### Association Affairs

#### **Pacific Division Meeting**

The 41st annual meeting of the Pacific Division, American Association for the Advancement of Science, was held at the University of Oregon, Eugene, 13–18 June 1960. Arrangements were capably handled by a local committee under the chairmanship of Bradley T. Scheer, head of the biology department.

The divisional symposium on 14 June, on the topic of "Man's Exploration of Space," was participated in by Manfred Eimer, chief, Research Analysis Section, Jet Propulsion Laboratory; Carl Sagan, Yerkes Observatory, University of Chicago; and Marsha Neugebauer, senior scientist, Division of Space Sciences, Jet Propulsion Laboratory. Seth Nicholson, director, Mount Wilson and Palomar Mountain Observatories, was the moderator. The symposium provoked animated questioning and discussion, which continued into the general reception immediately following.

The presidential address of Henry P. Hansen, president of the Pacific Division and dean of the Graduate School at Oregon State College, Corvallis, folowed the divisional banquet on 15 June. Taking as his topic "Cycles and Geochronology," President Hansen presented the broader aspects of his own studies of fossil pollens, leading into such topics as climatic cycles, vulcanism, and early man in the Pacific Northwest.

Press coverage of the meeting was good, being interlocked with a special conference on science writing sponsored by the University of Oregon School of Journalism and the National Science Foundation, which brought to the meeting a number of nationally known science writers and provided a stimulating discussion of the special problems of science reporting.

Sixteen affiliated societies participated in the Eugene meeting with programs at which a total of 353 scientific papers were presented. The 857 registered members and guests were drawn from a wide geographical area, as shown in Table 1. Though this was a divisional meeting, 29 states, the District of Columbia, Canada, and 5 countries other than the United States and Canada were represented, with no region of the United States omitted.

The 42nd annual meeting of the Pacific Division will be held at the Uni-

Table 1. Geographic distribution of registrants at the Eugene, Oregon, meeting of the Pacific Division of the AAAS. Italics indicate the eight states and the Canadian province of British Columbia that comprise the area of the Pacific Division. The combined registration from these areas was 754, or 88 percent of the total.

United States	
Alabama	1
Arizona	14
California	320
Colorado	21
Connecticut	1
District of Columbia	4
Florida	1
Georgia	1
Hawaii	9
Idaho	15
Illinois	7
Kentucky	1
Maryland	7
Massachusetts	3
Michigan	- 1
Minnesota	1 2 5 1 2 2 1
Montana	5
Nevada	1
New Mexico	2
New York	2
North Dakota	1
Ohio	2
Oregon	223
Rhode Island	1
Texas	7
Utah	19
Virginia	2
Washington	141
Wisconsin	2
Wyoming	4
Total	820
Other countries	
Canada:	
Alberta	4
British Columbia	21
Ontario	1
Saskatchewan	1
England	2
Honduras	1
India	5
Iraq	1
Thailand	1
Total	37

versity of California at Davis, 19–24 June 1961. The president of the Division for 1961 is W. A. Clemens, professor of zoology emeritus, University of British Columbia. The president elect is Melvin Calvin, professor of chemistry, University of California at Berkeley. The chairman of the general committee for the Davis meeting is R. M. Hagan, professor of irrigation in the University of California at Davis.

R. C. MILLER California Academy of Sciences, San Francisco

#### Lubrication Engineers

The lubrication engineer is associated with a great variety of operations. He is responsible for planned lubrication in virtually every industrial plant. In addition, he conducts research in lubricant development, bearing design and theory, and environmental analysis—activities which bring him into the related areas of physics, chemistry, and metallurgy.

In 1944 the increasing need for dissemination of information within this profession was recognized, and the American Society of Lubrication Engineers was founded. After 16 years of growth, the society (a recent affiliate of the AAAS) now has a membership of about 3000. More than 35 foreign countries, in both hemispheres, are represented in this number. Industry is considered a working partner in the structure of the society, and industrial membership is available to companies on a fee basis. At present there are 31 industrial members, including lubricant producers, lubricating equipment manufacturers, additive manufacturers, and others. Industry councils and technical committees, representing many branches of industry and research, report to a coordinator of councils and committees. Thus, education, research, and publications are coordinated in the many areas in which the lubrication engineer, by the nature of his profession, is active.

Programs of education in the fundamentals, practices, and theory of lubrication are held regularly, sponsored by local sections in cooperation with leading educational institutions. Other research and educational activities are undertaken by the society on a national basis.

The society publishes a monthly journal, *Lubrication Engineering*, and a semiannual publication, *ASLE Transactions*. *Lubrication Engineering* con-

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tains technical papers in the field of lubrication, information on lubricants and lubrication devices, news of the various sections of the society; news of product and plant applications; news of developments in the field of lubricant testing; and examples of the benefits of a planned lubrication program. ASLE Transactions is devoted to papers of a more theoretical nature. The society issues handbooks on fundamentals and research problems, full-scale volumes treating of important and relatively neglected areas of research, and noteworthy texts not otherwise available in this country.

The society holds two regularly scheduled meetings each year—the ASLE Annual Meeting and Lubrication Exhibit, held in the spring, and the Joint Lubrication Conference, held in the fall and cosponsored by other engineering groups.

Current officers of the society are as follows: president, L. O. Witzenburg (Eaton Manufacturing Company); secretary, A. E. Cichelli (Bethlehem Steel Company); treasurer, W. E. Hoch (Viscosity Oil Company); vice-president at large, D. M. Cleaveland (Bendix Corporation); and executive secretary, Calvert L. Willey.

CALVERT L. WILLEY American Society of Lubrication Engineers, Chicago, Illinois

#### Science Abstracting and Indexing

The National Federation of Science Abstracting and Indexing Services, a new affiliate of the AAAS, was organized in 1958 by the major abstracting and indexing organizations of the United States to coordinate their efforts and seek ways of improving them. The ultimate goal of the federation is to improve communication among scientists through the documentation (abstracting, indexing, and analyzing) of international scientific literature.

The federation provides a broad and comprehensive program. Its activities range from research and education to the publication of lists of scientific and technological periodicals. As new problems or new techniques arise from advances in documentation, the federation will broaden its activities by including them.

By means of working group committees reporting to the secretariat, the federation is endeavoring to achieve its aims through cooperative efforts in such

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ENGINEERS MATHEMATICIANS PHYSICISTS

## **V**ISSILE PAYLOAD TECHNOLOGY

# RESEARCH The ratory DEVELOPMENT ANALYSIS for market

The Applied Physics Laboratory of The Johns Hopkins **NT** University has prime responsibility for the development of guided missile weapon sys-

tems for the U. S. Navy. One technical group within APL is specifically concerned with the research, development and analysis of warheads for these missiles which include TERRIER, TALOS, TARTAR and TYPHON. For purposes of description, the activities of this group may be divided as follows:

**SUPPORTING-APPLIED RESEARCH:** Supporting and applied research pertaining to warhead technology and explosive phenomena are conducted, including theoretical analysis, laboratory and field test experimentation.

**DESIGN AND DEVELOPMENT:** Group efforts are concerned with the research, design, direction of fabrication, development and actual testing of prototype devices. Also included is the data reduction, processing, and analysis of test results.

ANALYTICAL: The Warheads Group also performs design analyses for determination of most suitable warhead types depending on specific weapon system and target performance characteristics. Warheads under development are critically evaluated in terms of test objectives and ultimate weapon system acceptance by the Navy. Lethality analyses, mathematically simulating missiletarget spatial intercept geometries also are conducted in conjunction with specific warhead research and development. For this purpose, an IBM 7090 is available to the group at APL's Computing Center.

The several assignments open at this time are exceedingly diversified and challenging. New staff members will have the opportunity to extend their professional capabilities both in the field of warheads and such associated fields as fuzing, guidance, missile structures and operational analysis. Technical liaison with other APL groups, subcontractors, and government agencies provides a wide range of activities in support of the primary mission of the Warheads Group. Initial and future assignments will be made in accordance with background qualifications of applicants, their interests, and the needs of the technical program.

You will find an intellectual and professionally stimulating environment at APL, and the opportunities for significant contributions and personal advancement are excellent. You will be associated with colleagues in numerous disciplines and technical specialties, many of whom have earned reputations as leaders in their fields. Your work will enhance our national purpose, since it has a material bearing on the defense capability of our country.

Scientists and engineers, both on senior and intermediate levels, are invited to direct their inquiries to:

Professional Staff Appointments

The Applied Physics Laboratory · The Johns Hopkins University 8615 Georgia Avenue, Silver Spring, Maryland (A residential suburb of Washington, D.C.)

All qualified applicants will receive consideration for employment without regard to race, creed, color or national origin.