The PUGET SOUND CHEMIST

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The PUGET SOUND CHEMIST

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October Meeting

PUGET SOUND SECTION OF THE AMERICAN CHEMICAL SOCIETY

Tuesday, October 19, 1948

7:45 P. M.

UNIVERSITY OF WASHINGTON

BAGLEY HALL

ROOM 140

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SPEAKER

DR. ARTHUR B. ANDERSON

Director of Research, Oregon Lumber Co.

(Formerly with Western Pine Association)

SUBJECT

EXTRACTIVES FROM PONDEROSA PINE

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A Social Period will follow the Meeting and Address

OUR OCTOBER SPEAKER

Dr. Arthur B. Anderson

Dr. Arthur B. Anderson, Director of Research, Oregon Lumber Company (formerly of Western Pine Association Research Laboratory) will speak on "Extractives from Pondersosa Pine." Dr. Anderson took his undegraduate work and Ph.D. from the University of Wisconsin receiving the latter in 1933 with majors in wood and organic chemistry. During his graduate years he held Forest Products Laboratory and Biochemical fellowships.

From 1934 to 1941 he was associated with Quaker Oats Company first as supervisor of the analytical laboratory and commercial productions of furan. Later he was transferred to research where he was concerned with the improved production of furfural from waste oat hulls and vapor phase oxidation of furfural to maleic anhydrides. During this period he also acted as a consultant for the company on furan compounds.

From 1941 until recently when he resigned as acting research director, Dr. Anderson was connected with the Western Pine Association Research Laboratory in Portland. As a researcher his work concerned the chemistry of western pine knots and the finding of a suitable knot sealer to prevent paint blemishes over the knot. He discovered that ponderosa pine stumps are a suitable new source for naval stores products. For seasoning lumber he discovered three new chemical processes. He also developed a new process for extracting stumpwood to make the extract-free stumpwood chips more amenable for subsequent manufacture into fiber products, paper and hydrolysis.

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November Meeting

THURSDAY
November 4th
BAGLEY HALL
7:45 P.M.

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Speaker
DR. LINUS PAULING

A Dinner for Members and Wives at the Hotel Meany will precede the regular meeting

OUR JUNE SPEAKER

Dr: Eugene D. Farley

Dr. Farley received his AB degree from Wisconsin, his native state, in 1931. In 1935 he took his Ph.D. under C. S. Marvel at Illinois and added an LL.B. from Fordham School of Law in 1943. His chemical experience includes both industry and teaching. As an industrial researcher he was associated with Shell Development Corporation, Emeryville, California (1935-1936) and as a teacher with the University of Illinois and Rollins College (1936-1939).

For a number of years, Dr. Farley was in the Legal Department of Standard Oil of New Jersey (1939-1943), later with the Patent Department of Shell Development, San Francisco (1943). Currently he is in the private practice of Patent Law and is located at 517 Dekum Building, Portland. He is a member of state, federal and patent office bars, American Chemical Society, Forest Products, Sigma XI, Phi Lambda Upsilon, and is listed in American Men of Science.

Dr. Farley treated a complex subject "Chemical Patents" under a simple outline of what a patent is; why obtain a patent; how to obtain a patent and methods of exploiting patents commercially. The problem of handling chemical patents has developed into a specialty due to the rapid increase of such cases loaded onto an already overworked and staggering patent office.

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Cost of Distilling Ocean Water

When California turns to the ocean for its future water supply (many people already have discarded the "if" and are using instead the word "when"), the cost may run from 12c a ton down to 5c, the latter figure being less than the cost now charged by the U. S. Bureau of Reclamation to bulk users of domestic and industrial water.

Rough estimates for a very large plant with five stages of condensing on a 24- hour a day operation for 300 days a year indicate a cost of water produced at the plant of about 12c, according to R. G. Folsom, professor of mechanical engineering, University of California. Some authors have estimated the cost at 5c, and Professor Folsom puts the minimum bulk price at 3c a ton.

The major problem in operation of a compression distillation unit is the scaling occurring in the evaporator and heat exchanger caused by concentration of mineral salt in the brine. An intensive study of the problem is being undertaken by Professor W. F. Langelier of the University of California engineering department at Berkeley.

EDITOR'S RETORT

Let us be thankful for and thoughtful with our "liquid gold" of the Northwest. . . . Hand in hand with the shameful way in which we have diminished our available water by pollution, is the equally shameful waste of natural water by ignorant and reckless use of our watersheds. Following are excerpts from the August "American Forests" on the subject which says it better.

Over a large part of southern California the expected rains did not come last winter. Day after day the farmers looked disappointedly at the cool blue sky for a sign of dark clouds. In the cities the people went about their business, secretly rejoicing that fair weather was so continuous and there was no need to carry umbrellas or wear raincoats. They discovered they needed rain only when the electric clocks all ran slow. They needed rain because a ban had been placed on all but essential uses of water. People could still use it in prudent volume for drinking and washing up, but not for running showers or baths. In some localities they were forbidden to water their lawns or shrubs, or sprinkle their flower beds.

Like the struggle of desert tribes for the rare oasis, competition for water "holes" is leading to bitter disputes. Los Angeles, desperately coping with the water needs of a war and postwar-swollen population, is tapping the lower Colorado River 250 miles away, and not only is barring towns on its periphery from access to its mains, but is engaged in a dispute with upriver states for additional rights to water of the Colorado. New York is casting envious eyes upon the Connecticut River, which Boston also claims as its own, and has already been in the courts with Philadelphia over her rights on the Delaware River watershed. Not only is the available supply running short in many sections of the country, but the quality of water reaching municipal reservoirs is deteriorating owing to the mud washing down from eroding lands and to the sewage and industrial wastes dumped into the streams.

Industry is also looking to its water supply. Many industrial processes take a lot of water—65,000 gallons to cool a ton of molten steel, 3600 gallons to make a ton of coke, 180 gallons a barrel of crude oil. Industrial sites with an adequate supply of water are fast becoming rare "commoditiies," according to U. S. Geological Survey. Because of declining streamflow or lowering water tables—that under the city of Louisville, Kentucky, for example, has dropped forty feet in the past ten years—many industries are treasuring their water.

We have already alluded to the difficulties of Los Angeles. This city has arrived at a peak of demand for water which prewar estimates indicated would not be reached till about the year 2000. If population growth continues and no other supplies become economically feasible, allocations to industry and agriculture will probably become mandatory. The Los Angeles area will then have to decide between orange groves and airplane factories.

Turning to the East, the south Atlantic drainages suffer from erosion that has occurred on millions of acres of steep agricultural land—much of it worn out and abandoned. In addition to increased silting, the incapacity of the bare soils to store water has changed the character of the streams — the flow has become much more irregular than it was under pristine conditions, and flood stages are higher and come more frequently. Roughly the same conditions exist on the drainages of the Piedmont and Atlantic and Gulf Coastal plain.

Fairfield Osborn in his recent book "Our Plundered Planet" may well have added water as another reason why America won't feed the world for long.

Proposed New By-Laws For Puget Sound Section

The revision of the Constitution and By-laws of the American Chemical Society has made it necessary that the by-laws of the local sections also be changed to conform. A committee consisting of the councilors of the Puget Sound Section has studied the situation and now presents the following proposed draft of by-laws for the consideration of the membership. We urge that all members study this draft and then *give their comments or suggestions to any of the councilors.* A final draft will then be prepared for presentation to the membership at the regular November meeting. At that time the revised by-laws will be voted upon in order that its provisions may be put into effect for the year of 1949.

HERBERT R. ERICKSON
Councilor and Chairman of Constiution Revision Committee

I. Name. — The name of this organization shall be the PUGET SOUND SECTION, hereinafter referred to as "the Section," of the AMERICAN CHEMICAL SOCIETY, hereinafter referred to as "the Society."

II. Objects.—The object of the Section is the encouragement and advancement of chemistry in all its branches, the increase and diffusion of chemical knowledge, the promotion of scientific interests and inquiry, and the stimulation of the professional interest and promotion of the well being of its members. A further object is a close cooperation with other nearby local sections for the sponsoring of regional activities.

III. Territory and Headquarters. Section 1. The territory of the Section shall be that assigned to it by the Society and now comprises the territory north of the Columbia River to the 51st parallel and west of the 120th meridian, except the counties of Clarke, Cowlitz, and Skamania in Washington. The headquarters of the Section shall be at Seattle, Washington.

IV. Membership. Sec. 1. The membership of the Section shall be composed of those members of the Society residing within the territory of the Section, provided that exceptions to this rule shall be made in conformity with the Constitution and By-Laws of the Society.

Sec. 2. Any person not a member of the Society may become a local section associate after having been nominated in writing by the Membership Committee and having said nomination approved by the Executive Committee of the Section.

Sec. 3. Members and associates shall have such rights and privileges as are accorded them by the Constitution and By-Laws of the Society.

All members, senior and junior grade, may vote. A member, junior grade, is entitled to all privileges of membership, except that of holding office. A local section associate is not entitled to vote or hold office but is entitled to all other privileges of membership in the Section.

V. Organization. Sec. 1. The officers of the Section shall be a Chairman, Chairman-Elect, Secretary, and Treasurer.

Sec. 2. The Section shall have councilors and alternate councilors as provided in the Constitution and By-Laws of the Society.

Sec. 3. The Executive Committee shall consist of the officers of the Section, the immediate Past Chairman, and the councilors.

Sec. 4. All officers, councilors, alternate councilors, and other persons elected by the members, shall be chosen from the members, senior grade.

VI. Manner of Election and Terms of Office. Sec. 1. Elected officers of the Section shall serve for a term of one year beginning on January 1 or until their successors are elected. The Chairman-Elect shall succeed to the office of Chairman upon completion of his term of office.

Sec. 2. Councilors and alternate councilors shall be elected for a term of three years beginning on January 1.

Sec. 3. In the event of a vacancy in the office of Chairman, the Chairman-Elect shall assume the added duties of the Chairman for the unexpired term. All other vacancies shall be filled by the Executive Committee by interim appointment for the period up to the next annual election, at which time the Section shall choose a member to fill out the unexpired term, if any. In the event the office of Chairman-Elect is filled by such interim appointment, the Section shall elect both a Chairman and Chairman-Elect at its next annual election.

Sec. 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 the current year. The entire membership of the Section is to be informed as to the names of this committee not later than October 1 in order that the membership may express their views and suggestions to the nominating committee. At the regular October meeting the nominating committee will submit nominations. At this meeting additional nominations may be made from the floor. A ballot specifying the choices of the nominating committee and also listing nominations from the floor shall be distributed to members of the Section, such ballots to reach the members at least 7 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.

VII Duties of Officers and Executive Committee. Sec. 1. The duties of the officers shall be those customarily performed by such officers, together with those responsibilities prescribed by the Constitution and By-Laws of the Society and by these by-laws and such other duties as may be assigned from time to time by the Executive Committee.

Sec. 2. The Chairman of the Section shall serve as Chairman of the Executive Committee and shall appoint all committees authorized in these by-laws or by the Executive Committee.

Sec. 3. The Executive Committee shall be the governing body of the Section and, as

such, shall have full power to conduct, manage, and direct the business and affairs of the Section in accordance with the Constitution and By-Laws of the Society and these by-laws.

VIII. Committees. There shall be the following standing committees:

Program
Membership
Public Relations
Finance
Social
Professional Practice and Legislation
Employment
Regional Activities
Library
Representatives to the Puget Sound Engineer Council
Editor of Section Publications

IX Meetings. Sec. 1. The Section shall hold not less than eight regular meetings each year, preferably monthly on the third Tuesday of the month, at places designated by the Executive Committee.

Sec. 2. The Section may hold special meetings at the call of the Executive Committee or by the call of the secretary at the written request of twenty-five members of the Section. The notices of special meetings shall state the exact nature of the business to be transacted and no other business shall transpire at such meetings.

Sec. 3. Due notice of all meetings shall be sent to each member of the Section. A quorum for all meetings of the Section shall consist of twenty per cent of the members of the Section. In the absence of a quorum all meetings shall adjourn to a date.

Sec. 4. At the regular meeting of the Section the rules of order, not specifically provided in these by-laws, shall be Robert's "Rules of Order."

Sec. 5. The Executive Committee shall meet upon due notice to its members at the call of the Chairman or at the request of a majority of the members of the Committee. In the absence of a quorum, which shall be a majority of the members of the Executive Committee, called meetings of the Executive Committee shall adjourn to a date.

X. Dues. Sec. 1. All members of the Section, except honorary and emeritus members of the Society, may be assessed such annual local section dues as may be set by the Executive Committee.

Sec. 2. A Local Section Associate shall retain his associate status only so long as payment is made of Local Section dues of two dollars ($2.00) per annum, except that a regularly matriculated student specializing in chemistry or chemical engineering may be accepted as a Local Section Associate on payment of one dollar ($1.00) per annum.

XI. Amendments. Sec. 1. A proposed amendment to these by-laws must first be submitted in writing to the Executive Committee. If it is approved by a majority of the Executive Committee, the Secretary shall furnish all members of the Section with copies of the proposed amendment at the time when notice of the next meeting of the Section is given.

Sec. 2. At the second meeting of the Section after notice of the proposed amendment is given, the amendment may be adopted by three-fourths of the votes of the members present providing a quorum is present.

XII. Dissolution of Section. Upon the dissolution of the Section and the discharge of its debts and the settlement of its affairs, any funds and property of the Section remaining thereafter shall be used for the advancement of chemistry in the area covered by the Section. In the event this procedure is not practical, or there still remain unexpended funds, such funds shall be conveyed to the Society for the general purposes of the Society.

P.S.C. vs. C.& E.N.

In the October 4 issue of C. & E.N. the following appeared under "News-Scripts" entitled "Abashed":

"Our congratulations to L. D. Berger, Jr., managing editor of the Puget Sound Chemist on the excellency of the special issue published for the Western Session of the 114th National Meeting, but we are more than slightly curious about the following note which appeared under the caption "Detailed Program": (Note: This program is reproduced from C. & E. News, Aug. 2, 1948 and may therefore contain inaccuracies. It is included with the thought that those attending may desire it for later reference.—Ed.)

"We didn't suspect our reputation for accuracy was so low in the Northwest. We're also curious as to whether those who preserve the special issue will be motivated by the thought that they wish to have documentary evidence of the inaccuracies of C. & E.N."

Shuddering before this editorial blast from Walter Murphy's pen, your editor haltingly composed the following apologia:

•MR. WALTER J. MURPHY, *Editor*
Chemical and Engineering News
Dear Mr. Murphy,

Our sincerest thanks for your kind comment on our efforts in connection with the special issue for the recent Portland Meeting.

Regarding the matter of that "Note," our editorial head is bowed. We hasten to explain the circumstances surrounding the occasion.

During the preparation of the special issue, our Polyphase Alternative Meaning Claculator was subjected to frequent overload, usually between the hours of midnight and 4:00 a.m. About four days before deadline, while we were operating at unusually high temperature and

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NEWS

Rayonier, Inc., Appoints New Assistant Director of Research

Dr. Edwin L. Lovell, research associate at the Central Chemical Laboratory since 1941, has been appointed Asst. Director of Research. Dr. Lovell received his B.A. and M.A. degress in chemistry from the University of British Columbia and his doctorate from McGill University working under the late Dr. Hibbert. Until his recent appointment Dr. Lovell has been engaged in fundamental research in cellulose chemistry.

Art Walton Made Director of Research for Simpson

Simpson Industries recently announced the appointment of Art Walton as Director of Research. Mr. Walton graduated from the University of Washington in chemical engineering in 1940 and was with Rayonier, Inc. before joining the Simpson organization in 1943 as engineer at the Olympic Plywood Mill. In 1945 he was transferred to the research laboratory and early this year became manager of the fibreboard plant, a position which he held until his present promotion to research director.

Dr. Van Rysselberghe Attends Faraday Society Meeting

Professor Pierre Van Rysselberghe of the Department of Chemistry, University of Oregon at Eugene, who also is director of the research on corrosion phenomena carried out under the sponsorship of the Office of Naval Research, is leaving on July 17th for Europe. He will have the title while travelling abroad of Naval Technician and is to be flown to New York and thence to Europe by the U. S. Military Air Transportation Service.

In England he plans to have discussions with Dr. U. R. Evans, the noted British authority on the chemistry of corrosion and with other scientists. He will attend the annual Faraday Society Discussion on th ephysical chemistry of high temperature process metallurgy and will read a paper on some characteristic results of the polarographic study of corrosion phenomena before the Congress of Industrial Chemistry to be held in Brussels in September. In Germany Dr. Van Rysselberghe plans to hold discussions with the eminent German scientist, Dr. G. Masing of the University of Gottingen, on the chemistry of corrosion and reactions on metal surfaces.

On his way to Europe the Doctor plans also to stop in New London, New Hampshire where he has been invited to read a paper before the Gordon Research Conference of the A.A.A.S. on the application of the polarograph to corrosion studies. He will return to Eugene about October 1st to resume his research and teaching at the University of Oregon.

JOHN M. MCGEE.

Seattle University News

Father Clair Marshall, instructor in chemistry since 1933, has obtained a year's leave of absence for study at Fordham University.

Dr. David Read joins the staff the fall quarter as Assistant Professor of Chemistry. Dr. Reed received his B.S. degree from Seattle University in 1942. After two year's graduate work at the University of Illinois he served as Ensign in a Navy Bomb Disposal Unit until 1946. Since that time he has been doing research in antimalarials at the University of Notre Dame, from which university he has recently received a Ph.D. degree. His main interest is in the field of organic chemistry.

Idaho University Research Projects

Three new special research projects in the engineering experiment station at the University are:

(1) Exploring the possibility of chemical processing of Idaho industrial wastes to develop marketable products, beginning with a study of the wastes of starch manufacture from cull potatoes. C. O. Reiser of the chemical engineering department will direct the project.

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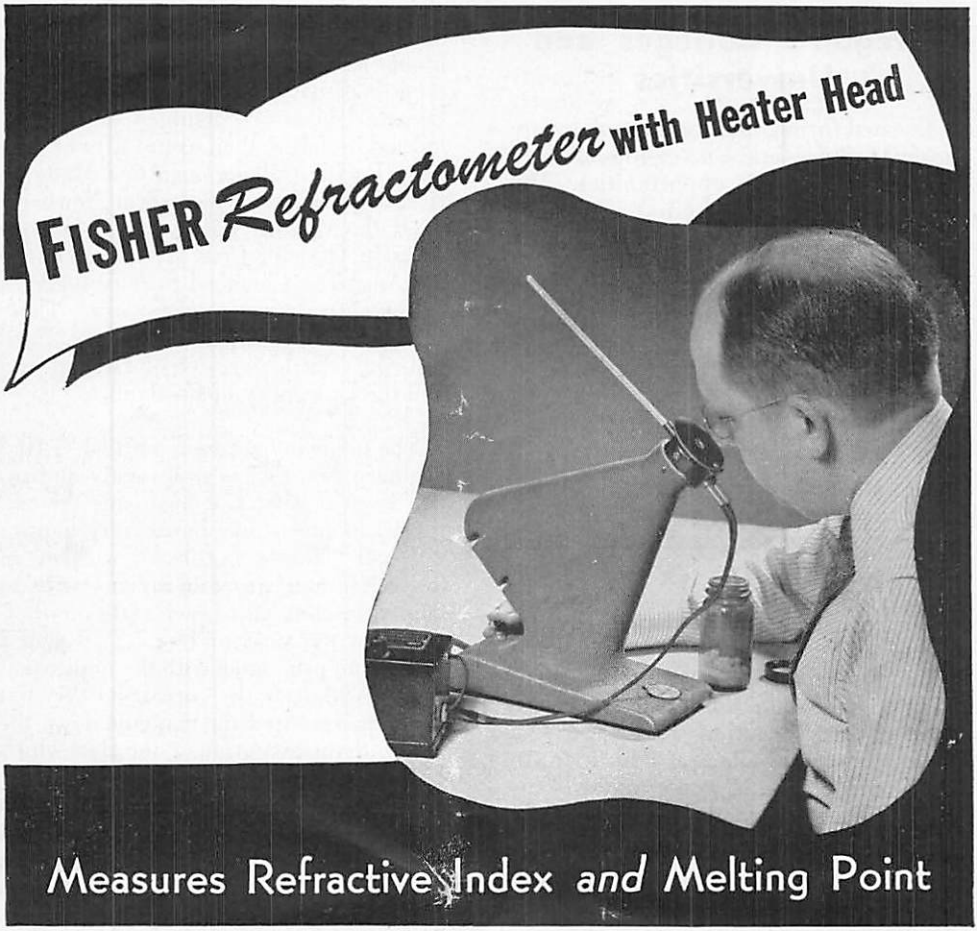

The Fisher Refractometer with Heater Head is a new multi-purpose instrument which enables simultaneous observation of melting points and measurement of refractive index.

The Refractometer is self-contained, portable and can be used with as little as 0.001 ml. liquid sample or only a few crystals of a solid.

The refractive index is read directly on the Refractometer's illuminated, transparent scale. Gradual approach to melting point in the Heater Head is controlled by the transformer designed for 110 volt, 60 cycle A.C. only. The thermometer provided has a range of 20 to 300° C.

55698 Fisher Refractometer with Heater Head.....$110.00

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Oregon's Colleges and Universities

Located throughout the State there are several Colleges and Universities offering varied educational opportunities. The University of Oregon and Oregon State College are the largest State supported institutions of higher learning in Oregon. The University of Oregon has served the people of Oregon and the Northwest since 1876. The Liberal Arts College and eight Professional Schools of the University are located at Eugene. The Medical School and also the College of Dentistry are located in Portland. Oregon State College was established at Corvallis in 1868 and its departments of Agriculture, Engineering, and Home Economics were the first in the Pacific Northwest. Today the College includes the School of Science, the Graduate School, and seven Professional Schools.

Included in the Oregon State System of Higher Education are Eastern Oregon College of Education located at La Grande, Oregon College of Education situated at Monmouth, and Southern Oregon College of Education located at Ashland. These Colleges specialize in training Elementary and Junior High School teachers and also offer Junior College work.

In addition to the State Schools of Oregon there are several private and Church affiliated Colleges and Universities. The largest of these is the University of Portland. Besides the University of Portland, four other Colleges are located in the City. Reed College was established in Portland in 1911. Lewis and Clark College, formerly called Albany College, at Albany, Oregon was later transferred to Portland. Also situated in Portland are Cascade College and Multnomah College, the latter having Junior College status.

A few miles south of Portland there is situated Marylhurst College, the first Standard Catholic Women's College in the Northwest. At McMinnville, thirty-eight miles southwest of Portland is located Linfield College. Pacific University, the oldest chartered institution of higher learning west of the Rocky Mountains is situated at Forest Grove. Willamette University, founded in 1842, is located in Salem, the Capitol City of Oregon. Pacific College, an Alma Mater of Herbert Hoover, is located at Newberg.

Of the various Colleges and Universities in Oregon, four are approved by the American Chemical Society for Professional training in chemistry. These schools are Oregon State College, Reed College, The University of Oregon and and the University of Portland.

* * *

The following account, entitled "I Had Eighteen Bottles," is supposedly authentic. Even if it isn't, it has made the editors of eighteen joke books very happy:

I had eighteen bottles of whiskey in my cellar and was told by my wife to empty the contents of each and every bottle down the sink, or else. . . . I said I would and proceeded with the unpleasant task. I withdrew the cork from the first bottle and poured the contents down the sink with the exception of one glass which I drank. I extracted the cork from the second bottle and did likewise with it with the exception of one glass, which I drank. I then withdrew the cork from the third bottle and poured the whiskey down the sink which I drank. I pulled the cork from the fourth bottle down the sink and poured the bottle down the glass, which I drank. I pulled the bottle from the cork of the next and drank one sink out of it, and threw the rest down the glass. I pulled the sink out of the next glass and poured the cork down the bottle. Then I corked the sink with the glass, bottled the drink and drank the pour. When I had everything emptied, I steadied the house with one hand, counted the glasses, corks, bottles, and sinks wtih the other which were 29, and as the house came by, I counted them again, and finally had all the houses in one bottle, which I drank. I'm not under the afluence of incohol, as some tinkle peep I am. I'm not half as thunk as you might drink. I fool so feelish I don't know who is me, and the drunker I stand here the longer I get. Oh me! !

Additions to the Seattle Public Library

July 1, 1947 — June 30, 1948

GENERAL

Bennett: Concise chemical and technical dictionary. 1947.
Hildebrand: Principles of chemistry. 5th ed., 1947.
Jacobsen: Encyclopedia of chemical reactions. V. 2, 1948.
Strong: Chemistry for the executive. 1946.
U. S. office of international trade: World chemical developments, 1940-1946. 1947
Whittaker: Rudiments of chemistry. 1947

ANALYSIS

Association of vitamin chemistss Methods of vitamin assay. 1947
Cheronis and Entrikin: Semimicro qualitative organic analysis. 1947
Kolthoff: Volumetric analysis. V. 2, 1947
Lucas: Forensic chemistry and scientific criminal investigation. 4th ed. 1945
Feigl: Qualitative analysis by spot tests. 3d ed. 1946
Reilly and Blake: Physico-chemical methods. 4th ed. 1943
Rieman and others: Quantitative analysis. 2d ed. 1942
Welcher: Organic analytical reagents. 3v., 1947

INDUSTRIAL

Bennett: Practical emulsions. 2d ed. 1947
Blue book catalog for the soap, insecticide, disinfectant and allied industries. 1947
Bogue: Chemistry of Portland cement. 1947
Clarke: Manual for process engineering calculations. 1947
Delmonte: Technology of adhesives. 1947
Doree: Methods of cellulose chemistry. 2d ed. 1947
Grant: Wood pulp and allied products. 2d ed. 1947
Haynes: American chemical industry. v. 4 1948
India rubber world: Compounding ingredients for rubber. 2d ed. 1947
Jacobs: Synthetic food adjuncts. 1947
Kirk and Othmer: Encyclopedia of chemical technology. v. 1, A to Anthrimides. 1947
Kirkbridge: Chemical engineering fundamentals. 1947
National research council, Canada: Abstracts on utilization of sawdust. 1945
National research council, Canada: Manufacture of dextrose from cornstarch. 1943
Sauchelli: Manual on fertilizer manufacture. 1946
Stage and Schultze, eds.: Fundamental work on theory, aparatus, as well as procedures of distillation. 1947
Witt: Portland cement technology. 1947

INORGANIC

Northey: Sufanamides and allied compounds. 1948
Yost and others: The rare-earth elements and their compounds. 1947

ORGANIC

Conant and Blatt: Chemistry of organic compounds. 3d ed. 1947
Elsevier's encyclopedia of organic chemistry. Series III: Carbocyclic condensed compounds. Vol. 12A: Bicycle compounds (except naphthalene); v. 13: Tricyclic compounds v. 14: Tetracyclic and higher-cyclic compounds. 1940-1946
Groggins: Unit processes of organic synthesis. 3d ed. 1947
Handbook, butane-propane gases. 3d ed. 1947
Johnson: Chemistry of the acetylenic compounds. v. 1. 1946
Organic syntheses. v. 26, 27. 1947
Richter: Organic chemistry. v. 4: Heterocyclic compounds. Free radicals. 1947
Schmidt and Rule: Textbook for organic chemistry. 5th ed. 1947
Shell chemical corporation: Methylisobutyl ketone. 1948
Sumner and Somers: Chemistry and methods of enzymes. 2d ed. 1947

PHYSICAL CHEMISTRY

Burk and Grummitt: Chemical architecture.
Getman: Outlines of physical chemistry. 7th ed. 1943
Hartman: Colloid chemistry. 2d ed. 1947
Hawley: small wonder. 1947
Longsworth and others: Diffusion of electrolytes
Millard: Physical chemistry for colleges. 6th ed. 1946
Stewart: Recent advances in physical and inorganic chemistry. 7th ed. 1946
Wells: Structural inorganic chemistry. 1945

PLASTICS

Alfrey: Mechanical behavior of high polymers. 1948
Carswell: Phenoplasts. 1947
Debell and others: German plastic practice. 1946
Resins, rubbers, plastics: The science of plastics. v. 1. 1948
Wakeman: Chemistry of commercial plastics. 1947

PAINT AND ORGANIC FINISHES

American society for testing materials: Symposium on paint and paint materials. 1947
Heaton: Outlines of paint technology. 3d ed. 1947
Krumbhaar: Coating and ink resins. 1947
Mattiello: Protective organic coatings as engineering materials. 1946
Pratt: Chemistry and physics of organic pigments. 1947
Remington: Drying oils, thinners and varnishes. 1946
Stewart and others: National paint dictionary. 3d ed. 1948
Wampler: Modern organic finishes. 1946

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OILS, FATS AND WAXES

Knaggs: Adventures in man's first plastic. 1947

Lundberg: A survey of present knowledge, researches and practices in the U. S. concerning the stabilization of fats. 1947

Weil: Literature search on the solvent extraction of oleaginous materials. 1948

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OUR COVER PAGE

MAJESTIC MOUNT HOOD TOWERS OVER BONNEVILLE DAM

Reproduced from the Special Issue prepared for the Portland Meeting

Nominating Committee Appointed

Chairman J. L. McCarthy has announced the appointment of the following nominating committee:

John Stephan, Chairman
Monsanto Chemical Co.
H. R. Erickson
The Tower Co. Inc.
Dr. Geo. H. Cady
University of Washington
Dr. E. L. Lovell
Rayonier, Inc., Shelton
Dr. R. D. Sprenger
CPS, Tacoma

This committee will bring in its report and recommendations for the 1949 ballot at the next meeting, November 4. All members who have suggestions or recommendations relative to the ballot for the next election are urged to communicate with one of the members of the Nominating Committee before Nov. 1.

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P.S.C. vs. C.&E.N.

CONTINUED FROM PAGE 9

pressure, failure occurred in the superdyne transverse macromix drive system which powers the entire double entendre bank of the rectifying selectivity channel. Damage to the device was extensive, requiring complete replacement of the adverb gears and a whole new set of condensers for the variable syntax circuit. Naturally, replacement parts were not available locally so we were forced to put the mazagine to bed as best we could, checking each page laboriously with a hand-held semanticometer of rather low sensitivity. Eventually even this crude instrument burned out when exposed to the titles in the Division of Biological Chemistry. An abortive attempt, just before press time, to cross check a few pages be recycling through the almost undamaged subjunctive columnator of the thesaurus phase regulator was a total failure.

Unhappily, then, as a result of this grave situation in our proof checking machinery, our little note which only meant to say that we wouldn't be able to incorporate the inevitable additions and corrections to the program printed in the August 2 C. & E.N. seems to have said quite something else. Or at least we are afraid maybe it did. We won't be sure until the double entrendre circuit is restored to operation and we can give that page a high fidelity recheck with the P.A. M.C. set at full amplitude.

NEWS

(Continued from Page 10)

(2) Chemical separation and purification of the rare earth metals, from Idaho monazite sands using ion-exchange methods. L. A. Jobe of the chemical engineering department will be project leader.

(3) Methods of evaluating seepage losses in irrigation canals.

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Rayonier Central Chemical Laboratory to Move to New York

Rayonier's Central Chemical Laboratory at Shelton, Washington will be moved to Pleasantville, New York in about twelve months, according to Edward Bartsch, president of the corporation. Construction will be started shortly on the new building at Pleasantville and will include the executive and sales offices of the company as well as the new laboratory.

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Molasses is being produced by the Forest Products Laboratory on a pilot plant scale from wood waste. A dilute sugar solution is first made by pressure hydrolysis of the wood chips using dilute suphuric acid at high temperature. The solution is then neutralized and concentrated by evaporation. The molasses has a slightly bitter taste, but is suitable for stock feed and for industrial purposes. There are two by-products: From 10 to 20 lbs. of methanol per ton of wood is produced, passing off as vapor. Also, from 10 to 30 lbs. of furfural is obtained per ton of wood.

L. A. DANSE, *Supervisor*
Materials and Processes
Production Engineering Section

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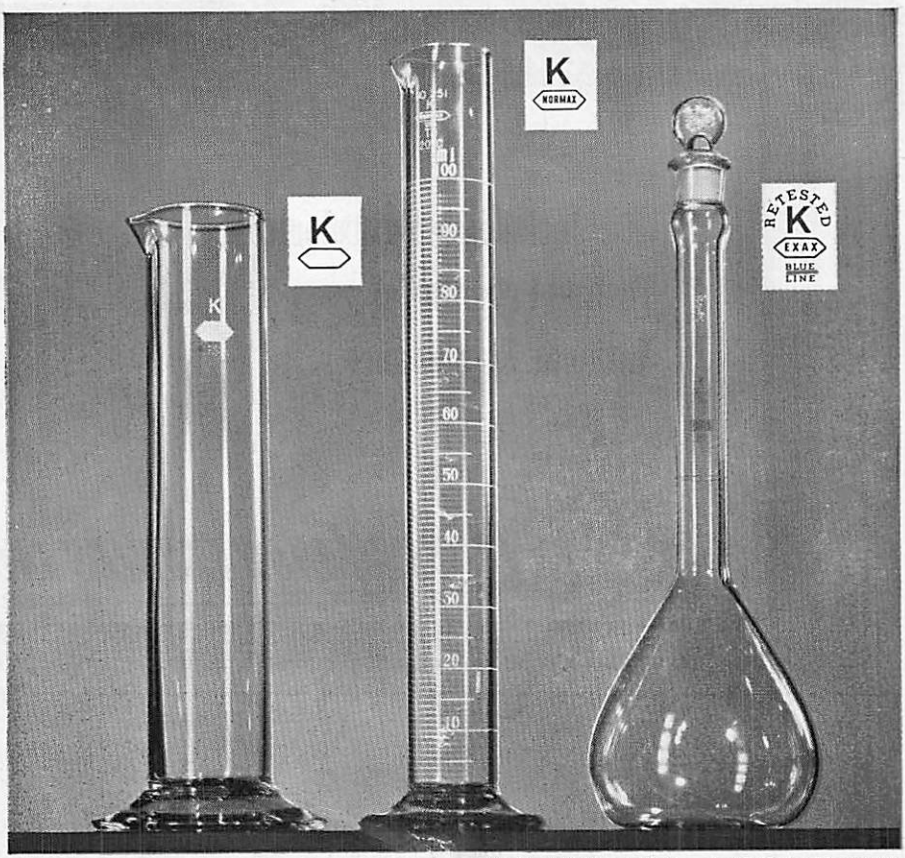
The defeated candidate has it all over the victor. He won't have to keep all his campaign pledges.



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