

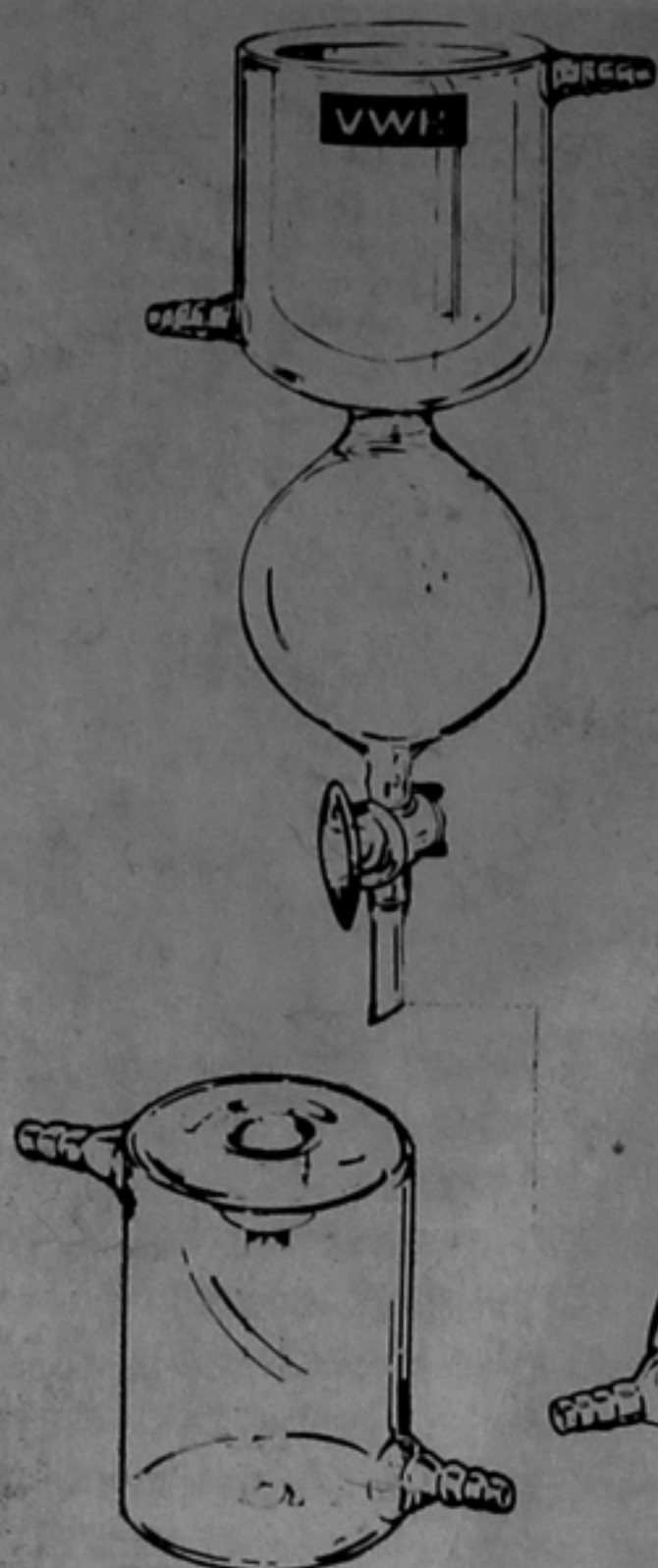
PUGET SOUND CHEMIST

BULLETIN OF THE PUGET SOUND SECTION OF THE AMERICAN CHEMICAL SOCIETY

Volume 53, Number 3



April 1992



VWR® Scientific Glass Shop

Standard glassware
modified for unique
applications.

- ▣ Special Items
- ▣ Creative Designs
- ▣ Complex Repairs
- ▣ Expert Consultation

VWR has expert glass blowers and glass fabricators to assist you.

Conventional glassware customized. VWR glass specialists can alter the design of standard laboratory glassware in the VWR Catalog. They modify Pyrex® glassware, glass tubing and bell jars, glass plates and Corning® glass colored filters.

Unique items created. Specialized glassware needs are filled. Our glass specialists work directly with each customer. You sketch out your needs and they use imagination and experience to create your special glassware.

Unusual or conventional pieces repaired. VWR glass specialists meet the toughest repair challenges. And, most repairs cost less than the new items!

Corning® colored glass filters supplied in standard 2" squares. For your special or unusual needs, the VWR glass specialists can cut and shape larger glass filters into just the size you need.

The VWR glass shop stocks Pyrex® flat glass in many thicknesses between 1/16" and 1 1/4" sheets. For other standard laboratory glassware our glass specialists draw from VWR's huge glass inventory. And, in the rare case that we don't stock what you need, our glass shop specialists will get it for you.

Let us help you solve your glassware needs.

To arrange a free consultation with a VWR glass shop specialist or for more information about the VWR Glass Shop, just call your local VWR Sales Representative.

VWR Scientific
P.O. Box 3551
Seattle, WA 98124
(206) 575-1500
1-800-333-6336

VWR Scientific

A VWR COMPANY

On the cover: Dr. Ellis K. Fields, Amoco Chemical Company, will be the ACS Tour Speaker for the April 1992 meeting of the Puget Sound Section of the American Chemical Society (see related articles in this issue).

APRIL MEETING

- DATE:** Thursday, April 23, 1992
- PRESENTER:** Dr. Ellis K. Fields
Amoco Chemical Company
- PROGRAM:** "My Career As an Industrial Chemist"
- LOCATION:** Seattle University
1891 Room
Bellarmine Hall
12th and Columbia
Seattle, WA
- SCHEDULE:** 6:30 pm - Dinner Buffet
7:30 pm - Speaker and program
Please feel free to join us for the program even if you don't attend dinner.
- DINNER:** Lasagna Buffet
- COST:** \$14.00 per person
- NOTE:** When you reserve your dinner, you have an obligation to pay. Once the food is ordered, the section is billed even if you do not show up.
- RESERVATIONS:** All reservations must be made by NOON, Monday, April 20.
Seattle: 543-1610 Bellingham: 676-3070
Tacoma: 535-7530
- OFFER TO STUDENTS:** The Section will pay half the cost of dinner for the first ten students (graduate, undergraduate, or high school) who call 543-1610.

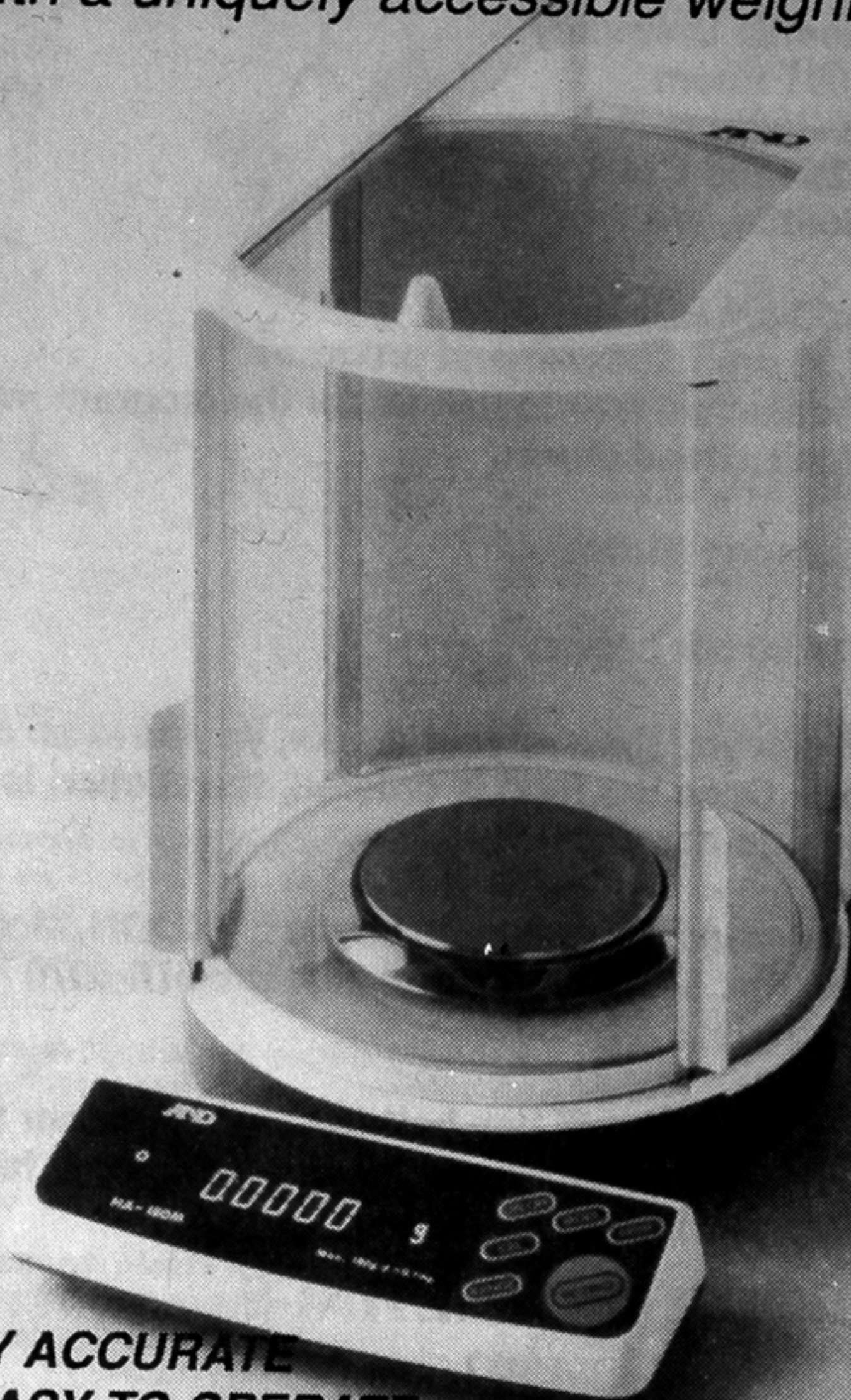
FUTURE MEETINGS 1992

- May 9 1991 Pauling Award Symposium & Banquet —
Oregon State University
Corvallis, Oregon
- June 17-19 Northwest Regional Meeting (NORM)
University of Montana, Missoula
- late June Tour and Picnic (families welcome).
Details to be announced.
- September Section Meeting
- Fall 1992 Pauling Award
Puget Sound Section, Host
University of British Columbia
Vancouver, B.C.

A&D

A&D WEIGHING DIVISION

Featuring the new HA-M series analytical balances with a uniquely accessible weighing chamber.



- **HIGHLY ACCURATE**
- **EASY TO OPERATE**
- **WITH ADVANCED STABILIZATION SOFTWARE**

All-World Scientific is your Puget Sound source for the full A&D line of toploading, analytical, and moisture balances, all with a two year warranty!

Call us to find out just how-affordable a quality balance can be.



5515 - 186th Pl SW, Lynnwood, WA 98037
(206) 672-4228 • FAX (206) 776-1530
Toll Free 1-800-28WORLD (289-6753)

ELLIS K. FIELDS TO ADDRESS APRIL MEETING OF PUGET SOUND SECTION

Dr. Ellis K. Fields received his B.S. in 1936 and his Ph.D. in Physical Organic Chemistry in 1938 with Professor M. S. Kharasch at the University of Chicago. He was a Lilly post-doctorate Fellow during 1938-41, and was Chief Chemist at Research Corporation from 1941 to 1950. He has received many honors, including the ACS Award in Petroleum Chemistry, 1978; Almquist Lectureship at the University of Idaho, 1979; and the Chicago Technological Societies Council Award, 1980. He was a Visiting Lecturer at Kings College London, 1962-63; a Fellow of the Canadian Institute of Chemists, 1985; and became a Fellow of the American Association for the Advancement of Science in 1985. Presently, he is Research Consultant (their highest scientific title) at Amoco Chemical Company, a position he has held since 1950. He has held numerous American Chemical Society offices, including Chairman or member of 40 local and national boards and committees. He was President of the ACS in 1985. Dr. Fields is a member of AAAS, the Royal Society of Chemistry, the Society of Chemical Industry, the New York Academy of Science, the Inter-American Photochemical Society, the International Society of Heterocyclic Chemistry, an affiliate of IUPAC, and Secretary of the Council of Scientific Society Presidents. He has published 128 journal articles and holds 221 U.S. patents.

Dr. Fields' areas of research include homogeneous and heterogeneous catalysis, organic photochemistry, reactions of organic ions in the gas phase, oxidation of hydrocarbons, organophosphorus chemistry, heterocycles, monomers and polymers.

ABSTRACT MY CAREER AS INDUSTRIAL CHEMIST E. K. FIELDS

Dr. Fields' talk will illustrate the myriad projects involved in his career, during the war under Research Corporation, and since 1950 with Amoco. These include medicinals, lube oil additives, hydrocarbon reactions — both thermal and under electron impact, photochemistry, free-radical chemistry, enhanced oil recovery, heterocycles, oxidations, monomers, and polymers.

LEIGH VAN ETEN RETIRES FROM CHARLES WRIGHT ACADEMY

Forty years ago, the Dean of Puget Sound area chemistry teachers began his illustrious career. This June, Leigh Van Etten, the venerable leader of Charles Wright Academy's science program, will retire from the faculty. Leigh, a distinguished figure in his traditional shirt and tie, still adheres to an exacting regimen. "I get up at 5:00 a.m. to drive to the 'Y' for a swim before I start the day," he said.

Leigh came to Charles Wright Academy in 1963, after ten years leading the science departments of two Eastern independent schools. "I received my degree from the University of Connecticut," Leigh said, "and decided to stay back there awhile before returning to my native Northwest." Leigh has also served as lecturer during his summers at U. Conn., Marquette University, Lakeside School, and the University of Washington.

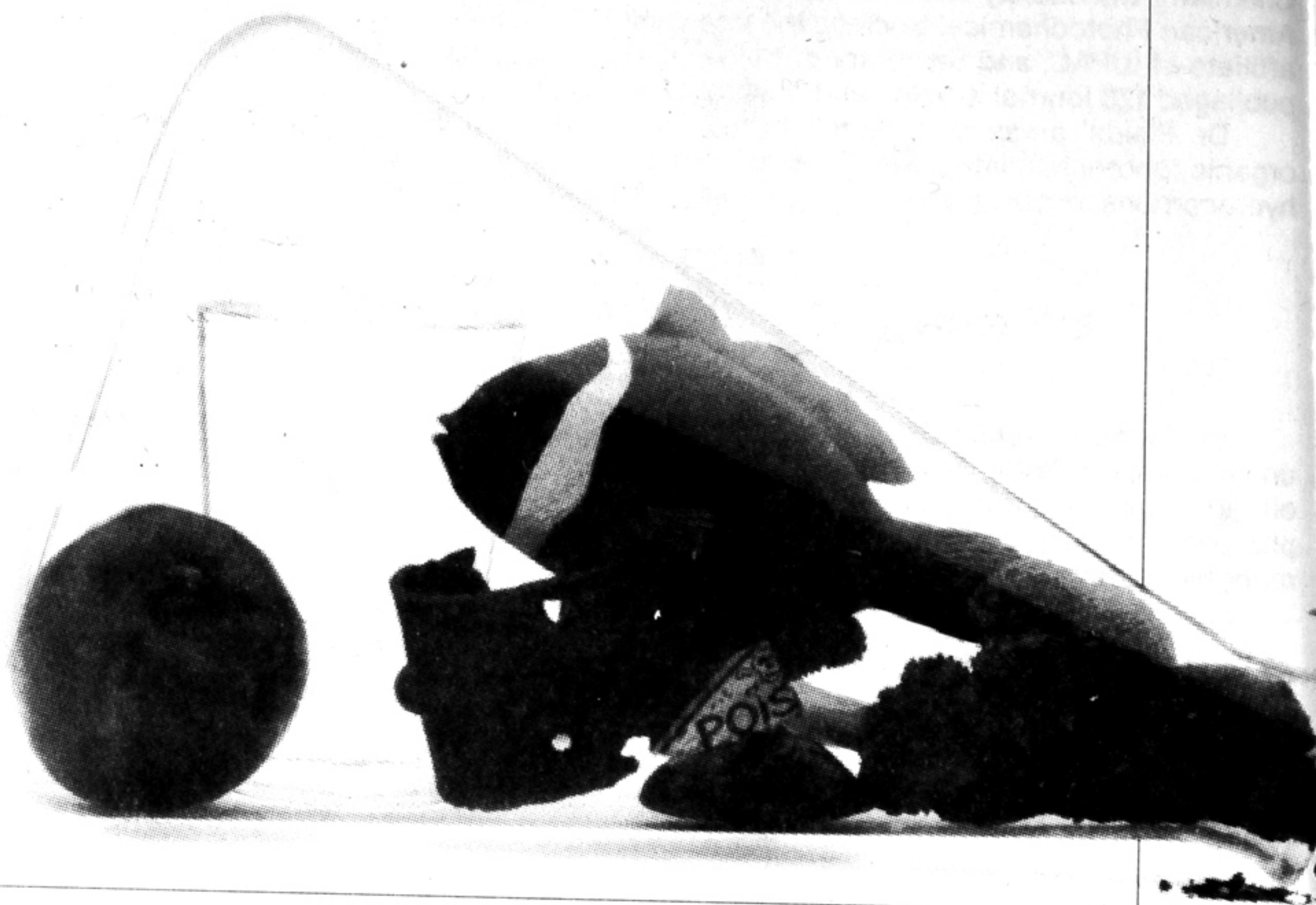
If pressed, Leigh might tell you he's most proud of the interest for the sciences he has generated in his students. Because of their preparation, all of Leigh's students do well in their college science courses. And, Leigh notes proudly, "several of my Advanced Placement students have gone on to receive their Ph.D.'s in chemistry."

While the local community of science teachers will miss Leigh's dedication and good humor, the mark he has left on the profession and the spirit he has engendered in all of us will live on for many years to come. Congratulations, Leigh, for a lifetime of great work.

To fill Leigh's position, Charles Wright Academy has announced an opening for a full-time chemistry teacher. Teaching experience and an M.A. or M.S. is preferred. Interested candidates should send a resume and references to: Headmaster Robert Minnerly, Charles Wright Academy, 7723 Chambers Creek Rd., Tacoma, WA 98467.

— Jack Dombrosky, Science Department Chairman

How to break through the productivity bottleneck.



It's simple: Wherever you see a bottleneck in your environmental laboratory, look to HP for the solution.

Sample preparation? We'll cut your time from days to minutes. Report generation? Powerful, automated HP data handling solutions meet your data quality objectives — and your deadlines — while your people focus on other tasks. Informa-

tion flow? Industry-standard HP networking helps different vendors' instruments and systems work together smoothly.

Every product in our broad offering — from sample preparation through analysis and reporting — is designed for high throughput. While top-rated HP quality, service and support all help lower your cost of ownership — and make

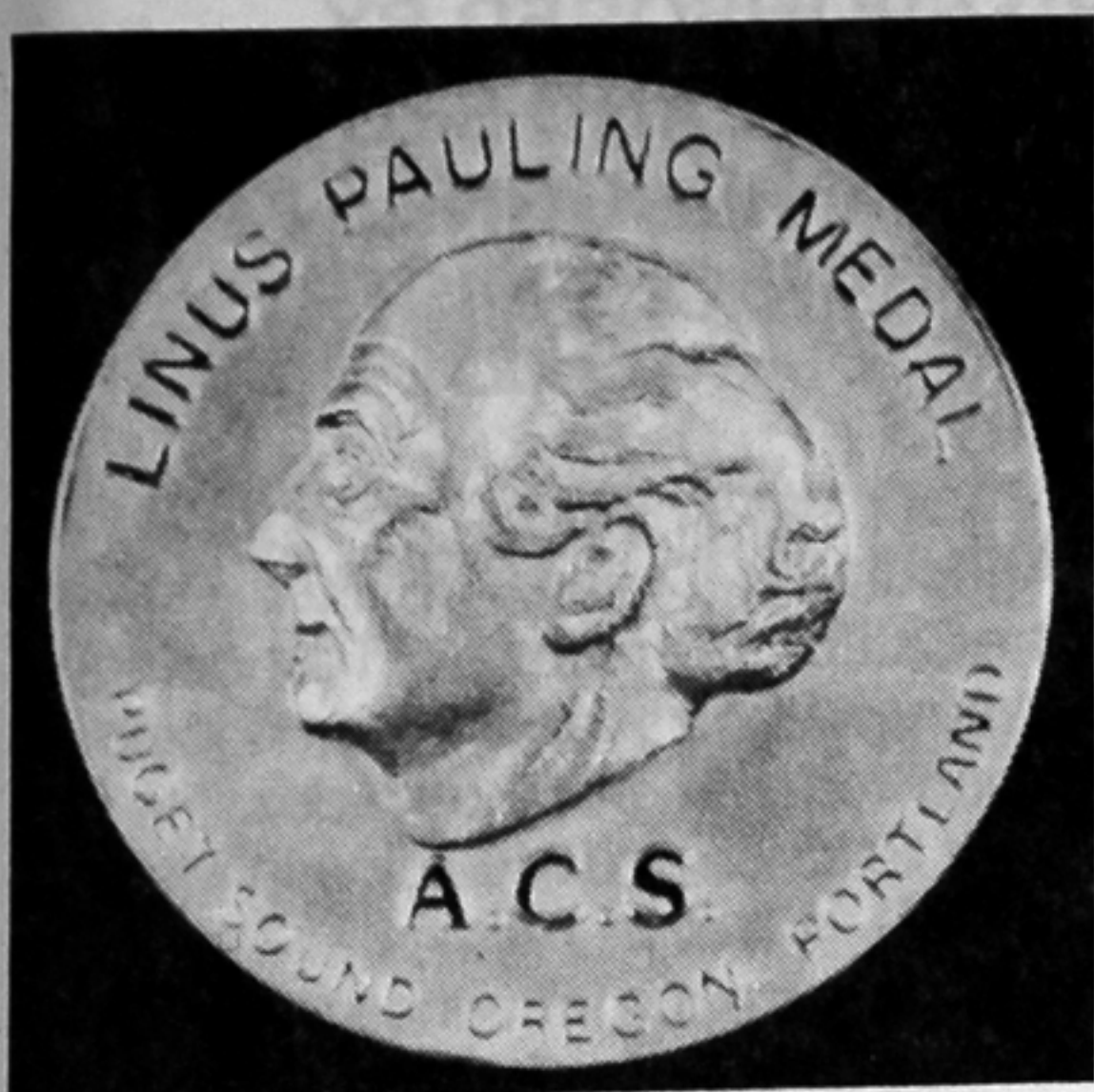
possible our 99-percent uptime guarantee.*

Call **1 800 556-1234, Ext. 10232**, for our informative brochure. In California, call **1 800 441-2345, Ext. 10232**.



**HEWLETT
PACKARD**

*Not available in all countries.
© 1990 Hewlett Packard Company AG040001



**1991
PAULING MEDAL AWARD
OREGON STATE UNIVERSITY
CORVALLIS, OREGON
MAY 9, 1992**

PROFESSOR RUDOLPH MARCUS 1991 PAULING MEDALIST

The 1991 Pauling Medal Award ceremonies will be held on May 9, 1992, on the Oregon State University campus. The 1991 recipient is Prof. Rudolph Marcus of the California Institute of Technology. A symposium will be held in the afternoon, followed by a social hour and the Award Banquet featuring The Pauling Award Address by Professor Marcus.

The Pauling Medal Award, cosponsored by the Oregon, Portland and Puget Sound Sections of the American Chemical Society, annually recognizes outstanding achievement in chemistry and contributions to the field that have merited national and international recognition. The award is named after Dr. Linus Pauling, a native of the Pacific Northwest, because of the inspiration of his example. The 1991 event is being organized by the Oregon Section of the ACS.

Rudolph Marcus is a foremost expert in the field of theoretical chemical kinetics. Although he has contributed to many areas, he is best known for his theory of electron transfer reactions in solution ("Marcus Theory") and for his contributions to the theory of unimolecular reactions (RRKM theory). The outstanding aspect of his work is that his theories have not only been a stimulus to other theoreticians, but they have had a profound influence on shaping the direction of experimental research.

The Award Symposium will begin at 1:30 p.m. in Wilkinson Auditorium, and will be chaired by Prof. Seymour Rabinowitz of the University of Washington. Speakers include Prof. Dudley Herschbach of Harvard University, Prof. William Miller of the University of California at Berkeley, Dr. Norman Sutin from Brookhaven National Laboratory, and Prof. Ahmed Zewail from the California Institute of Technology. A social hour, scheduled for 5:45 p.m., will be held following the symposium, in the Valley Football Center. The symposium and social hour are free and open to the public.

The Awards Banquet will follow the social hour, service beginning at 7 p.m. The meal will include choice of chicken breast or prime rib, as well as salad, vegetable, potato, bread, dessert and wine. The program, featuring Professor Marcus' address, will follow the meal.

The charge for the banquet is \$25.00. Tickets for the banquet may be obtained by sending a check for \$25 per person, payable to Oregon Section, ACS, to Prof. Kevin Gable, Department of Chemistry, Gilbert Hall 153, Oregon State University, Corvallis, OR 97331-4003. Deadline for receipt of payment is **May 1, 1992**. Tickets may be picked up prior to the banquet at the Valley Football Center.

Lodging in Corvallis is available at the following motels:

Grand Manor Inn
925 NW Garfield Ave.
503-758-8571

The Jason Inn
800 NW 9th St.
503-753-7326

Nendel's
1550 NW 9th St.
503-753-9151

Shanico Inn
1113 NW 9th St.
503-754-7474

Motel Orleans
935 NW Garfield Ave.
503-753-9125

The Riverbank Inn
101 NW Van Buren Ave.
503-752-9601

The Towne House Motor Inn
350 SW 4th St.
503-752-5917

PAULING MEDAL AWARD SPONSORED BY PUGET SOUND, OREGON, AND PORTLAND SECTIONS AMERICAN CHEMICAL SOCIETY RECOGNIZING OUTSTANDING ACHIEVEMENT IN CHEMISTRY

LINUS PAULING

Linus Pauling graduated from Oregon Agricultural College in 1922 with a degree in chemical engineering. He went on to the California Institute of Technology where, in 1925, he received a doctorate in chemistry. After a year abroad he joined Caltech as a faculty member, where he remained for over three decades. He is presently director of the Linus Pauling Institute for Science and Medicine in Menlo Park, California.

Pauling's wide-ranging scientific work has had enormous influence on almost every field of chemistry. Among his interests have been the structure of molecules and crystals, the nature of chemical bonding, immunochemistry and disease and, more recently, "orthomolecular medicine" — the determination of the optimal amounts of substances, such as vitamin C, for maintenance of good health. His discovery of the structures of several proteins, including the famous alpha-helix, led to his 1954 Nobel Prize in Chemistry. He has been awarded many other prizes and medals and holds honorary degrees from numerous distinguished universities around the world. His scientific publications number several hundred and include several books.

Science has not been Linus Pauling's sole interest. With his wife Ava Helen, whom he met while they were students at Oregon Agricultural College, he was an implacable foe of the spread of nuclear weapons, and he campaigned tirelessly on behalf of this issue. Pauling's public disclosure of the danger to human life from fallout resulting from tests of nuclear weapons in the atmosphere played a major role in the present international agreement banning such tests. For his efforts on behalf of peace, he was awarded the 1963 Nobel Peace Prize.

Linus Pauling is the most distinguished chemist from the Northwest. At the age of 91 this remarkable man is as active and enthusiastic as ever in his pursuit of new scientific truths in his social activism.

Pauling Award Recipients

1966 Linus Pauling	1978 Dudley Herschbach
1967 Manfred Eigen	1979 Daniel E. Koshland
1968 Herbert C. Brown	1980 John D. Roberts
1969 Henry Eyring	1981 Henry Taube
1970 Harold C. Urey	1982 George Pimentel
1971 Gerhard Herzberg	1983 Gilbert Stork
1972 E. Bright Wilson	1984 John S. Waugh
1973 E.J. Corey	1985 Harold A. Scheraga
1974 Roald Hoffmann	1986 Harry B. Gray
1975 Paul Bartlett	1987 Harden M. McConnell
1976 F. Albert Cotton	1988 Keith Ingold
1977 John A. Pople	1989 Neil Bartlett
1990 James P. Collman	
1991 Rudolf Marcus	

When you need to hire temporary personnel for your lab, chances are you have two basic requirements.

- 1. They have to be qualified.***
- 2. They have to be available when you need them.***



Call the one company that specializes in filling both of those requirements.



LAB SUPPORT

Science Professionals On Assignment

Seattle (206) 455-5025

GET A GIFT-PLUS DOLLARS FOR YOUR LOCAL SECTION

ACS members are being offered a beautifully cut acrylic art piece as an incentive to participate in this year's Member-Get-A-Member Campaign. Participating members not only receive a true collector's item, but they also help the section to increase its revenue. For each new full member recruited, the local section receives a \$5.00 commission and \$2.50 for each reinstated member.

In late February, members will receive promotional material from ACS asking for nominations to membership. To receive your gift and to help the section, just nominate someone for membership (a friend, colleague, graduate student). Be sure to sign your name on your nominee's application and at the bottom write the local section's name in the local section/division commission claim box. (Other information and instructions are included in the promotional mailing.) The campaign ends in May.

It is important to remember that ACS is your organization, organized to enhance your professional well-being and to encourage in the most liberal manner the advancement of chemistry in all its branches. The Society's success depends on membership participation and growth. You can support your Society substantially just by responding to the Member-Get-A-Member promotional mailing.

For more information, please contact the office of Member Services at (202) 872-8737.

HAZMAT INTERNATIONAL '93 SELECTED TO PARTICIPATE IN FOREIGN BUYER PROGRAM

The U.S. Department of Commerce has announced the selection of the Hazardous Materials and Environmental Management Conference and Exhibition/International (HazMat/International '93) as a participant in its 1993 Foreign Buyer Program. Scheduled for June 9-11, 1993, HazMat/International will be held at the Atlantic City Convention Center, Atlantic City, New Jersey. It is projected to have over 600 exhibiting companies and more than 12,000 attendees. Under this program, international trade shows held in the United States are selected for promotion in overseas markets. The intent of the program is to bring foreign buyers together with U.S. firms to encourage the export of American-made products. Selection is granted to those events which are judged to best meet the criteria for product export potential, international interest in the conference technology, exhibitor interest in exporting goods and services and overseas marketing efforts by the show organizer. The world market for environmental compliance and pollution abatement/control is estimated at \$200 billion and is expected to grow dramatically through the year 2000. HazMat/International '93 will be a forum for companies and individuals interested in these valuable world markets. Additional information on HazMat/International '93 and its participation in the Foreign Buyer Program can be obtained from the show organizer: Tower Conference Management Co., 800 Roosevelt Road, Building E — Suite 408, Glen Ellyn, IL 60137-5835, Phone: (708) 469-3373, FAX (708) 469-7477.

NEW ADDRESS FOR THE PUGET SOUND CHEMIST

Publicity for local events, news of interest to the local section, and inquiries regarding publication of the *Puget Sound Chemist* should be sent to our new address:

The Puget Sound Chemist
P.O. Box 24032
Seattle, WA 98124-0032



Christopher L. Getchell
Oceanographer / Biologist

BIOASSAY TESTING SERVICES

8455 S. 19th Suite 12A
Tacoma, WA 98465
206-565-5492

Acute and Chronic Toxicity Testing
Hazardous Waste Characterization
NPDES Permit Compliance

spectron corporation

PHIL JOHNSON

SALES & SERVICE REPRESENTATIVE

We buy, rebuild and resell laboratory instrumentation

11025-118th Place N.E. • Kirkland, WA 98033 • (206) 827-9317

47th NORTHWEST REGIONAL AMERICAN CHEMICAL SOCIETY MEETING

June 17-19, 1992, at the University of Montana, Missoula

The Montana Section of the American Chemical Society cordially invites all chemists and interested scientists to the beautiful University of Montana campus in Missoula, Montana, for the 47th Northwest Regional American Chemical Society Meeting, June 17-19, 1992. ACS President Ernest L. Eliel will give the plenary lecture and will address the banquet on June 18.

The meeting will center around six exciting symposia and contributed papers in all areas including undergraduate research.

An exciting range of commercial exhibits will be located in the same area as the poster sessions. The close proximity of the exhibition to the poster sessions and meeting rooms will be especially attractive.

For more information, contact the chairmen at the Department of Chemistry, University of Montana, Missoula, MT 59812-1006:

General Chairman
Edward E. Waali
(406) 243-4992 or 4022
INTERNET:
ch_eew@selway.umt.edu
FAX: (406) 243-4227

Program Chairman
Richard J. Field
(406) 243-6374
INTERNET:
ch_rjf@selway.umt.edu
FAX: (406) 243-4227

Exhibit Chairmen
William Van Der Sluys,
Edward Keller, Co-Chairs
(406) 243-2592 (WVDS)
(406) 243-4201 (EK)
FAX: (406) 243-4227

□ **25th Great Lakes Regional Meeting**—hosted by the Milwaukee Section of the American Chemical Society, June 1-3, 1992, at Marquette University, Milwaukee, WI. For more information contact General Chairperson Kenneth E. Miller, Chemistry Department, Milwaukee Area Technical College, 700 W. State Street, Milwaukee, WI 53233, (414) 278-6440.

BECKMAN

Products for the Life Sciences

Receptor Binding
DNA Sequencing
Pharmaceutical QA/QC

Molecular Biology
Peptide Mapping
Radiochromatography

System Gold HPLC
Capillary Electrophoresis
UV/VIS Spectrophotometers
Liquid Scintillation Counters
pH Meters

Centrifugation
Robotics
Lab Information Management Systems (LIMS)
Supplies
Field Service

Beckman Instruments, Inc., Western Sales

1050 Page Mill Road, P. O. Box 10015
Palo Alto, CA 94303
1-(800) 742-2345

PROTECT
**Your Expensive Lab Work with Research
and Development Record Books**

STOCK RECORD BOOKS

B50D — Fifty pages and fifty duplicates. 1/4 inch sqs. on right pages.

B100P — 100 — 1/4 inch sqs. on right pages.

100 — 10 sqs. per inch on left pages.

B200P — 208 1/4 inch sqs. on right and left pages.

B200PH — 208 horizontally lined right and left pages.

Books have instruction and TOC's. Page size 11 x 8 1/2.
Hard extension brown cloth covers. Pages open flat.

\$10.50 each, FOB Chicago

CUSTOM MADE BOOKS TO ORDER

SCIENTIFIC BINDERY PRODUCTIONS

1255 S. Wabash Ave., Chicago, IL 60605

Phone: 312-939-3449

Fax: 312-939-3787

HUFFMAN

LABORATORIES, INC.

Quality Analytical Services Since 1936

Elemental Analysis

(C, H, O, N, S, P ■ Halogens ■ Ash ■ Metals)

TOC ■ TOX ■ BTU ■ Molecular Weights

ICP ■ Emission Spectroscopy

GC ■ IC

4630 Indiana Street • Golden, CO 80403

Phone: (303) 278-4455 • FAX: (303) 278-7012

**POLYMER STANDARDS FOR GPC/SEC
MOLECULAR WEIGHT ANALYSIS
GPC/SEC COLUMN REPACKING**

American Polymer Standards Corporation

8680 Tyler Boulevard, Mentor, OH 44060

Phone: 216-255-2211 Fax: 216-255-8397

206) 932-7698

Car: (206) 947-6593

**KARDEN ASSOCIATES, INC.
CONSULTANTS**

Safety and Regulatory Compliance

Denis Sapiro, CSP, CHMM
Senior Consultant

3241 44th Ave. SW • Seattle, WA 98116

***polymer
laboratory
and
consulting
services***

**CHEMICAL/THERMAL ANALYSIS
PHYSICAL/MECHANICAL TESTING
ELECTRON MICROSCOPY
FAILURE ANALYSIS
STRESS ANALYSIS/DESIGN
PRODUCT EVALUATION/TESTING**

L.J. BROUTMAN & ASSOC., LTD.
3424 SOUTH STATE STREET
CHICAGO, IL 60616
312.842.4100

broutmanTM



**BYRNE
SPECIALTY
GASES, INC.**

- Pure, Mixed & Rare Gases
- Gas Handling Equipment
- Engineered Systems
- Cryogenic Supplies
- Liquid N₂, Ar

**Express Gas &
Emergency Delivery**
(206) 764-4633

118 South Mead Street
Seattle, WA 98108

1 (800) 767-4601

FAX (206) 763-3753

PUGET SOUND CHEMIST



BULLETIN OF THE PUGET SOUND SECTION AMERICAN CHEMICAL SOCIETY

The **Puget Sound Chemist** is the publication of the Puget Sound Section of the American Chemical Society (ACS). The **Chemist** is mailed to about 1600 members and student affiliates of the ACS who make or influence the decisions to buy research supplies, equipment and services. The **Chemist** readers include:

- All members of American Chemical Society and all high school chemistry teachers who reside in the Puget Sound area (including Victoria and Vancouver, B.C., Canada).
- Faculty members of universities, colleges, and high schools.
- Chemists active in research, quality control, and chemical analysis in industry, government and health care facilities and chemical consultants.
- Student affiliates who will be future chemists.

Their educational level is high because membership requires at least a college degree or five years experience in scientific work. Those who receive the **Chemist** and their coworkers read it for news of Section activities, regional and national activities such as:

- Seminars given by visiting speakers.
- Section events, meetings and committee reports.
- News from local industrial, academic, and government laboratories.
- Meetings of other professional organizations —
 - American Institute of Chemical Engineers
 - American Society for Mass Spectrometry
 - Spectroscopy Society of Canada
 - American Association for Clinical Chemistry
 - Pacific Northwest Instrumentation conference & exhibit
 - Association of Official Analytical Chemists

Your cost to reach these readers is about 5¢ per person for a full-page advertisement. A detailed rate schedule and mechanical requirements are printed on the back.

CHANGES AT PUGET SOUND CHEMIST

NEW BUSINESS MANAGERS FOR THE PUGET SOUND CHEMIST

Ron Ekdahl and Bruce Tanke of All-World Scientific are the new business managers for the *Puget Sound Chemist*. All advertising business should be directed to them at All-World Scientific, 5515-186th Place S.W., Lynnwood, WA 98037, (206) 672-4228.

Information regarding advertising in the *Chemist* is on page 14 in this issue.

We encourage our members to submit advertising for their businesses.

NEW ADDRESS FOR THE PUGET SOUND CHEMIST

Publicity for local events, news of interest to the local section, and inquiries regarding publication of the *Puget Sound Chemist* should be sent to our new address:

The Puget Sound Chemist
P.O. Box 24032
Seattle, WA 98124-0032

PUGET SOUND CHEMIST

Frequency and Size: 8 times a year, September through June. Average issue, 16-20 pages.

Circulation: Approximately 1600 per issue.

Deadline: First of the month preceding month of insertion. In event the deadline is not met, we reserve the right to use the preceding month's copy.

Mechanical Requirements: Space may be used in the following sizes:

Full page	4 ⁵ / ₈ in (wide)	by 7 ³ / ₄ in (deep)
Half page	4 ⁵ / ₈ in	by 3 ⁷ / ₈ in
Half page (vertical)	2 ¹ / ₄ in	by 7 ³ / ₄ in
Quarter page	2 ¹ / ₄ in	by 3 ⁷ / ₈ in
Eighth page	2 ¹ / ₄ in	by 2 in
Business card	2 ¹ / ₄ in	by 1 ¹ / ₄ in

Advertising Rates Per Issue: Effective January, 1992.

Space	8 issues	5 issues	1 issue
Full page			
Half page	\$92.00	\$98.00	\$190.00
Quarter page	55.00	58.00	127.00
Eighth page	33.00	36.00	95.00
business card	20.00	22.00	63.00
	12.00	13.00	32.00

Cancellations: Cancellable only on 60 days notice and upon payment of short-term rate for space used.

Advertising Copy: Advertiser or his agent must furnish glossy prints or must request an estimate of the charge for typesetting the copy. Copy subject to publisher's approval. Proofs sent upon request.

Unemployed Members: Unemployed members of the section who are seeking employment are allowed publication of three one-eighth page ads per year without charge.

We shall look forward to publishing your advertisements in the **Chemist**. For more information, please contact:

Business Managers

Ron Ekdahl

Bruce Tanke 672-4228

c/o All-World Scientific
5515 - 186th Place SW
Lynnwood, WA 98037

To the Puget Sound Chemist,

Here is our commitment for an advertisement:

Size _____ Issue(s) _____

Please send the bill to: _____

☐ Camera-ready copy will be provided.

☐ Our advertisement must be typeset. Please send us an estimate of the extra charge for this service.

PUGET SOUND CHEMIST



BULLETIN OF THE
PUGET SOUND SECTION
AMERICAN CHEMICAL SOCIETY

EXECUTIVE COMMITTEE PUGET SOUND SECTION

Editor Eloise Crittenden	524-3741	Chairperson Despina Strong	ofc 895-4737 hm 364-9783
Production Manager Margaret Pitts	728-4698	Chairperson-elect Clarita Bhat	546-4575
Business Managers Ron Ekdahl Bruce Tanke	672-4228	Past Chairperson Sheri Tonn	535-7552
Circulation Manager Bob Smith	296-5502	Secretary Tom Schultz	339-4400
Correspondent Staff Betty Smith	363-3626	Treasurer David Munch	523-3763
Printing Northwest Printing & Graphics, Inc. P.O. Box 3785 Kent, WA 98032 878-9446 FAX 870-4694		Councilors William J. Wasserman (1992) Mark Wicholas (1993) Herb Bryce (1994)	587-4083 676-3071 587-6921
		Alternate Councilors Chuck Mainard (1992) Deborah Wiegand (1993) Tim Hoyt (1994)	282-2133 641-1553 756-3833

Typeset by Scarlet Letters Ltd., 939 N.E. Boat Street, Seattle, WA 98105 • (206) 547-3036.
FAX (206) 547-0303.

Published eight times during the September-June portion of the year by the Puget Sound Section of the American Chemical Society. Direct all copy to the Editor and advertising correspondence to the Business Manager. The Secretary of the Section handles other business. All copy shall be **typed** and **double-spaced**!!

Executive Committee Meeting Puget Sound Section, ACS

Second Wednesday each month

April 8 May 13

Place: Seattle University

Engineering Building

Dinner: 5:30 PM in Cafeteria (optional)

Meeting: 6:30 PM in Room 511

Meetings are open to all members.

MICROANALYSES

Analysis for All Elements, Trace Analyses,
ICP Scans, TOX, Ion Chromatography,
Molecular Weights.

GALBRAITH LABORATORIES, INC.

P.O. BOX 51610
KNOXVILLE, TN 37950-1610

(615) 546-1335
Since 1950

2323 SYCAMORE DR.
KNOXVILLE, TN 37921-1750

SPECIALTIES

- GPC, high temp, aqueous and all solvents
- FTIR, with Micro capabilities
- Tensile and Puncture, -40°F to 600°F
- Headspace, Pyrolysis GC
- Oxidation Studies, TGA, DSC, TMA
- USP XXII Testing EP Toxicity
- Thermoplastic and Thermoset Formulations
- Plastic Film, constructions, Ident
- Gas Permeation Rates, most gases
- Residual solvents, Monomers, qual and quant
- Outgassing, qual and quant
- Deformulations; Coating and Paints, Organics
- Aging; Thermal, Humidity, UV, Cold



444 W. County Rd. D
St. Paul, MN 55112
612-631-9412
FAX 612-631-8405

CHEMICAL ANALYSIS • PHYSICAL TESTING

- Spectroscopy; AA, FT-IR, Micro IR
- Chromatography; LC, GPC, GC, Ion
- Thermal Analysis; DSC, TGA, DMA, TMA
- Microscopy ESD Instrumentation
- CHNOS GC/MS
- Instron, ASTM-TAPPI Instrumentation
- Environmental Instrumentation

American Chemical Society
Puget Sound Chemist
P.O. Box 24032
Seattle, WA 98124-0032

Dated Meeting Notice

Please Do Not Delay

Non-profit Org.
U.S. POSTAGE
PAID
Seattle, Wash.
Permit No. 12966



ACQUISITIONS DIVISION
UNIV OF WASH LIBRARY
SEATTLE WA 98195

Serials