

# UO Chemistry Department Announces Grants

The following research grants have been announced by the chemistry department for the current year:

Robert B. Dean, assistant professor, appointed—Ph. D. 1938, University of Cambridge (England). Previous experience: research associate, Stanford University; assistant professor, University of Hawaii. Research grant from National Institute of Health.

Dean is directing a research project supported by the Public Health Service to study the behavior of anesthetic gases on surface films. For some years one theory of anesthetic has held that these materials act by being absorbed on nerve membranes. This study will make use of special techniques developed by Dr. Dean and his students to measure the absorption of vapors on surface films of fatty materials and proteins.

## Surface Films Studied

The University of Oregon is perhaps the only University in the country where surface films are being actively studied. As a result student assistants have been recruited from distant parts of the world to work on this problem. The first one came from China and there are now two Englishmen working here who came from the laboratory of N. K. Adam in Southampton. Professor Adam is considered to be a world authority on the Physics and Chemistry of Surfaces.

In parallel study Bradley T. Scheer will investigate the conductance of nerve impulses in the presence of the same anesthetic vapors. They hope that results on surface films and on nerve can be correlated leading a better understanding of the nature of anesthetic and nerve conduction.

V. R. Gaertner, assistant professor, appointed 1949—Ph. D. 1949, University of Illinois. Previous experience: post-doctoral fellow, Ohio State University; research grant from Research Corporation.

## New Tetracyclic Structure

Grant by Research Corporation: With the assistance of C. W. Young, a study entitled "Synthesis of Fused Strained Aromatic Hydrocarbons" is being made. The objective is the preparation of compounds containing a new tetracyclic structure, partially or completely aromatic, of theoretical interest.

Grant by the Graduate School: A new class of organometallic reagents, which undergo extensive rearrangements under mild conditions, is being investigated. The results appear to bear upon the intimate structural nature of the attached heteroaromatic nuclei.

F. J. Reithel, associate professor, appointed 1946—Ph. D. 1942, University of Oregon Medical School. Previous experience: Lalor fellowship, St. Louis University; instructor, St. Louis University; instructor, Washington University School of Medicine; and research fellow, California Institute of Technology. Research grants from ONR and National Institute of Health.

## Study Of Gland

Biochemistry of the mammary gland: A study of the synthetic and metabolic activities of lactating mammary gland. Of chief interest is the exact mechanism involved in the synthesis of lactose or milk sugar. Other aspects of mammary metabolism are being studied to provide information for those interested in the problem of breast cancer.

Various portions of this problem are being studied with recent advanced techniques such as enzyme assays, radioactive tracers, chromatography, and differential centrifugation.

This project is now in its fourth year and has been supported by the Office of Naval Research.

Synthetic biochemical mechanisms: To be undertaken by Dr. M. C. Horowitz working on a postdoctoral research fellowship awarded by the National Foundation for Infantile Paralysis under supervision of Dr. F. J. Reithel.

## Sugar Phosphate Separation

Chromatographic separation of sugar phosphates: An attempt will be made to develop new techniques for separating and analyzing important constituents of tissues. This is an attempt to furnish an analytical tool for use in studying carbohydrate metabolism.

Supported by grant from Graduate Council, University of Oregon. Study of the intestinal enzyme lactase: The intestinal enzyme involved in the digestion of milk sugar has been isolated during a study underwritten by the U. S. Public Health Service. Further studies of this enzyme are contemplated.

D. F. Swinehart, assistant professor, appointed 1946—Ph.D. 1943, Ohio State University. Previous experience: research chemist, Eastman Kodak Company; research, Atomic Energy Commission, Los Alamos. Research grant from A.E.C.

## Solution Chemistry Problems

For several years Swinehart has been engaged in a series of research problems dealing with solution chemistry, specifically in the thermodynamics of dilute electrolytic solutions. Some of these were financed with funds from the Research Council of the University of Oregon in amounts of several hundred dollars per year. Two of the problems were supported by a grant of \$1800 from the Research Corporation (New York) as indicated in the description. Part of the work was done by Swinehart personally. Part has been done by graduate students under his direction.

Pierre Van Rysselberghe, professor, appointed 1941—Engineer, University of Brussels, 1927; Ph.D., Stanford University, 1929. Previous experience: instructor, Stanford University.

Van Rysselberghe is now on sabbatical leave with Fulbright Fellowship in Milan, Italy. Research grant from Office of Naval Reserve.

# UO Placement Service, Federal Council Co-Sponsor Conference

An informal conference on university level occupations in the federal service in the Pacific Northwest will be held Thursday. Sponsors are the Federal Personnel Council of Portland and the university's graduate placement service with the help of teaching departments.

Sessions will be open to persons from 18 to 35 years of age who have graduated or expect to graduate from college by June. Faculty members have also been invited.

Speakers from outside the university will include J. Lyle Cunningham, assistant regional director of the Bureau of Reclamation; Ben Hundley, president of the Portland Federal Council; F. S. Creager, assistant chief of the regional personnel management division of soil conservation service.

Joseph J. Pachot, Bonneville Power administration; R. C. Fury, Soil Conservation Service; Sam Hutchinson, Fish and Wild Life service; Robert Hooper, Atomic Energy commission from Hanford, Wash.; Frank Cole, Corps of Engineers.

Mrs. Dolores Y. Miller, Corps of Engineers; Miss Ruth Carr, BPA; Roscoe Day, BPA; J. Lyle Cunningham, Bureau of Reclamation; Bernard Goldhammer, BPA; Ar-

thur Atkisson, BPA, and Dr. William R. Van Dersell, Soil Conservation service.

Further information concerning the conference may be obtained by contacting the teacher placement office.

Oct. 11, 1911—Pres. William Howard Taft addresses University of Oregon students from his private railway car. Yell Leader "Busher" Brown greets him with famed "Oskey Wow Wow." Sophomores challenge freshmen to a football game Saturday at Kincaid field.

Grover Cleveland was born in Caldwell, N. J., March 18, 1837, and died in Princeton, N. J., June 24, 1908.

## Look out—here comes a shortstop!

Each year many children are killed because they thoughtlessly follow bouncing balls into streets. So watch out for a bouncing ball—a young shortstop may be racing after it. Slow down near schools, playgrounds, and in residential areas.

Be careful—the child you save may be your own!



Sponsored in the interest of child safety by

Oregon Daily EMERALD

# People have asked... "Oil Progress? Should that mean something to me?"



The oil companies of America are now observing Oil Progress Week. Some people outside the industry have asked, "Oil Progress? Should that mean something to me?"

The answer is "Yes, indeed!"—for oil progress directly affects the lives of all Americans, and the rest of the civilized world as well. One indication of the strides the industry has made is a count of its products. Fifty years ago, we were getting only about a dozen different products out of crude oil. Now Standard produces more than 1100. What we ourselves produce, plus what's made with the help of products we provide, adds up to a seemingly endless list of things that make your life better.

natural gas, hydraulic oil, castor machine oil, floor wax, plastic cement, printing ink, automobile, shock dip, carbon paper, roof coating, detergents, leather oil, egg oil, shoe, paint, cleaners, paraffin wax, fly spray, st, cloths, cant, instrument oil, wood preservative, wax, fuel, petroleum jelly, waterproof canvas, dr, lives, motor oil, cold cream, ice cream, oil sprays, gum wrappers, paper, oil adhesive tape, naphtha, metal, aluminum, asbestos, coating, char, photographic film, cup, grease, que fluid, water softener, univ, milk cartons, cylinder oil, waxed hexanes, mineral spirits, water

Your car can be "like new" longer with a motor oil developed by Standard's scientists using atomic energy. It cuts engine wear as much as one-half, compared with conventional oils.

Your country's military strength is increased by jet fighters. Standard developed the first jet fuels used by the U. S. Our fuel progress continues with today's super-jets.

Your cleaning chores are easier thanks to today's new detergents. Standard pioneered their development, now supplies a large portion of the nation's needs.

storm oil, absorption oil, mineral concrete, pipe form oil, soap wrapp, rust preventative, dynamite stick, automobile washing compounds, paper, marine insect spray, surface coati, textile oils, caulking compounds, pantograph grease, rubber boots, aviation gasoline, heavy duty mo, crayons, liquefied petroleum gas, after-shave lotions, ice machine

mill and roller greases, wocless, waterproofing compound, white oil, fire fighting equipment, soaps, vestuffs, gas odorants, auto polish, transformers, arification, alton lining, fluid, butter cartons, valve oil, etoidea, flushing oil, gear oil, cleaner, dehydrated food packages, rbor oil, paper bottle tops, foil

The growth of the industry over the years has meant the development of thousands of oil companies, large and small. All are needed—to serve you better, and keep the nation strong. As the industry progresses, the gain is yours... for your progress and oil progress go hand in hand.

Oil Progress Week... October 14 to 20

STANDARD OIL COMPANY OF CALIFORNIA  
• plans ahead to serve you better