

The Puget Sound Chemist

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PUG. SD. SECT. OF AMER. CHEM. SOCIETY

JANUARY MEETING

Getting in under the bars, as it were, an interesting meeting is scheduled for Tuesday, January 30th, at 8:00 p.m. At this time in a Chamber of Commerce dining room Mr. A.H. Hooker, Jr., will address us on the very fascinating, but (we hope) untimely subject of what industry might expect immediately after the declaration of war by this country. In his talk "Mobilization of Industry", Mr. Hooker will outline the industrial picture on M-day. In his more peaceful pursuits the speaker looks after the interests of the Hooker Electrochemical Co. in Tacoma; but he has recently been to Washington D.C. conferring on the above topic.

This is a meeting, arranged downtown especially, at which we would like to see "the downtown members". This would be an excellent chance to bring your boss or your wife and bore neither of them. There is no reason why there should not be a crowd from Lauck's, from Fisher's and Carnation-Albers, from Crescent Mfg., from Wash. Coop. Egg (excuse the abbreviations) from the U.S. Food & Drug (see below), U.S. Frozen Pack, U.S. Bureau of Fisheries, Bureau of Mines, Bureau of Industrial Alcohol; yes and the Rayonier lab at Shelton, the Weyerhaeuser Mill, State Liquor Control lab and the State Highway lab at Olympia, many Tacoma chemists and several others. There are one or more members at each of the above places and at many others beyond the scope of the writer's immediate memory and space.

A good dinner (75¢) and the meeting at the Seattle Chamber of Commerce Building. BUT, Please make reservations for dinner by 11 a.m. Mond. Jan. 29. Write the secretary, V. Sivertz, address above, or phone ME 0630, Loc. 439. It takes several hours' time on the part of some of us to arrange one meeting. Therefore we urge that you take a few minutes to relieve us of further headaches.

LABORATORIES AND PERSONALITIES

Under this caption it is planned to give a brief review of Chemical Labora-

tories of the Northwest, to describe briefly the size, nature and activities of the one in question and something of its personnel.

It seems fitting to begin this section with an account of the U.S. Food and Drug Lab since its chief, Robert S. Roe is the new chairman of the Section.

Mr. Roe, a native of Colorado, has been with the F & D Administration since 1925, serving in the Chicago office five years, in Washington D. C. four years and going to San Francisco (as assistant chief) in 1934. He came to Seattle in May 1937 as acting chief and has been chief since August 1938. He has been a member of the A.C.S. since 1924. He is married and has a nine-year-old daughter.

The Seattle Station, one of 16 set up to enforce Food and Drug acts, is headquarters for Washington, Oregon, Alaska and parts of Montana and Idaho. It is the duty of its staff of 11 analysts and 9 inspectors, all graduate chemists, to investigate the foods, drugs, cosmetics, insecticides, and caustic poisons produced in this territory for interstate shipment. The lab is equipped to perform all the usual chemical determinations on food and drug products and the staff are qualified to carry out a wide variety of routine work with some specialization. The laboratory is well worth seeing any time.

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New members in the Section include H. M. Haendler and Dr. E. C. Lingafelter, both associates in the Chemistry department, U. of W., Ted D. Niedo, we would like to hear about his affiliation, Walter C. Sands, a new appointee at the Bureau of Fisheries at Montlake.

F. B. MacKenzie has left the post of head chemist of Carnation Co. It is with mixed feelings of regret and congratulations (he is now with Carnation in Milwaukee) that we note his leaving here. Mac was chairman of the Section 1936 and 1937.

NOVEMBER MEETING

November 29th of last year was the occasion of a most interesting address given by Dr. Gustav Egloff, Director of

Research for the Universal Oil Products Co., before a joint gathering of the Puget Sound Section of the A. C. S. and the American Institute of Mining and Metallurgical Engineers. The subject of Dr. Egloff's talk was "Motor Fuels of the Present and Future". A brief summary of the address follows.

Motor fuels of today and tomorrow are produced partly for the national self-sufficiency that is desired and partly for the democratic urge of research to produce better fuels for use in motor cars, airplanes, and other vehicles of transportation.

The chief quality of a motor fuel of today is the high octane rating it possesses. Such a product is most economically secured from petroleum and its products. The best hydrocarbons for use as motor fuels are those of the branched-chain paraffin type because of their non-detonating character.

Gasoline with an octane rating of 80 is that of premium grade for motor cars at the present time, while 100 and higher octane gasolines are employed now only for airplanes with resulting higher speeds and comfort of transport. It is only a matter of a few years, though, until the time when research of the oil industry will produce these now so-called aviation gasolines at a price level for use in motor vehicles on the ground.

Motor fuels are derived mainly from petroleum, and are made up of hundreds of paraffin, olefin, aromatic, and naphthene hydrocarbons varying greatly in percentages. An overall efficiency of the combustion of these hydrocarbons in a motor cylinder is being improved by the production of isooctane, neohexane, and alkyls by thermal and catalytic cracking and polymerization.

Research in the oil industry is tending toward the production of single hydrocarbons as gasoline so that combustion in a modern motor may be controlled with a high degree of exactness. An ideal motor fuel of the future will be a single hydrocarbon or perhaps a mixture of two or three to suit prevailing climatic conditions during the year. This fuel will

have the proper volatility and an octane rating of over 100 for all kinds of motor vehicles.

Those present at the dinner were A. J. Bailey, W. O. Baker, H. K. Benson, J. C. Blucher, G. H. Cady, Gustav Egloff, W. L. Haley, Wm. H. Hill and W. F. Seyer of Vancouver, B. C., Prof. and Mrs. Lind of Ellensburg, E. C. Lingafelter, F. B. MacKenzie, Carl Miller, Rex Robinson, R. S. Roe, C. H. Secoy, V. Sivertz, H. V. Tartar, T. G. Thompson and, contrary to rules of feminine precedence, Miss Julia Westermann.

DECEMBER MEETING

Oregon State College on December 2, 1939, played host to the Puget Sound, Idaho-Washington Border, and Oregon Sections of the A. C. S. at the dedication of that institution's splendid new Chemistry Hall. Those members constituting the delegation from the Puget Sound Section were Prof. W. L. Beuschlein; our Vice-Chairman, Dr. G. H. Cady; Prof. P. R. Fehlandt; Dr. E. H. Huffman; Dr. E. C. Lingafelter; our Secretary Dr. V. Sivertz; Dr. H. V. Tartar; and our Councilor, Dr. T. G. Thompson.

During the morning an intersectional meeting of the three A. C. S. sections was held, Dr. Christensen, Chairman of the Oregon Section, presiding. At this meeting papers on various researches in progress at the different universities and colleges represented by the A. C. S. members attending the dedication were presented. Dr. Tartar's paper was an excellent presentation of the studies he and his coworkers have been making on the alkyl sulfonates.

Dr. Linus Pauling of the California Institute of Technology gave a scientific address early in the afternoon on "The Significance of the Resonance Phenomenon in Chemistry". Later open house for inspection of the new laboratories was held. Towards late afternoon Chemistry Hall of O. S. C. was formally dedicated with officers of the college and state dignitaries taking part in the ceremonies.

In the evening there was an informal dinner, after which Dr. Joel H. Hildebrand

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which Mac it was. 16 hazarded they might pay as high as 75¢ for dinner and 7 suggested 60¢. Eleven voted against entertainment at dinners; eight voting for some form, some suggesting the Section pay upward of \$5 for movies or other entertainment. On the question of occasional wife attendance, 13 said yes, one said no; altho the lone dissenter voted to bring his wife (or someone) to a ladies' night. Ten voted for a ladies' night program sometime during the year. Altogether 25 promised attendance at about 100 dinners at 6 meetings. We hope more will attend more. Q.E.D.