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BULLETIN OF THE PUGET SOUND SECTION OF THE AMERICAN CHEMICAL SOCIETY

DECEMBER, 1950



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The PUGET SOUND CHEMIST

Published by the Puget Sound Section
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 A. C. S. is not responsible for statements or opinions expressed in this publication.

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Editor and Business Manager

CHARLES V. SMITH

Northwest Laboratories

Second and James, Seattle — MAin 0680

Associate Editors

G. L. PUTNAM

University of Washington
Seattle — MElose 0630

F. BRUCE SANFORD

U. S. Fish and Wildlife Service
Seattle — EAsT 0586

Assistant Editors

TED NIEDO

WE. 6519

BEN BALDWIN

FI. 1430

Photographer

G. OTTO ORTH, JR.

2919 First Avenue South
Seattle — MAin 4090

NEWS CONTRIBUTORS

DR. CARL M. ANDERSON, McMinnville

DEAN BALKEMA, Shelton

DR. WALTER CARMODY, Seattle Univ.

DR. LEO FRIEDMAN, Corvallis

DR. C. H. JOHNSON, Salem

ROBERT B. DEAN, Eugene

ROBERT C. OLSEN, Pac. Luth. College

C. E. HIGER, Everett

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No. 8

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of the

Puget Sound Chemist

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A

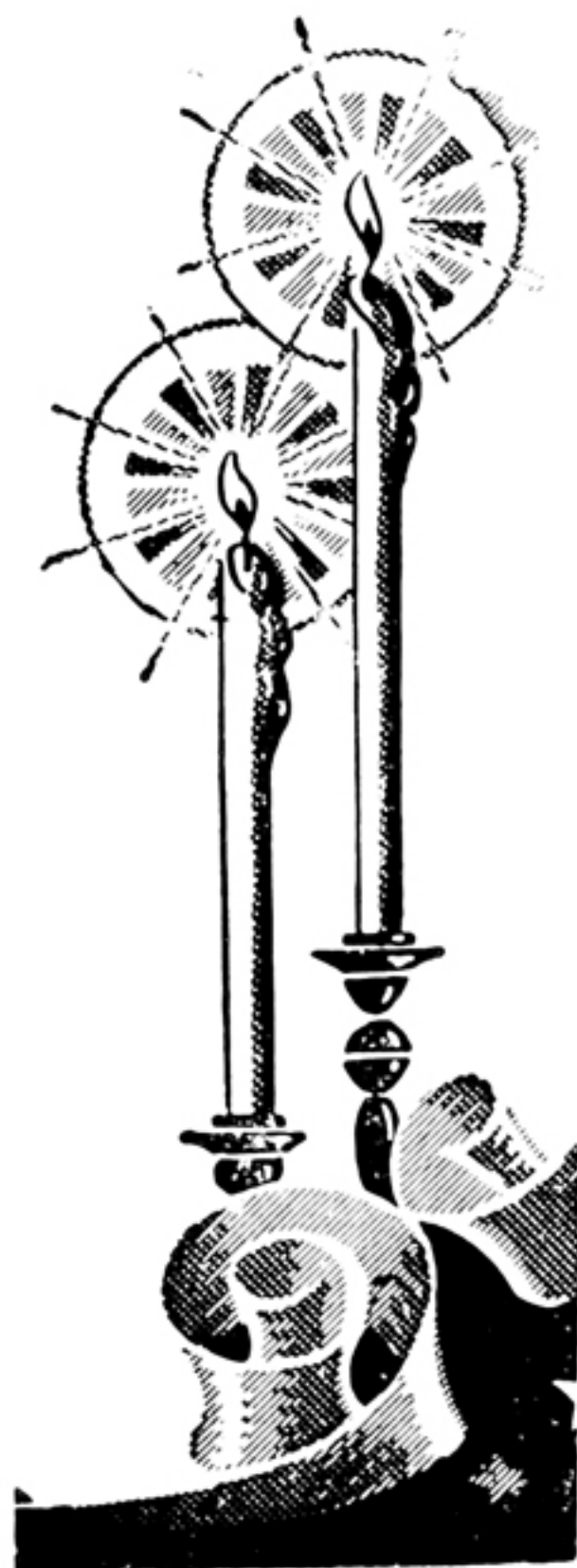
Merry Christmas

AND



- Blessed are the merciful:
for they shall obtain mercy.
- Blessed are the peacemakers:
for they shall be called the
children of God.

*(From the Sermon of the Mount
—Matthew 5)*



Our Sincere Thanks to the Members for Their Cooperation

December Meeting

Puget Sound Section

AMERICAN CHEMICAL SOCIETY

Time

Wednesday, December 20, 8:00 p. m.

Place

Seattle, 131 Bagley Hall, University of Washington

General Topic: Aromaticity

Speakers

Dr. W. T. Simpson: "Remarks on the Nature of Aromaticity"

Dr. A. G. Anderson, Jr.: "Azulene, the Blue Aromatic Hydrocarbon"

Refreshments and Social Hour After Meeting

January Meeting

Puget Sound Section

AMERICAN CHEMICAL SOCIETY

Time

Thursday, January 18, 8:00 p. m.

Place

Seattle, 131 Bagley Hall, University of Washington

Speaker

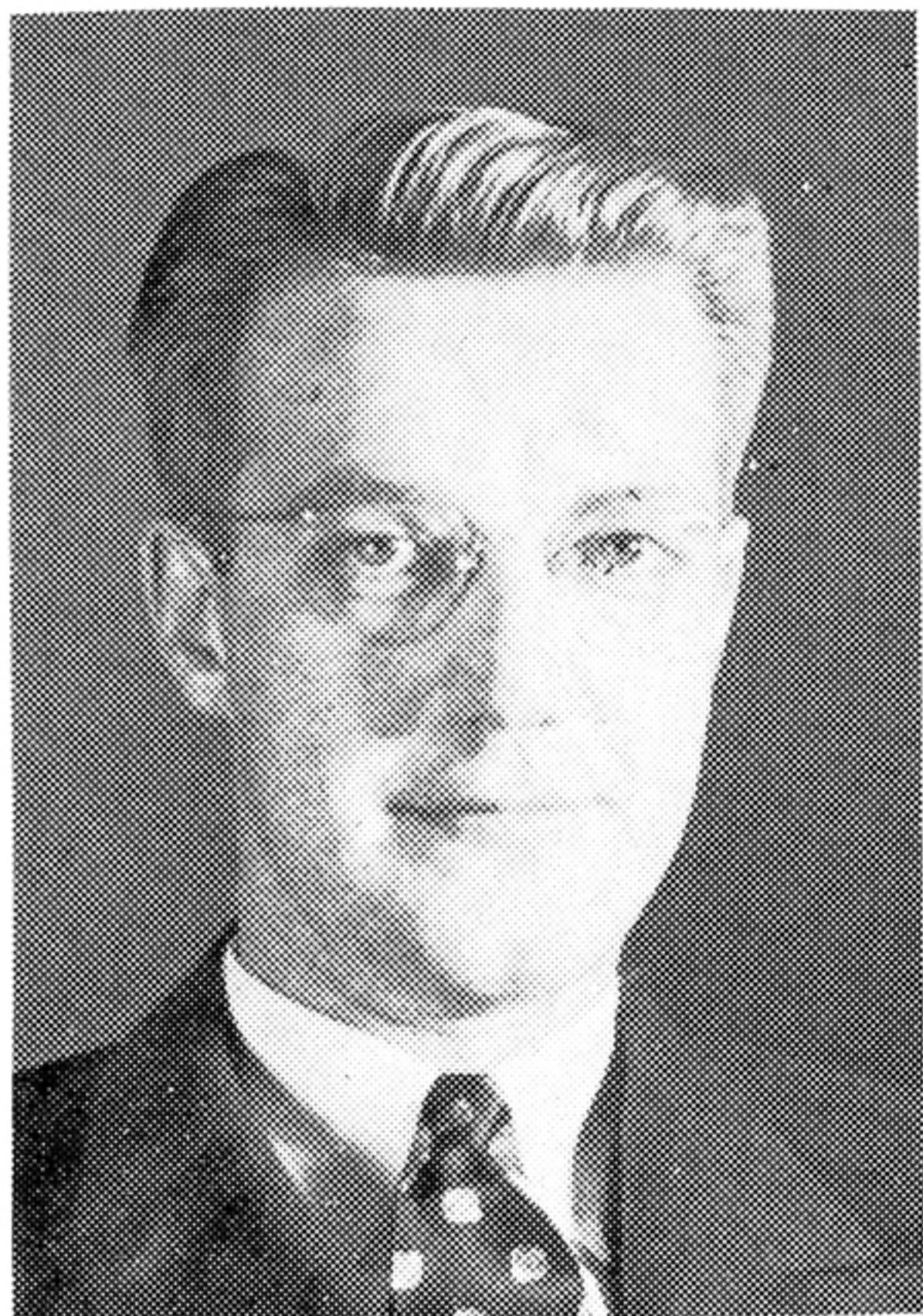
DR. H. K. BENSON, University of Washington Department of
Chemistry and Chemical Engineering

Subject

CHEMICAL UTILIZATION OF COAL

Refreshments and Social Hour After Meeting

DECEMBER SPEAKERS



A. G. ANDERSON, JR.
Biographical Sketch

Arthur G. Anderson, Jr., Assistant Professor of Chemistry at the University of Washington, was born in Sioux City, Iowa, in 1918. After graduation from the public schools in Urbana, Illinois, he attended the University of Illinois (A.B., 1940) and the University of Michigan (M.S., 1942; Ph.D., 1944).

In 1944 and 1945, he was employed as a chemist on the Manhattan Project with the Tennessee Eastman Corp. in Oak Ridge, Tennessee. His next position was that of Post-Doctorate Research Fellow at the University of Illinois. In the fall of 1946 he came to the University of Washington as Instructor in Chemistry and since 1947 has been an Assistant Professor at this University.

His main research interest has been in the synthesis and study of polycyclic hydrocarbons, particularly azulene and related compounds.

He is married and has one child.

★ ★

I expect to pass through this life but once. If, therefore, there is any kindness



W. T. SIMPSON
Biographical Sketch

William T. Simpson, Assistant Professor of Chemistry at the University of Washington, was born in Berkeley, California, in 1920. His university training, at the University of California, culminated in a Ph.D. in 1948.

Between 1943 and 1946 he served in the Army Signal Corps, and came to the University in 1948.

His main research interest is electronic energy levels in molecules.

Dr. Simpson is married and has two children, Elizabeth and Jane.

★ ★

OFFICERS FOR 1951

Officers for 1951, elected at the November meeting, are E. C. Lingafelter, Chairman; C. V. Smith, Chairman-Elect; J. C. Drury, Secretary; N. W. Gregory, Treasurers, and D. C. Lovell, Counselor.

I can show, or any good I can do to any fellow being, let me do it now, let me not defer or neglect it for I shall not pass this way again.—A. B. Hegeman.

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CHAIRMAN'S MESSAGE

As my term of office as chairman of the Puget Sound Section of the American Chemical Society comes to an end, I extend my sincere thanks and appreciation to all members of the Executive Committee, all committee chairmen, all committee men, the editor and staff of the PUGET SOUND CHEMIST and to all members of the Section for their splendid cooperation and assistance in carrying forth the program of the Section thereby making the year most satisfying and enjoyable.

As the year closes, the financial condition of the Section is sound. At the beginning of the year, using previous years' expenditures as a guide, a budget was prepared by the Finance Committee, based upon our anticipated income, so that each officer and committee chairman would know the limit of his expenditures. As all officers and committees have carried on their programs below the budgeted amount, and as the income of the Section is a little larger than anticipated, there will be a fair amount to be added to the reserve.

It also now appears that at the end of the year the PUGET SOUND CHEMIST will be solvent. This is gratifying when we recall that only two years ago it was several hundred dollars in the red.

Even though our section is a non-profit organization, it is good business to have a reasonable reserve to take care of unexpected and unavoidable deficits, thereby avoiding the necessity of special assessments which are troublesome, annoying and definitely undesirable.

It is believed that the Section and the PUGET SOUND CHEMIST should each accumulate and endeavor to keep a reserve of at least \$1,000 so that each may uninterruptedly carry on the planned program even though an unexpected or unavoidable period deficit may occur. However, should such a period deficit occur the following period should be so managed that the reserve is again brought back to the desired amount.

This year our section expenses were reduced somewhat to bring our reserve back up to a point approaching the desired goal.

I extend my congratulations to Dr. Joseph McCarthy and other members of the Finance Committee for their preparation of a practical, sound budget which assisted in bringing our reserve nearer the desired goal.

I also extend my congratulations to our program chairman, Dr. E. C. Lingafelter, and his committee for arranging the outstanding programs we have had at a cost to the Section below the diminished budget allowance. This, rightly, is by far our largest single item of expense.

I further extend my congratulations to the editor of the PUGET SOUND CHEMIST, Dr. C. V. Smith, and his co-workers for the fine work that has been done in producing our publication, of which we are justly proud, and for managing it in such a way that its financial condition has been greatly improved. As we are still a long way from a comfortable and desired reserve, there is still plenty of room for the next publication committee to further improve the situation.

And I extend my congratulations to the secretary, Mr. Jim Drury, and the treasurer, Dr. A. E. Markham, and other members of the Executive Committee, for the efficient manner in which they have fulfilled their offices.

Congratulations are also extended to all other committee chairmen and committee members, outstanding of which were Dr. Fehlandt and his committee, for their arrangements and work on the outstanding Tacoma meeting, and Clifford Higer and other members of the Membership Committee, for the work that they have done in making the year a success.

Again I thank every member of the Puget Sound Section for the opportunity of serving you as your chairman and the pleasure that it has brought.

—Collis C. Bryan, *Chairman.*

★ ★

Argentina is greatly expanding its facilities for plutonium production.

PUGET SOUND CHEMIST

PROPOSED CHANGE IN BY-LAWS

Part VI.

Section 4. A nominating committee consisting of five persons shall be appointed by the chairman and approved by the Executive Committee not later than September 1 of each year. The entire membership of the Section shall be informed as to the names of the members of this committee not later than October 1 in order that the members may express their views and present their suggestions to the nominating committee. At the regular October meeting the nominating committee shall submit one or more nominations for each office. At this meeting additional nominations may be made from the floor. Such nominations from the floor may be made only at the October meeting. In the event that the above procedures result in only one nomination for a given office, the chairman of the meeting shall instruct the secretary to cast a unanimous ballot in favor of said unopposed nominee. In the event that the above procedures of nomination produce more than one nomination per office, a ballot is to be prepared specifying the choices of the nominating committee and also listing nominations from the floor. This ballot shall be distributed to members of the Section and must reach the members at least 5 days before the regularly scheduled November meeting. Ballots shall be returned to the secretary at or before the regular November meeting. The ballots shall be tabulated and the results announced during the November meeting.

(To be voted on at January meeting.)

★ ★

November Speaker's Summary

In one of the most interesting discussions of the year, Dr. H. S. Bennett, head of the U. of W. Department of Anatomy, gave an illustrated talk on "Microspectroscopy," and showed how the composition of minute cells and muscle fibers could be determined by examination of the absorption spectra.

DECEMBER, 1950

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BRINGING DREAMS OUT INTO THE DAYLIGHT

(More truth than poetry for chemists too.—Ed.)

We recently came upon a copy of a talk given sometime ago by Dr. D. B. Steinman, the eminent bridge engineer, and NSPE's first president. The talk, directed at young men who think they want to be engineers, was the "cold facts" sort of thing that laid the profession's good and bad points boldly on the line. One could almost picture the still faces of the eager students as the experienced and realistic doctor dealt their dreams some body blows.

No, the engineering profession offers little pink lemonade to its members. And, as Steinman points out, it is cruel to paint untrue pictures and be "responsible for the heartbreak and the disillusionment of young graduates who are unable to gain a foothold in their chosen profession, and the hopelessness and despair of older men who

find professional employment precarious, underpaid, or unobtainable."

Then, warming to his subject, the noted engineer became specific. He pointed out that unlike other professions, the opportunities for independent private practice in engineering are limited. That only about five percent of all engineers are in private practice, with uncertain income, and the remaining ninety-five percent are employees working for salaries, with uncertain tenure of employment. Further, there are many thousands of competent engineers who wish they could earn as much as bricklayers, plumbers, painters, ironworkers, plasterers, or mechanics.

Turning to the actual work of the engineer, Steinman says that reduced to cold facts, it is found to be quite prosaic, and frequently of repetitive routine. Figures, calculations,, formulas, tabulations, drafting, detailing, tests, contracts, inspections, estimates, reports and more calculations—these make up the bulk of engineering work. Moreover, of all engineering students enrolling in our colleges, only about forty per cent ultimately graduate, representing a mortality of sixty percent within the engineering schools. There is further mortality, or dropping from the profession, during the early years after graduation, so that at any time only about fifty-five percent of the living engineering graduates are found remaining in engineering work. With few exceptions, the doctor sums up, all this represents a tragic waste of economic and human values.

There it is and there's no getting away from it. Most engineers who have weathered the ups and downs of the profession would side with Doctor Steinman. But we wonder, and here we use our imagination again, how many meetings of prospective engineering students the doctor has left, saying to himself, "There. That will separate the men from the boys." Why not get rid of the forty-five percent who will fall by the wayside before the shooting starts?

Our colleges open their doors to a new group of young people. Among

them will be many young men who want to become engineers. Chances are they want to join the profession because at some time during their impressionable years they held in high regard a parent, an uncle, or a family friend, who was an engineer. It should be the duty of that individual to talk to the engineer-to-be in Steinman-like tones. Then, if the student is still determined, the talk might be ended in much the same way as Doctor Steinman ends his: "But, the one priceless reward you can look forward to is the inner satisfaction of useful creative accomplishment and enduring contributions to human comfort and progress."

—The American Engineer, Sept. 1950

★ ★

THANK YOU

The members of the Puget Sound Section are indeed to be congratulated for their whole-hearted support of the urgent request to assist in the completion of the national register of scientific personnel. A large number of names have been sent to our secretary.

Several days ago a similar request was mailed to all firms which it was believed might employ chemists and chemical engineers, commercial and government laboratories, colleges, and junior colleges requesting the same information.

If for some reason the reader failed to see the "Emergency Call" on page 6 of the October issue of the PUGET SOUND CHEMIST, which was a request from the National Government for the complete names and addresses of all chemists and chemical engineers in our territory who are not members of either the American Chemical Society or the American Institute of Chemical Engineers, it is hoped that he will now comply with the request as far as his acquaintances are concerned.

As it is very important that this coverage be as complete as possible, all members and firms who have not responded are requested to do so at once.

—Collis C. Bryan, Chairman.

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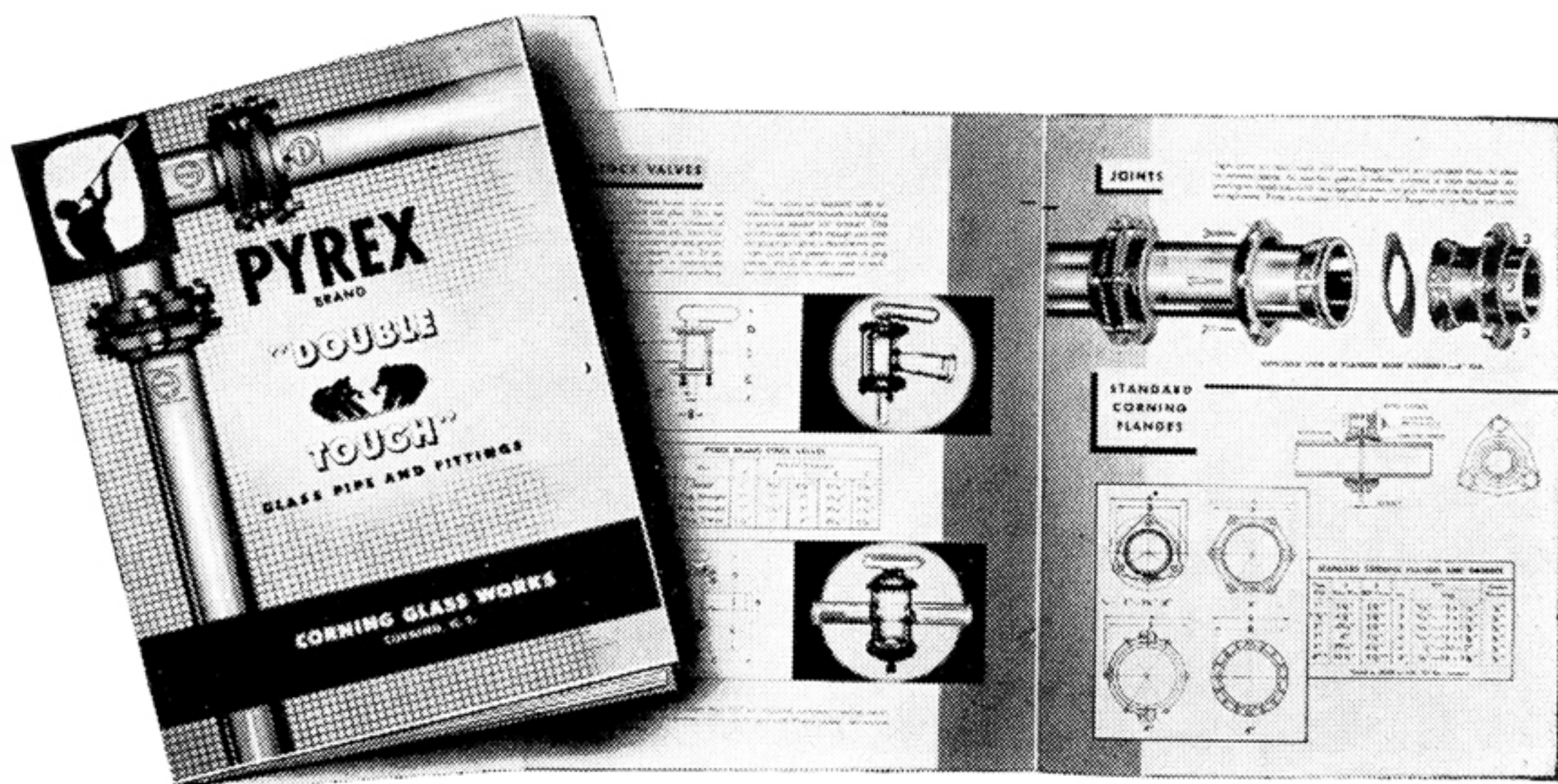
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OREGON NEWS

AEC CONTRACT TO STUDY NON-AQUEOUS SOLUTIONS—A contract between the U. S. Atomic Energy Commission and Oregon State College for "A Study of Generalized Acid-Base Phenomena in Non-Aqueous Ionizing Solvents with Radioactive Tracers" has recently been renewed for the year ending September 19, 1951, with funds amounting to \$9,180 made available to Drs. T. H. Norris and John L. Huston of the Chemistry Department.

Work now in progress will involve completion of the sulfur dioxide studies and in addition will be extended to a study of exchange reactions in other non-aqueous ionizing solvents, such for example as anhydrous acetic acid, acetic anhydride, and selenium oxychloride. Mr. Rolfe Herber is being employed this year as a Research Assistant. Ersel Evans, holding the DuPont Fellowship, will be doing research within the scope of the project.



OSC CHEMISTRY DEPARTMENT GETS NEW INFRARED SPECTROMETER—A double-beam, ratio recorded infrared spectrometer has been constructed employing the principle described by Savitzky and Halford (Rev. Sci. Instruments 21, 203 (1950)).

Infrared absorption studies are in progress on certain hydrazine salts and their deuterium analogues in the crystalline state and upon some large, symmetrical organic molecules, such as the phthalocyanins and porphyrins. The latter program is being supported by a Frederick Gardner Cottrell Grant-in-Aid from the Research Corporation.



It takes courage to keep from talking about others when others around you are talking; to stand up for an absent person who is being abused; to be somebody by holding fast to your ideals when it causes you to be looked upon as queer; to refuse to do a thing that is wrong, though others do it—but that is what makes you BIG.

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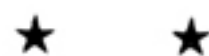
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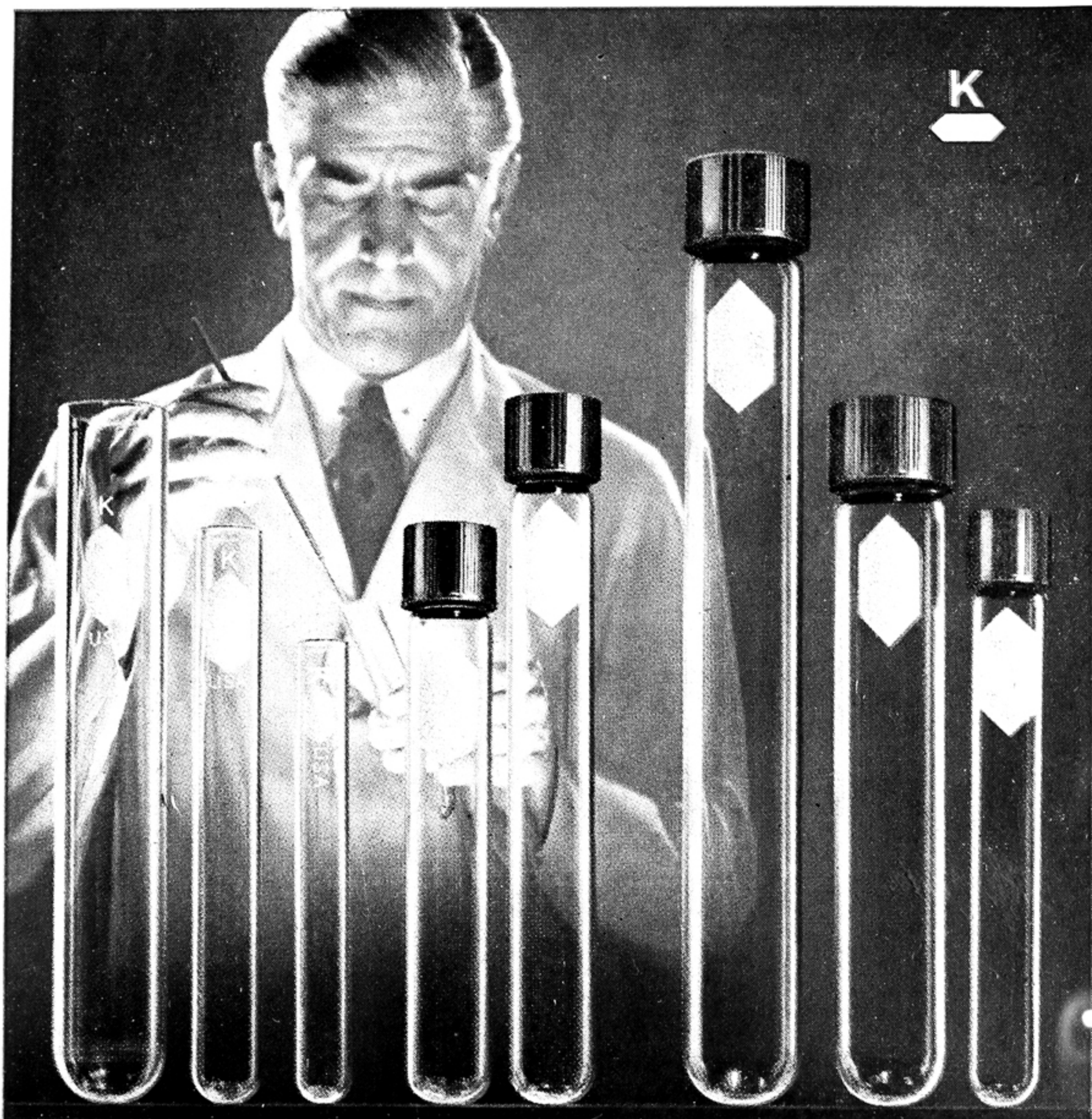
UNIVERSITY OF OREGON MEN HONORED—Professor A. H. Kunz, Chairman of the Department of Chemistry at the University of Oregon, will attend a conference sponsored by the Council on Medical Education of the American Medical Association to study pre-professional medical education. The conference will be held at Buck Hills Falls, Pennsylvania, from November 26 to 29.

Professor W. V. Norris of the Department of Physics at the University of Oregon and an A. C. S. member since 1922, received one of five Achievement Day awards at William Jewell College, Liberty, Missouri. Dr. Norris was chosen for his achievements in science. He graduated from William Jewell in 1918 and received his Sc. D. from the Colorado School of Mines in 1922. In his two public lectures to students and visitors, he did not fail to point out the opportunities for achievement in the Pacific Northwest.



The Argentine Ministry of War produces nitrobenzene and aniline for its own use.

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INDUSTRIAL NEWS

HOOKER ELECTROCHEMICAL TO BUILD AMMONIA PLANT—Another important step in the development of Northwest industries has been concluded in the announcement of Hooker Electrochemical Company's new anhydrous ammonia plant.

It is anticipated that the plant will be in operation the latter part of 1951 or early part of 1952, depending on delivery of equipment.

Hydrogen, heretofore a wasted by-product, will be one of the raw materials. The piping of natural gas into this region should result in expansions of the plant.

This nitrogen-fixation plant further establishes Tacoma as the major chemical and chemical-process center of the Pacific Northwest, which recognition will play an important part in the locating of other basic and "end-product" industries there. Ammonia, along with sulphuric acid and oleum now produced by the Tacoma Smelter, chlorine, caustic and hydrochloric acid, sodium silicate and other products also manufactured in Tacoma are fundamental raw materials of the processing industries and will result in further diversification through a multiplicity of new products.

—Marshall Ramstad.

CONTAMINANTS

Two women talking in a restaurant:
"Why don't you go to him in a perfectly straightforward way and lie about the whole thing?"

★ ★

A teacher, annoyed with his clock-watching students, covered the clock in the schoolroom with a sheet of cardboard. On it he lettered these words:
"Time will pass. Will you?"

★ ★

He: Do you serve women at the bar?
Bartender: Nope, you have to bring your own.

★ ★

A WASH OUT!

"Lucy!" shouted Auntie. "Come here this minute and wash your face!" "I won't wash my face!" said Lucy defiantly. "Naughty, naughty," answered Auntie. "When I was a little girl I always washed my face." "Yes," spoke the child, "and look at it!"

★ ★

He should have lived, poor Willie Bassett; but he used his mouth to siphon acid.

★ ★

Joe once was alive but now he's dead; he sweetened his coffee with sugar of lead.

★ ★

Poor Willie Blake is out of luck; he started the lathe with the key in the chuck.

★ ★

A young midshipman reported to the commanding officer for duty. The CO, a gruff old sailor, sized him up and snorted, "Well, I suppose that, as usual, your family sent the fool to sea."

"Oh, no sir," replied the middie. "They've changed all that since your time, sir."

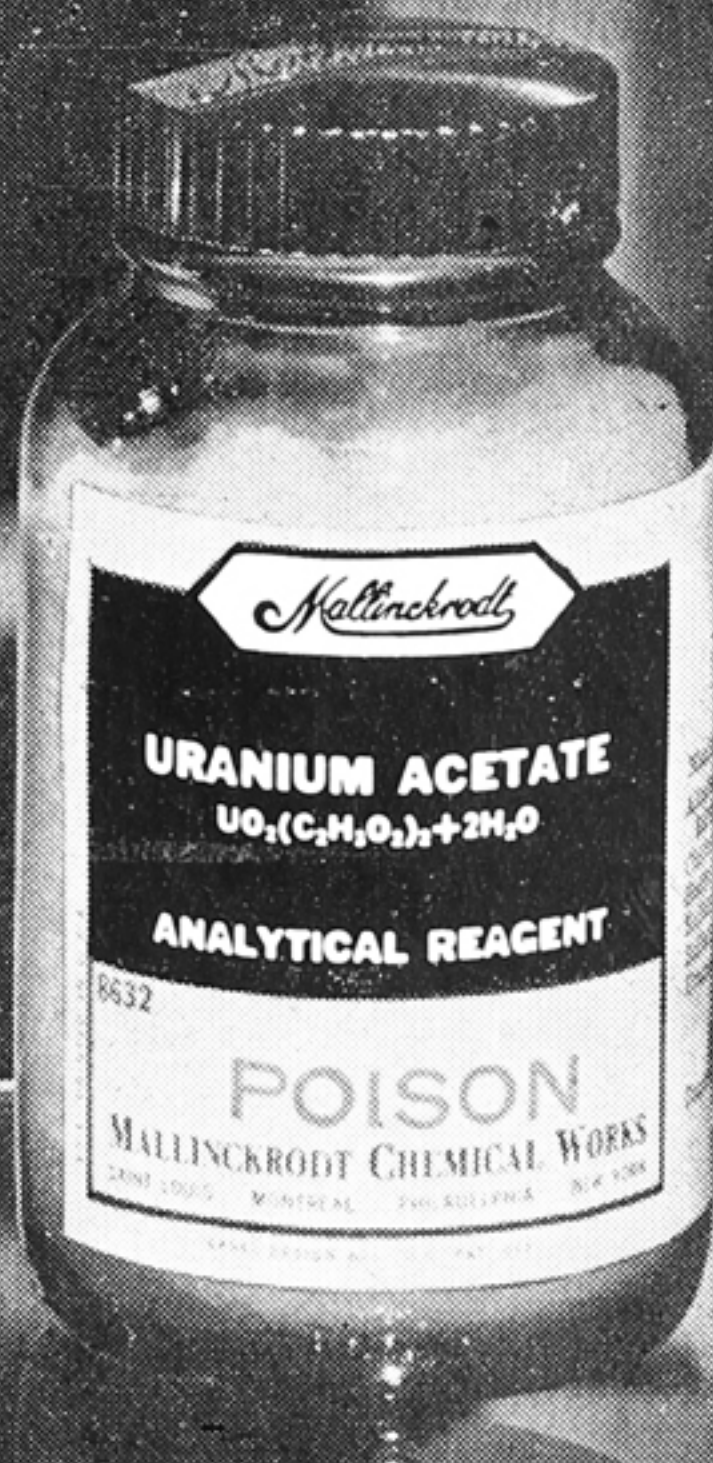
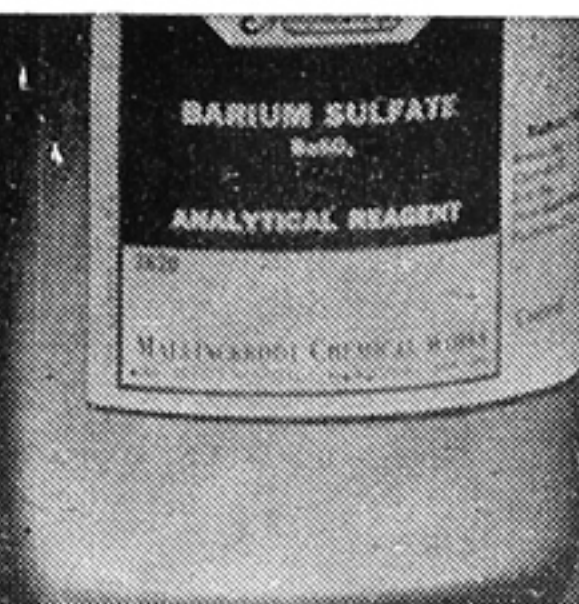
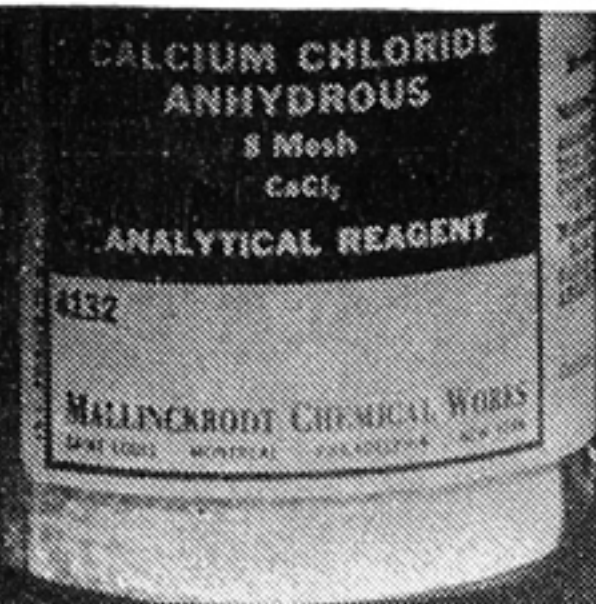
★ ★

Man (to psychiatrist): "My wife has developed an inferiority complex. What can I do to keep her that way."

★ ★

The only money that goes as far today as it did in 1940 is the nickel that rolls under the bed.

PUGET SOUND CHEMIST



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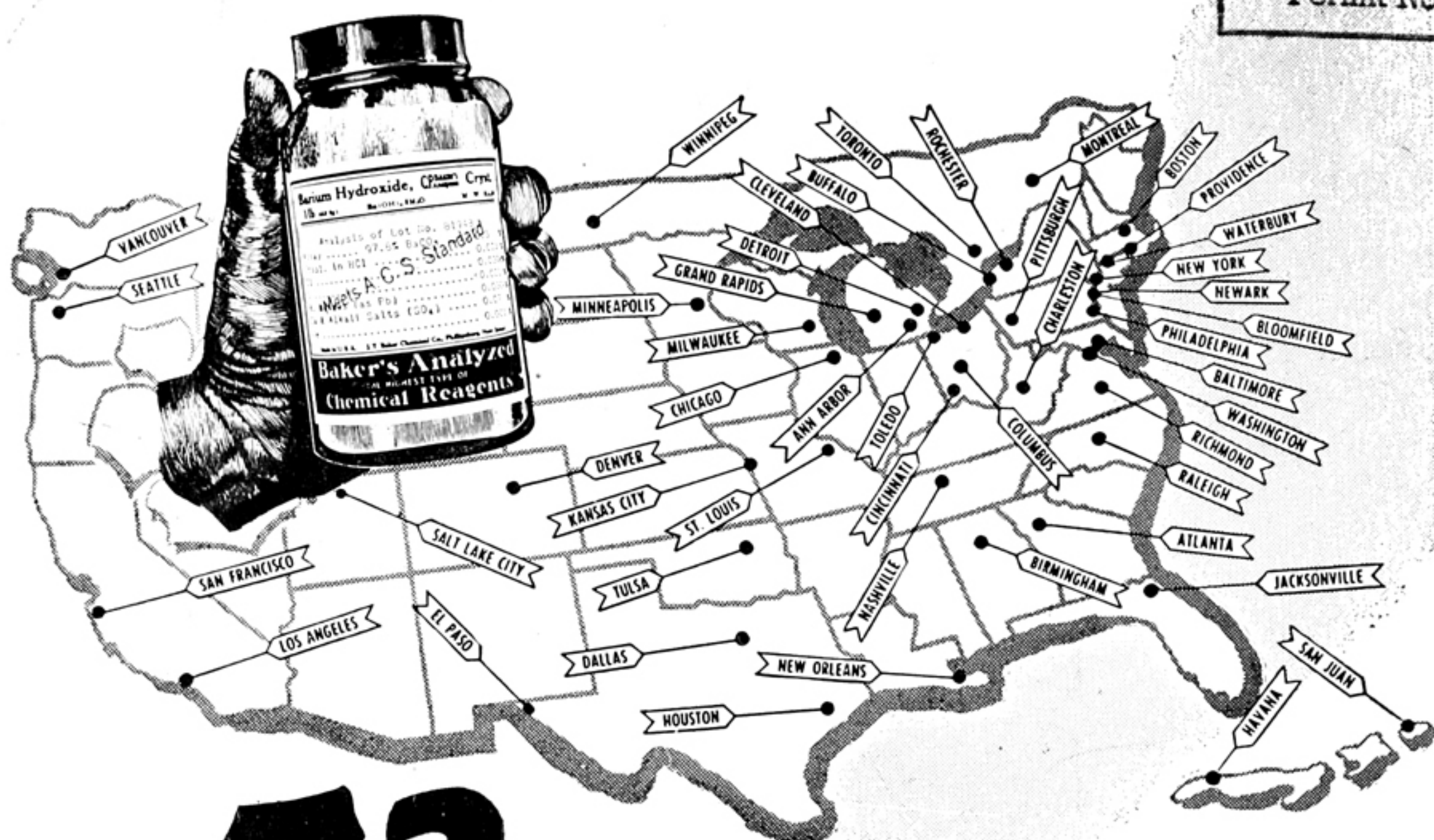


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