal has been attained. The preparation, physical and chemical properties of this series of compounds as well as new predictable applications in their uses will be described in detail in this lecture. The material presented will be of interest to physical, organic and analytical chemists alike.

Minutes of the Executive COMMITTEE MEETING Puget Sound Section

American Chemical Society
Bagley Hall—December 4, 1951
December 20, 1951

The meeting was called to order at 9:45 p. m. by Dr. E. C. Lingafelter, chairman.

Present were the following:

Edward Lingafelter, Collis Bryan, Norman Gregory, Charles Smith, Eric Reaville, Paul Cross, and Robert Paquette.

A quorum was present.

Proposed Boundary Change Of The Section

At its April 9 1951 meeting, the Executive Committee indorsed the following geopraphical area of the Section: "All of the following counties; Chelan, Clallam, Grays Harbor, Snohomish, Island, Jefferson, King- Kitsap, Kittitas, Klickitat, Lewis, Mason Pacific, Pierce, San Juan, Skagit, Thurston, Whatcom, and Yakima in Washington, and that portion of the Province of British Columbia south of the 51st paraliel and west of the 120th meridian."

Mr. Emery, Executive Secretary of the Society and Mr. Shaffer of the Standing Committee on Local Sectional Activities have both expressed the view that the counties without members or having only one member be deleted from the area of the Section.

After discussion of the question, the motion was made and carried that the Executive Committee again indorses the above proposed boundary of the Section.

National Professional Association Of Engineers, Architects, and Scientists

A letter from the above organization regarding the organization of professional employees for collective bargaining was read to the Executive Committee.

It was decided that the subject be dropped and that a response from the Section was not necessary.

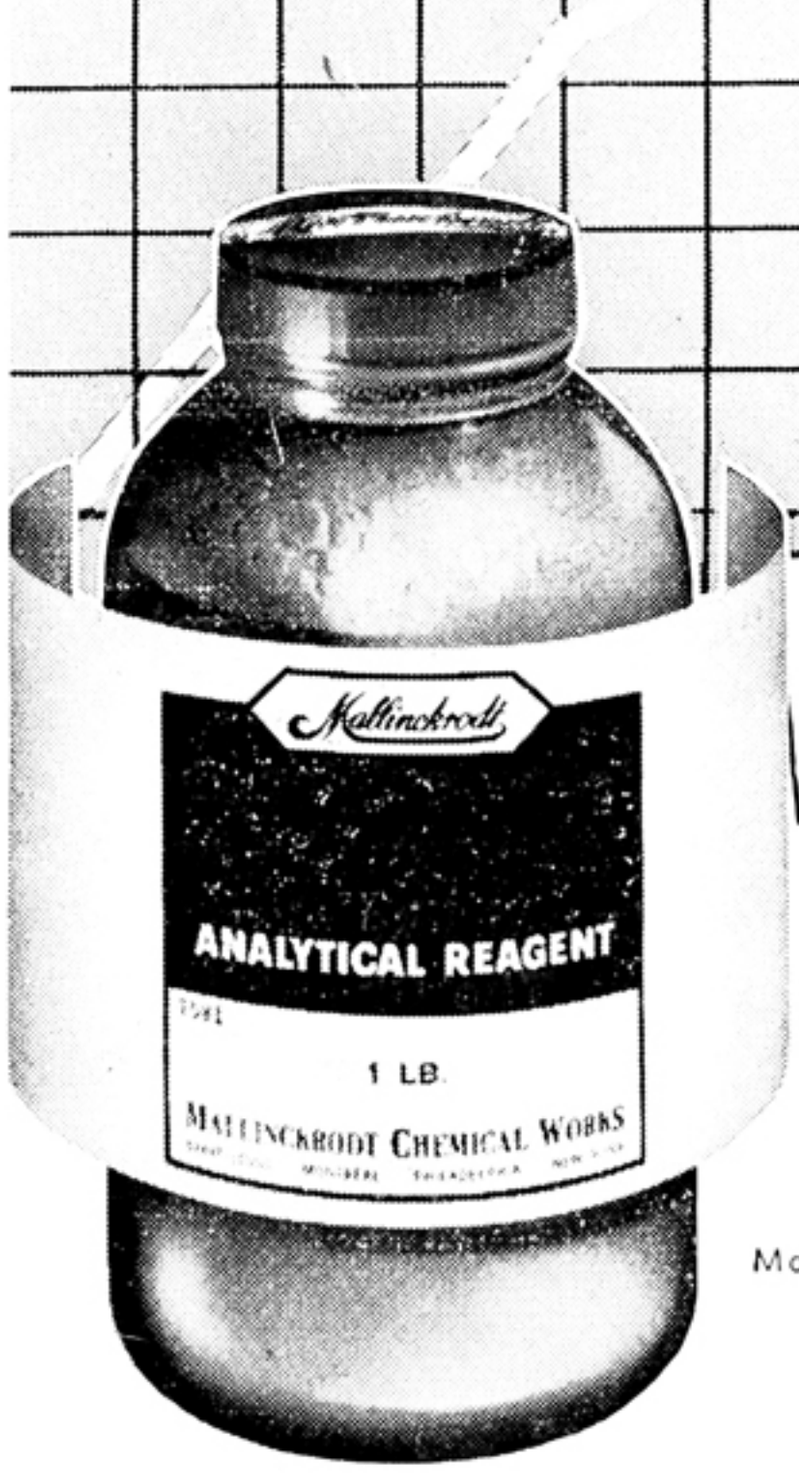
(Continued on Page 14)

More chemists are using

Mallinckrodt®

AR's*

than ever before



* TRADEMARK ANALYTICAL REAGENTS

the label you can trust

● The chemist is one of the world's most exacting buyers. He has to be . . . his work often depends wholly upon the purity of the laboratory chemicals he uses. That's why more chemists than ever before choose from the over 400 Mallinckrodt Analytical Reagents.

MALLINCKRODT CHEMICAL WORKS

Mallinckrodt St., ST. LOUIS 7, MO. • 72 Gold Street, NEW YORK 8, N. Y.

Chicago • Cincinnati • Cleveland • Los Angeles

Philadelphia • San Francisco • Montreal • Toronto

✓WRITE FOR THE NEW ANALYTICAL REAGENT CATALOG—LISTING OVER 400 AR'S

Mallinckrodt Analytical Reagents are distributed by:

TELEPHONE BRoadway 3456

SHAW SURGICAL COMPANY

SURGICAL INSTRUMENTS-HOSPITAL SUPPLIES-
PHYSICAL THERAPY APPARATUS-LABORATORY SUPPLIES

902-912 S. W. YAMHILL STREET PORTLAND 7, OREGON

MY LIFE AMONG THE CHEMISTS
or
TRUE CONFESSIONS OF A GIRL SECRETARY
BY DOROTHY BOCKMAN

In the year A. D. 1946 I became employed in the office of a certain chemical laboratory. There I met my first chemist. At first he seemed much like other people, but through careful study of him and his kind I have come to the following conclusions:

Chemists are men (or, infrequently, ladies) who dress in old army clothes or cast-off civilian clothing. In either case this typical uniform is stained all over or has many small holes eaten into it. Anything in the line of shoes that will stay on at all is the rule, and I've heard reports of barefoot chemists working in the depths of some labs.

The older married chemists have families and live in homes like ordinary folk. The younger, still available, male ones use the same approaches and hand out the same lines to us poor defenseless girls as any fellows do.

They come in about the same age assortments as other men and sometimes equal or even surpass them in looks. Unless they wear their hair in very short crew cuts they are apt to need a haircut. Most of them shave regularly, though they prefer to do this in the lab rather than at home.

What do chemists do all day? They sit on high stools in their laboratories weighing powders or little lumps of things. They jump up and boil stuff and make it go through different sizes and shapes of glass tubes. As long as it makes a bad smell they don't really care much what they do. His biggest moment is when our chemist can conjure up such a terrible odor that he has to shut his lab doors to protect the neighbors and stay in there with it alone all day.

After several days or weeks in his lab the chemist will emerge with a report. This is always in handwriting so bad that no typist can possibly read it, and full of silly things that make no sense to her anyway.

There are many frustrated poets in the chemical profession. They write odes to the lovely Lovibond Colors or the heavenly music of a boiling pot.

All chemists like to eat. They like to eat things they make themselves over their own little Bunsen burners and to drink things out of their own little beakers. No true chemist would leave his lab at lunch time and pay his own money to eat out. Besides, chemists never have any money.

Lots of lab work is strictly confidential. Some is so secret that the chemist doesn't know what he's going to do with a product until it's finished.

When they are working with food in the laboratories you must be very careful. An offer of something to eat probably means they want to see if it is fit to eat.

Chemists have a club they call the ACS. They have to hold their monthly gatherings in the form of dinner meetings in order to entice the chemist away from his lab.

All in all, it is my opinion that chemists are something very like people but not many people are like chemists!

—Reprinted from The Chemical Bulletin

★

Minutes of the 300th REGULAR MEETING

of the

PUGET SOUND SECTION

of the

American Chemical Society

Johnson Hall—University of Washington

December 4, 1951

The meeting was held jointly with the Institute of Food Technology and was preceded by a dinner.

At the dinner, Dr. Lingafelter introduced one of the founders of the Section,

(Continued on Page 12)

Mallinckrodt Employees Celebrate Edward Mallinckrodt, Jr.'s 50th Year With The Firm

In a recent ceremony at the St. Louis plant of the Mallinckrodt Chemical Works, approximately 1700 employees celebrated the 50th Anniversary in business of Edward Mallinckrodt, Jr., Chairman of the Board.

Mr. Mallinckrodt succeeded his father, Edward Mallinckrodt, Sr., as Chairman of the Board in 1928, and is the second Chairman in the Company's 84 year history. He joined the Company after completing graduate studies for the A. M. degree at Harvard University in 1901 and has been active in the management of the Company's technical as well as business affairs since that time. A chemist in his own right, he is responsible for much of the Company's research and development on ether for anesthesia.

At the ceremony in St. Louis, employees unveiled a portrait of Mr. Mallinckrodt which had been painted by Richard S. Meryman of Dublin, New Hampshire. The portrait had been arranged for through the participation of every one of the Company's 2400 employees throughout the United States and Canada. Charlton MacVeagh, Vice Chairman of the Board, presided at the ceremonies which were attended by the Company's St. Louis employees. The portrait was unveiled by R. F. Ritschy, Chairman of the Employees' 50th Anniversary Committee.

In his acknowledgment, Mr. Mallinckrodt paid tribute to the able leadership of the founders and early managers of the business, pointing out that their policies of fair dealing with customers and quality of product had endured and were being continued. He stated that the principles of business enterprise they had established were "to produce useful products to satisfy human need, to raise standards of living and to reduce the burdens of man's toil with profit to both producer and consumer."

January Meeting

PUGET SOUND SECTION

OF

AMERICAN CHEMICAL SOCIETY

TIME

Friday, January 25th, 1951, 8:00 P. M.

PLACE

SEATTLE, 131 BAGLEY HALL, UNIVERSITY OF WASHINGTON

SPEAKER

DR. G. FREDERICK SMITH

SUBJECT

Controlled Modification of Organic Anolytical Reagents

Having the same Functional Group

—There will be a no-host dinner at the Edmond Meany Hotel at 6:30—

ARE CHEMISTS PEOPLE?

(Reprinted from The Memph-ion)

Are Chemists People? To be a little broader in scope, Are Scientists People? From facts as presented in today's news and as history relate them to us back as far as recorded information is available, one is at times led to doubt whether the individual "homo sapiens" who takes up the intriguing work of science and follows it diligently may any longer consider himself a normal human being.

In the "good old days," we find the early alchemists rated along with the court jester and the magician, being taken in by the governing class or governing body, which at that time consisted of an individual and his immediate captains, and our early scientist, if we may call him that, being given a room in the deepest cellar of the castle, so that the foul smells arising from his labors might not be too disturbing to the household, and being supported entirely by the bounteous nature of his sponsor, who hoped to get in return some new poison to use against his enemies, or some item of military value, or most desirable of all, the transmutation of metals.

Today, we have our governments of the world taking much the same position in deeming that a scientist is not fit to take care of himself in the everyday world, to be a normal human being or citizen, but must be protected in cloistered halls and supported with the hope that some of his efforts will be valuable in furthering the ends of the individual supporting him.

Some of the dreams and fancies of the ancients have been realized in modern scientific developments, and now that we have arrived at the "atomic age" and the scientist has proven his points of theory, he still is back in the dungeon as far as his thoughts being accepted as having any value in the social or business world.

Scientific experts developed the atomic bomb, carried it through to its completion, and then were summoned by our law-makers and according to the reports we read in public newspapers, were furnished with an expense-paid tour through our Capitol. Upon arrival in the seat of government, they were housed for a certain length of time, asked a few questions, but not given an opportunity to express themselves, and were promptly sent back to their laboratories.

An insignificant item possibly was a letter which might bear bringing to the front. This was printed in a newspaper with a large circulation under a two-line headline across three columns in type one-quarter inch high—"WE SHOULD STOP ATOMIC RESEARCH: LET US DESTROY SCIENTISTS AND EQUIPMENT," advocating that a union of all the nations should ask the delivery to a designated committee of all scientists and their equipment for destruction. "We should burn all books and eliminate experimentation and study beyond the physics required for ordinary industrial processes," . . . "Then, when we have eliminated the possibility of further nuclear research, we should behead our own scientists and drop their secrets into the bottom of the sea."

From this, it would seem that we should make a change in our designation; no longer should we call them "scientists' but "scientwists" to correspond with the distorted development of their characters, which produces such "scientific" means of destruction as that product of nuclear research, the atomic bomb.

Perhaps a few of the science personnel of our nation should take it upon themselves to become better informed upon the means and ways of government, even going to the extent of applying themselves along that line, not with the idea of an axe to grind, but to keep a balance in our democratic form of government.

V. C. O'Leary—

★

A stenographer defines a wolf as a modern dry cleaner. He works fast and leaves no ring.

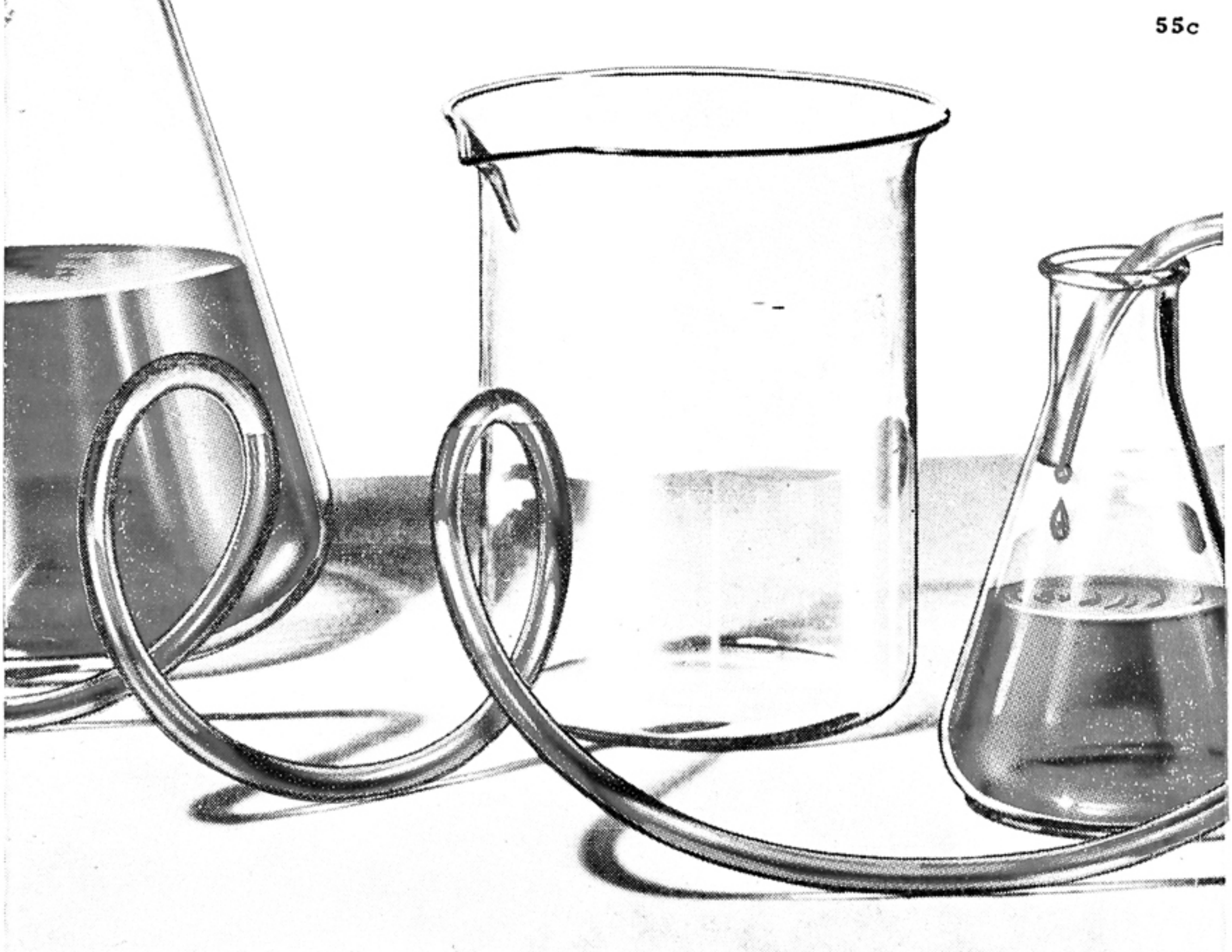
TYGON *Laboratory* TUBING

By any standard of comparison Tygon *flexible-plastic* Laboratory Tubing stands head and shoulders above the crowd. It is clear, for solution visibility; flexible, for ease in handling; tough for extra long life. It is chemically inert, and non-toxic. And available in a range of sizes to meet every laboratory need.

In performance records made . . . in opinions of laboratory technicians everywhere . . . it is tops.

AT YOUR LABORATORY SUPPLY DEALER OR WRITE
THE U. S. STONEWARE CO. • AKRON 9, OHIO

55c



Minutes of Regular Meeting

(Continued from Page 8)

Dr. H. K. Benson. Dr. Benson gave some interesting remarks on the first few meetings of the Section.

Dr. Swensen, Chairman of the Institute of Food Technology, introduced Dr. Bucholtz.

Dr. Buchoitz spoke on the program and history of the I. F. T.

The regular meeting in Johnson Hall was called to order by Dr. E. C. Lingafelter, Chairman of the American Chemical Society at 8:15 p. m. Dr. Lingafelter turned the meeting over to Dr. Bucholtz who introduced the speaker of the evening, Mr. Neno D. Voth, Chief Chemist, Pure Food and Drug Administration, Seattle Office.

Mr. Voth gave an informative talk on the activities and procedures of the Food and Drug Administration. His talk was illustrated by a movie entitled "Fraud Fighters." His talk concluded with an extended and interesting question period.

The meeting adjourned at 9:45 p. m.

Jim C. Drury, Secretary
Puget Sound Section
American Chemical Society.

★

Examinations For Scientists and Sanitarian Now Open

Competitive examinations for the appointment of chemists and biochemists to the Regular Commissioned Corps of the United States Public Health Service will be held in various cities throughout the country on March 4, 5, and 6, 1952. The examination will include professional written tests, an oral interview, and a physical examination. Completed applications must be in the Washington office by January 29, 1952.

Appointments are permanent and provide opportunities for career service in research and public health activities. Appointments will be made in the grades of Assistant and Senior Assistant, equivalent to Navy ranks of Lieutenant (j. g.) and Lieutenant, respectively. Entrance pay is $4,486 for Assistants with dependents, and $5,346 for Senior Assistants, including rental and subsistence allowance. Officers enjoy most of the usual military benefits. Applicants must expect to receive the master's or doctor's degree no later than December, 1952, and by that time must have completed a total of seven years of appropriate professional training and experience subsequent to high school.

For application forms and additional information write to: Surgeon General, United States Public Health Service, Federal Security Agency, Washington 25, D. C., Attention: Division of Commissioned Officers.

★

Applicants For Fellowship Invited

Candidates are now being sought for the $2,500 Merck Graduate Fellowship in Analytical Chemistry for 1952. Sponsored by Merck & Company, Rahway, N. J., the fellowship is administered by the

CHEMICALS

Industrial • Agricultural

Raw Materials

Largest and Most Complete Stocks

in Northwest

VAN WATERS & ROGERS

Incorporated

SEATTLE - PORTLAND - SPOKANE

BOISE

American Chemical Society.

The fellowship will be awarded to that applicant believed capable of contributing most to the advancement of the theory and practice of analytical chemistry during his tenure of the fellowship and in the future. It will be voted contingent upon the successful candidate's acceptance by the institution and professor selected for the proposed study program.

The place of study must be an institution whose undergraduate course of instruction in chemistry is approved by the American Chemical Society. In Canada, the institution selected must be approved by the Chemical Institute of Canada. A student will be eligible to have the fellowship renewed twice, but no student may hold it for more than a total of three years.

Application blanks may be obtained from the American Chemical Society, 1155 Sixteenth Street, N. W., Washington 6, D. C. They should be completed and returned to the Merck Fellowship Committee, at the same address, along with letters of recommendation and transcripts of credits. Deadline date for receipt of all material is March 1, 1952.

★

We wish to thank Warren W. Koenig for his assistance in the preparation of this issue.

★

A disgusted sailor was hauled into court for fighting.

"Your honor" he told the judge, "I was in a telephone booth talking to my girl. This guy wants to use the phone, so he opens the door, grabs me by the neck, and tosses me out of the booth."

"Then you got angry?" asked the judge.

"Well, a little," replied the sailor. "But I didn't get really mad until he grabbed my girl and threw her out, too."

★

She: "Oh, Doctor, will the scar from my operation show?"

Doc: "That, young lady, is up to you."

For Your
Chemical Needs
look to
DOW

Industrial Chemicals
Compressed Gases
Chlorinated Solvents
Flotation Reagents
Agricultural Chemicals

"OVER A QUARTER CENTURY OF EXPERIENCE WORKING WITH WEST COAST INDUSTRIES"

THE DOW CHEMICAL COMPANY

San Francisco
Los Angeles
Seattle

DOW

Executive Committee Meeting

(Continued from Page 6)

Puget Sound Engineering Council

Mr. Fred Greaves of the Council has requested the appointment of a Section representative to assist in solving the financial problems of the P.S.E.C. Bulletin.

As Mr. C. Smith is now serving as Associate-Editor of the Bulletin, it was proposed that any further appointments be deferred until after the first of the year.

Regional Meeting—Corvallis, Oregon, June, 1952

The dates of June 20 and 21 have been suggested by the Oregon Section for the American Chemical Society meeting. The A.A.A.S. meeting will be held from June 16-21.

After discussion it was decided that this Section recommends:

1. The dates of June 20 and 21 or if an alternate time is necessary, the 13 and 14 of June.
2. The American Chemical Society meeting be held in conjunction with the A.A.A.S. mteting with perhaps a joint schedule of papers.
3. The continuance of a meeting of the Chairmen of the participating sections.
4. A possible meeting of the Councilors of the Northwest Section.

High School Students Day

A brief discussion was held regarding a Chairman for the event, whether or not private, parochial, and denominational schools should be included, and means of obtaining publicity. No decisions were made pending the appointment of a Chairman.

Loss Of Councilor and Alternate Councilor

Due to the decrease (58) in membership of the Section we suffer the loss of Mr. Albert Hooker, Councilor, and Dr. Hyp Dauben, Alternate Councilor.

The paid membership of the Section as of December 1, 1951 was 444.

Respectfully Submitted,
Jim C. Drury, Secretary
Puget Sound Section Am. Chemical Soc.

NEW MEMBERS

LLOYD, Winston D., Department of Chemistry & Chem. Eng., University of Washington, Seattle 5, Wash.

From Florida (Pensacola)

BARNES, Robert K., Chem. Dept. Bogley Hall, Box 9, Univ. of Washington, Seattle 5, Wash.

From Idaho (Moscow)

MUPSIK, Herman M., care University of British Columbia, College of Pharmacy, Vancouver, B. C., Canada.

From Maryland (Baltimore)

SHARP, Merrill J., U.S.P.H.S. Hospital, P. O. Box 3145, Seattle 14, Wash.

From Utah (Salt Lake City)

★

Minutes of the 299th REGULAR MEETING

of the
PUGET SOUND SECTION
of the
American Chemical Society
Bagley Hall — University of Washington
November 26, 1951

The meeting was called to order at 8:00 p. m. by Dr. E. C. Lingafelter, chairman.

Dr. Lingafelter welcomed the members of the Pacific Northwest Section of the Electrochemical Society with whom this meeting was jointly held.

The New Officers and councilors for 1952 were introduced to the audience.

Dr. J. L. McCarthy introduced the speaker of the evening, Dr. K. S. Spiegler of the Massachusetts Institute of Technology.

Dr. Spiegler gave a very interesting lecture on "The Electrochemistry of Ion-Exchange Resins".

The meeting adjourned at 9:30 p. m. followed by a social hour.

Jim C. Drury, Secretary
Puget Sound Section
American Chemical Society.

★

Conscience: Something that gets a lot of credit which really belongs to cold feet.

Nature Isn't Always Right . . .

but

TYGON

Is!

No, we're not trying to change the color of your hair, build bulging muscles, or get you to join the "regulars" if you're over 35. We just want to point up the fact that while Nature provides some excellent gums and resins for general purpose finishes, chemical-resistant coatings are a different story.

There are few, if any, natural products that can match the outstanding general chemical resistance of the synthetic resins used in TYGON.

In your laboratory, and out in the plant, there are many spots where conventional paints serve well, there are many others where only TYGON can do the job. Your fume hoods and ducts, your lab floors and table tops, your metal equipment, need the full protection that only TYGON gives. TYGON is "always right" for chemical resistance.

TYGON Series "K" PAINT is easy to apply and fast drying. The film produced is smooth, tough, flexible and seemingly ageless. It is fully resistant to acids, alkalies, oils and water. It resists most solvents except ketones, esters and certain hydrocarbons.

Why don't you try TYGON, today. Your favorite laboratory supply house usually carries it in stock. You can choose from a wide range of colors in convenient quart or gallon cans.

With apologies to our advertising colleagues for poking a little fun!

174C-4

U. S. STONEWARE

Since 1865 • Akron, Ohio

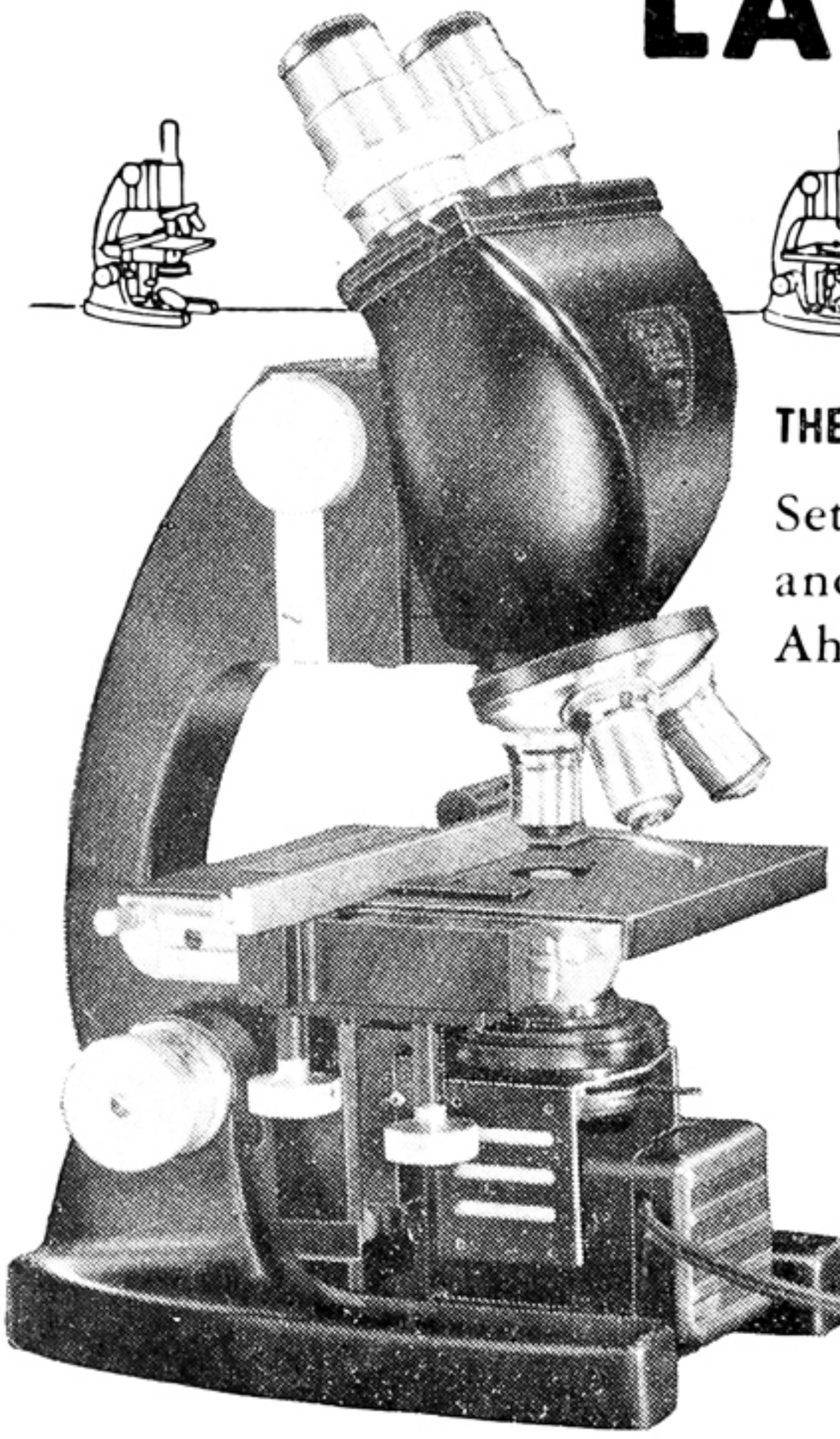
PLASTICS AND SYNTHETICS DIVISION

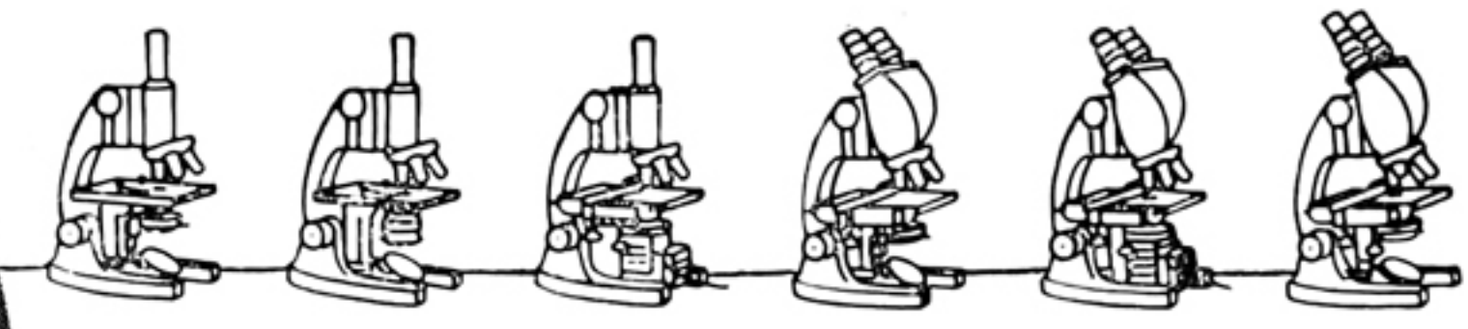
QUISTIONS DIVISION
ATTLE 5 WASH

U.S. POS
PAI
Seattle, Wash
Permit No

New! **BAUSCH & LOMB** *Dynoptic*

LABROSCOPES





THE WORLD'S FINEST LABORATORY MICROSCOPES

Set higher standards for comfort, accuracy and speed, in microscopy with new "Years-Ahead" advanced design features.

● New *Dua-rol* LOW POSITION Ball-Bearing and Roller Fine Adjustment—critical focus, easier and faster; less wear, longer life. New *Roto-sphere* BALL-BEARING Nosepiece—most accurate parcentricity and smoothest rotation ever.

New Mechanical Stage with LOW POSITION Controls for comfortable operation; 10× Achromatic Objective; New type Variable Focus Condenser for low-cost models; New attachable Integral Illuminator. AND—many other new and service-proved advantages exclusive with or pioneered by Bausch & Lomb . . . further proof that *the world's finest instruments are made in America—by Bausch & Lomb.*

Ask for a demonstration and for complete information on this new line of microscopes.

SCIENTIFIC SUPPLIES COMPANY

122 Jackson Street **ELiot 1134** **Seattle 4, Washington**