

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

ENGINEERS  
MATHEMATICIANS  
PHYSICISTS

## M ISSILE PAYLOAD TECHNOLOGY

### RESEARCH DEVELOPMENT ANALYSIS

The Applied Physics Laboratory of The Johns Hopkins University has prime responsibility for the development of guided missile weapon systems 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 missile-target 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

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problem areas as bibliographic, indexing, and abstracting standards; coverage overlaps and gaps; transliteration; copyright laws; definition of terminology; costs and financing; procurement of hard-to-obtain journals; journal inventories; mechanization in all phases of the operation of secondary-source information services; and information retrieval. For example, the federation has recently adopted a uniform standard for Cyrillic transliteration.

The affairs of the federation are administered by the executive secretary and his staff in the national offices, located at 301 East Capitol Street, Washington, D.C.

Members of the federation include the following: *Applied Mechanics Reviews*, *ASTIA Technical Abstract Bulletin*, *Bibliography of Agriculture*, *Biological Abstracts*, *Chemical Abstracts*, *Engineering Index*, *Fire Research Abstracts and Reviews*, *GeoScience Abstracts*, *Index Medicus*, *International Aerospace Abstracts*, *Mathematical Reviews*, *Meteorological and Geostrophical Abstracts*, *Nuclear Science Abstracts*, *Prevention of Deterioration Abstracts*, *Psychological Abstracts*, *Review of Metal Literature*, *Tobacco Abstracts*, and *United States Government Research Reports* (Office of Technical Services, U.S. Department of Commerce).

The federation holds annual meetings, the most recent of which was held in Cleveland on 9 and 10 March. Papers were presented as follows: "The literature problem for scientists and engineers," Richard S. Leghorn (president, Itek Corporation); "The price tag for meeting the literature crises," G. Miles Conrad (director, *Biological Abstracts*); and "The impact of the information problem upon higher education," John S. Millis (president, Western Reserve University). A panel discussion on responsibilities for meeting the literature crisis was moderated by Allen Kent (Center for Documentation and Communication Research, Western Reserve University); participants were Dolph G. Ebeling (Knolls Atomic Power Laboratory, General Electric Company, Schenectady, N.Y.), Burton W. Adkinson (Office of Science Information Service, National Science Foundation), Edwin Castagna (Enoch Pratt Free Library), Jesse H. Shera (School of Library Science, Western Reserve University), and Verner W. Clapp (Council on Library Resources, Inc.).

Officers of the federation for 1961-62 are as follows: Dale B. Baker (Chemical Abstracts Service), presi-

dent; John C. Green (Office of Technical Services, U.S. Department of Commerce), vice-president; Marjorie R. Hyslop (*Review of Metal Literature*), treasurer; Carolyn M. Flanagan (*Engineering Index*), secretary. Other members of the board of directors are Robert L. Shannon (Office of Technical Information Extension, U.S. Atomic Energy Commission); Arthur C. Hoffman (*Psychological Abstracts*); Martin Goland (*Applied Mechanics Reviews*); S. H. Gould (*Mathematical Reviews*); J. Heston Heald (*ASTIA Technical Abstract Bulletin*); Margaret S. Bryant

(U.S. Department of Agriculture Library); Seymour I. Taine (National Library of Medicine); G. Miles Conrad (*Biological Abstracts*); and Kenneth C. Spengler (*Meteorological and Geostrophical Abstracts*).

Federation publications include *A Guide to U.S. Indexing and Abstracting Services in Science and Technology* (prepared by the Library of Congress); *Some Counterparts in Perspective* (A detailed report on visits to the Soviet All-Union Institute of Scientific and Technical Information; the Polish Central Institute for Documentation in Sci-



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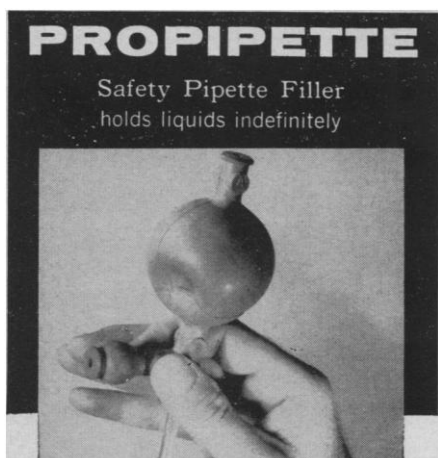
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ence and Technology; the *Excerpta Medica Foundation and the Danish Technical Information Service*), by D. B. Baker, G. M. Conrad, J. C. Green, M. Hoseh, and R. A. Jensen; and the published proceedings of each year's annual meeting.

The federation has recently undertaken the preparation of a program for studying the role of science abstracting and indexing services in solving the over-all information problem. The results of this work should provide a broad picture of efforts to communicate scientific information in the United States, from the time such information is available until it becomes obsolete. It is hoped that this plan will provide direction for all efforts in abstracting and indexing in the United States, both within and outside the government, for some years ahead.

The present AAAS Council representative is G. Miles Conrad, organizer, founder, and first president of the federation.

RAYMOND A. JENSEN

*National Federation of Science  
Abstracting and Indexing Services,  
Washington, D.C.*

## Forthcoming Events

### June

22-23. American Rheumatism Assoc., New York, N.Y. (F. E. Demartini, 622 W. 168 St., New York 32)

22-23. Computers and Data Processing, 8th annual symp., Estes Park, Colo. (W. H. Eichelberger, Denver Research Inst., Univ. of Denver, Denver, Colo.)

22-24. Endocrine Soc., New York, N.Y. (H. H. Turner, 1200 N. Walker, Oklahoma City 3, Okla.)

22-26. American College of Chest Physicians, New York, N.Y. (M. Kornfeld, 112 E. Chestnut St., Chicago 11, Ill.)

23-25. American College of Angiology, 7th annual, New York, N.Y. (A. Halpern, Secretary, 11 Hampton Court, Great Neck, N.Y.)

25-28. American Soc. of Agricultural Engineers, annual, Ames, Iowa. (J. L. Butt, 420 Main St., St. Joseph, Mich.)

25-29. Morphological Precursors of Cancer, intern. symp. (by invitation only), Perugia, Italy. (L. Severi, Div. of Cancer Research, Univ. of Perugia, P.O. Box 167, Perugia)

25-30. American Medical Assoc., 110th annual, New York, N.Y. (AMA, 535 N. Dearborn St., Chicago 10, Ill.)

25-30. American Soc. for Testing Materials, Atlantic City, N.J. (R. J. Painter, 1916 Race St., Philadelphia, Pa.)

25-30. International Union of Leather Chemists Societies, 8th congr., Washington, D.C. (F. O'Flaherty, Dept. of Leather

Research, Univ. of Cincinnati, Cincinnati 21, Ohio)

25-30. National Education Assoc. of the U.S., Atlantic City, N.J. (W. G. Carr, 1201 16 St., NW, Washington 6)

26-27. Conference on Vacuum Metallurgy, 5th annual conf., New York, N.Y. (R. F. Bunshah, Dept. of Metallurgical Engineering, New York Univ., New York 53)

26-28. American Soc. of Heating, Refrigerating and Air-Conditioning Engineers, 68th annual, Denver, Colo. (J. H. Cansdale, ASHRAE, 234 Fifth Ave., New York 1)

26-28. Control of Noise, symp., Teddington, England. (Director, Natl. Physical Laboratory, Teddington, Middlesex)

26-28. European Symp. on Space Technology, London, England. (Secretary, British Interplanetary Soc., 12 Bessborough Gardens, London, S.W.1)

26-28. Military Electronics, 5th natl. convention, Washington, D.C. (H. Davis, SAFRD, Pentagon, Washington 25)

26-30. American Soc. for Engineering Education, annual, Lexington, Ky. (M. Baker, Univ. of Kentucky, Lexington)

26-30. Concepts and Design in Aerospace Electricity, Philadelphia, Pa. (D. H. Scott, General Electric Co., No. 3, Penn Center Plaza, Philadelphia 2)

26-30. Reading Conf., 3rd annual, Syracuse, N.Y. (R. A. Kress, Syracuse Univ., Syracuse 10)

26-9. Large Dams, 7th intern. congr., Rome, Italy. (U.S. Committee on Large Dams, c/o Engineering Joint Council, 29 W. 39 St., New York 18)

27. Colloid Symp., by Faraday Soc., Glasgow, Scotland. (A. S. Hyde, Chemistry Dept., Royal College of Science and Technology, Glasgow, C.1)

27-29. Analytical Astrodynamics, intern. symp., Santa Barbara, Calif. (Capt. J. L. Gilbert, Air Force Office of Scientific Research, Washington 25)

27-29. Society for Investigative Dermatology, Inc., New York, N.Y. (H. Beerman, 255 S. 17 St., Philadelphia 3, Pa.)

27-30. American Home Economics Assoc., Cleveland, Ohio. (Miss M. Warren, School of Home Economics, Univ. of Oklahoma, Norman)

27-30. Hurricanes, 2nd technical conf., American Meteorological Soc., Miami Beach, Fla. (AMS, 45 Beacon St., Boston 8, Mass.)

28-30. International Gas Conf., 8th, Stockholm, Sweden. (R. H. Touwaide, Union Internationale de l'Industrie du Gaz, 4, avenue Palmerston, Brussels 4)

28-30. Joint Automatic Control Conf., Boulder, Colo. (R. Kramer, Massachusetts Inst. of Technology, Cambridge 39)

28-1. Institute of Navigation, annual, Williamsburg, Va. (C. T. French, General Precision, Inc., 777 14 St., NW, Suite 611, Washington, D.C.)

29-1. American Assoc. of Physics Teachers, Stanford, Calif. (R. P. Winch, Williams College, Williamstown, Mass.)

### July

1-3. Astronomical League, Detroit, Mich. (W. A. Cherup, 4 Klopfer St., Millvale, Pittsburgh 9, Pa.)

(See issue of 19 May for comprehensive list)