ELECTION RESULTS

Dana Mayo and Abe Savitsky are the new members of the Board of Management, replacing Bob Jakobsen and Ron Kagel. The Society is grateful to all four candidates; it is indeed gratifying that people of this caliber are willing to volunteer their time and talent to assist the Society in fulfilling its aims. Thanks are due also to the retiring board members for their contributions.

PRESIDENT'S REPORT - P. R. Griffiths

I was personally very pleased to see the results of the recent poll to determine whether the membership of the Coblentz Society was in favor of merging with the Society for Applied Spectroscopy. Although the results were not overwhelming one way or the other (56.8% in favor, 43.2% against), it appears that a majority of the members of the Coblentz Society do indeed favor initiating negotiations with the S.A.S. I feel that by uniting scientists interested in all facets of spectroscopy in a single association, the members of that body will have a stronger organization through which to achieve their professional goals. I hope that during my term as president of the Coblentz Society, substantial progress to this end will be made.

Bob Jakobsen presents the Coblentz Award to Peter Griffiths

IF YOU MOVE

Please let us know! We lose many members when they move and don't tell us their new address. Write R. W. Hannah, c/o The Perkin Elmer Corp., 761 Main Avenue, Norwalk, CT 06851.

NOTES FROM THE BOARD OF MANAGEMENT, CLEVELAND, 1977

- Dr. Peter Griffiths was elected as the new president of the Society by unanimous vote of the Board of Managers. Dr. Ira Levin was elected Vice-President. Bob Hannah and Howard Sloane were reappointed Secretary and Treasurer.

- The Education Committee, Jeannette Grasselli, Ch., reported that 25 requests for speakers had been processed.

- The Spectrum Evaluation Committee, Norman Jones, Ch., has completed new specifications for infrared reference spectra of vapors and gases.

- Membership of the Subcommittee which produced the document is: P. R. Griffiths, Ohio U., Chairman; Leo V. Azaroga, EPA; Michael J. Boyle, Jr., Norcon Instruments, Inc.; James de Haseth, U. North Carolina; R. W. Hannah, Perkin-Elmer; R. J. Jakobsen, Battelle; and Margaret M. Noone, Sadler Research Laboratories.

- An operating budget of $5400 for 1977 was approved.

- A financial arrangement with the Joint Committee on Atomic and Molecular Physical Data, covering revenues from Vol. 6-10 of the Infrared Reference Spectra plus three special volumes, was approved.

- Student membership, which provides one year free membership in the Society for students planning careers in vibrational spectroscopy, was approved.

- A committee was set up to investigate the publicity of an Industrial Chemist Award.

- Ron Kagel recommended that the Coblentz Society take an active role in interfacing the infrared community with government regulatory bodies such as EPA, OSHA, etc. A committee was instituted to probe this matter further and make a recommendation.

- The Coblentz Society symposium at FACSS will be a joint symposium with the Fourier Transform group on "Chemistry and Vibrational Spectroscopy."
Spectroscopic Vibrations

There are few conferences devoted entirely to molecular spectroscopy, but in June two such meetings have been arranged on consecutive weeks. The first is the annual affair at Columbus, the Ohio State Symposium on Molecular Structure and Spectroscopy, which is now in its 32nd year. Many of the members of the Coblentz Society will be aware that the latest advances in theoretical molecular spectroscopy are discussed by scientists from all over the world at this meeting.

The following week (June 20-24) a conference of a rather different nature, the 1977 International Conference on Fourier Transform Infrared Spectroscopy, is to take place at Columbia, South Carolina. This meeting perhaps signifies the acceptance of FT-IR as a routine tool for molecular spectroscopy. The first International Conference on Fourier Spectroscopy was held at Aspen, Colorado, in 1970, and the program was largely concerned with advances in instrumentation. This second conference has a much more varied program, with a total of 92 papers on many different aspects of FT-IR spectroscopy.

For the chemist, the afternoon symposia include sessions on chemical and biochemical spectroscopy, analytical chemistry, applications of absorbance subtraction routines, and atmospheric and stratospheric spectroscopy. Concurrent sessions on instrumental advances (2), far infrared spectroscopy and astronomical and planetary measurements are also scheduled. The morning will comprise plenary sessions featuring such internationally renowned speakers as Pierre Connes of France, Ludwig Genzel of Germany, Wally Stone of England, and Jack Koenig and Doug McDonald of America, and covering such diverse topics as the spectroscopy of macromolecules and biopolymers, time-resolved spectroscopy, Doppler-limited measurements, measurement of the cosmic background radiation and industrial infrared analysis.

In the same way that the fact that the International Conference on Raman Spectroscopy is now held on a regular basis signifies the maturity of that technique, it seems likely that the 1977 International Conference on Fourier Spectroscopy marks the year that FT-IR spectroscopy has come of age.

For information on these conferences, the following people may be contacted:

Ohio State - Dr. K. Narahari Rao
Ohio State Symposium on Molecular Structure and Spectroscopy
Department of Physics
The Ohio State University
Columbus, Ohio 43210

FT-IR -
Dr. Ronald O. Kage
1977 International Conference on FT-IR Spectroscopy
P.O. Box 2004
Midland, Michigan 48640

- Peter Griffiths

LOST AND FOUND

Found in the Coblentz Society booth at Cleveland, one man's light brown winter hat, made of synthetic fur. It doesn't fit Marcia Savely, and she is ready to relinquish it to its rightful owner if he will contact her at SOHIO Research, 4400 Warrensville Center Road, Cleveland, Ohio 44128.

MORE CONFERENCES

Other special meetings as well as the popular infrared summer schools and institutes include the following:

- Nato Advanced Study Institute on Vibrational Intensities in Infrared and Raman Spectra, at Belgrate (Lake Maggiore), Italy, September 1-10, 1977 (application deadline May 30).

Further information can be obtained from the Directors:

Professor Willis B. Person
Department of Chemistry
University of Florida
Gainesville, Florida 32611
Phone No. 932-0528

Professor Giuseppe Zerbi
c/o Istituto Chimica Industriale Politecnico
Piazza Leonardo da Vinci 32
Milano, Italy
Phone No. 292-125

- Applied Molecular Spectroscopy, July 18-22, 1977, at Arizona State University, Tempe. (Deadline July 8). Contact -
Dr. Jacob Fuchs, Director
Applied Molecular Spectroscopy
Chemistry Department
Arizona State University
Tempe, Arizona 85281

Dr. Dana W. Mayo
Department of Chemistry
Bowdoin College
Brunswick, Maine 04011

- Fisk Institute. July 25-29, at Vanderbilt University, Nashville, Tennessee. Simultaneous courses on Pollution Control; Interpretation of Infrared and Raman Spectra; and GLC, Contact -
Prof. Nelson Fusson, Director
Department of Chemistry
Fisk University
Nashville, Tennessee 37203

Joe Luongo and Jim Elliott between papers.
ABBREVIATIONS FOR SPECTROSCOPIC TERMS

Commission I.5 of the International Union of Pure and Applied Chemistry is concerned at the proliferation of informal abbreviations for terms in spectroscopy. It is considering criteria whereby well-established and suitable abbreviations can be recommended by IUPAC, and unsuitable ones discouraged.

Abbreviations play a useful role in the scientific literature in speeding communication and saving space. However, whereas these undoubted advantages are to scientists working in the same field, the use of abbreviations can also contribute substantially to difficulties in communication between scientists working in different fields.

The use of abbreviations should be strongly discouraged in the titles of papers, and only well-established ones should be used in the abstracts of papers. The reasons for these recommendations are that the title and the abstract of a paper are those parts which are most important in establishing communication with scientists in related fields.

All but very well-established abbreviations, e.g., in the context of chemistry, NMR for nuclear magnetic resonance or DNA for deoxyribonucleic acid, should be fully defined when used in a particular publication.

Abbreviations incorporating S for spectroscopy are to be generally discouraged as they frequently lead to ungrammatical use of language, e.g., an 'ESCA spectrum' literally means an 'electron spectroscopy for chemical analysis spectrum.'

Approved:

UV - ultraviolet
IR - infrared
NMR - nuclear magnetic resonance
ESR (or EPR) - electron spin resonance
NQR - nuclear quadrupole resonance

Recommended:

ATR - attenuated total reflection
CW - continuous wave
FT - Fourier transform
S/N - signal-to-noise ratio
ORD - optical rotatory dispersion
CD - circular dichroism

Disapproved:

NIR - near infrared
MIR - mid infrared
FIR - far infrared
MIRS - multiple internal reflection spectroscopy
IRS - internal reflection spectroscopy
FTS - Fourier transform spectroscopy

These recommendations are tentative; comments on the general principles and on specific cases would be welcomed by Dr. R. N. Jones, Division of Chemistry, National Research Council of Canada, Ottawa, Canada K1A 0R6.

SPECIAL COLLECTIONS OF REFERENCE SPECTRA

The Coblentz Society, for the first time, is offering special collections of reference spectra consisting of groups of related compounds. These volumes provide convenient "on-the-desk" reference for spectroscopists. They are priced low enough that each infrared can have his or her own copy; and, if ordered before July 1, each volume is subject to a 10% prepublication discount. (See the enclosed flyer for details.)

SPECTROMETER CALIBRATION

As every good spectroscopist knows, accurate wavenumber (or wavelength) calibration of his spectrometer is essential to any but the crudest work. Further, calibration accuracy should be checked frequently because of drift problems originating from temperature changes, mechanical wear, or unsuspected sources. The appearance of the second edition of TABLES OF WAVENUMBERS FOR THE CALIBRATION OF INFRARED SPECTROMETERS by A. R. H. Cole, published under the auspices of the IUPAC Commission on Molecular Structure and Spectroscopy, should make that task easier. The book contains two sets of tables and spectra: one for high resolution (0.03 cm^{-1}) spectrometers; the other for medium-to-low resolution (1-2 cm^{-1}) spectrometers. The wavenumber range 4300 to 1 cm^{-1} is covered. The book is published by Pergamon Press (1977); the cost is $22.50.
THE COBLENZ SOCIETY
Statement of Income and Equity
December 31, 1976

INCOME

Dues 971.00
Received from sale of spectra (Sadler) 11,200.00
Microfilm sales 3,021.75
Pittsburgh Conference support 855.09
NSRDS, government support 2,000.00
Interest 355.85

18,403.69

EXPENSES

Operating expenses:
Mailing, Pittsburgh Conf., Coblentz symposium, etc. 4,386.14
Spectra preparation 16,868.00

21,254.14

(2,850.45)

NET INCOME

PRIOR EQUITY (December, 1975) 19,962.52
NEW EQUITY 17,112.07

CASH IN BANKS 17,109.07

Notes to Financial Statements
December 31, 1976

1. Payments from Sadtler:
Vols. 1-5 (original Coblentz collection)
   hard copy 3,000.00
   microfilm 1,156.00
Vols. 6-10 (sponsored by Coblentz and Joint Committee)
   hard copy 8,200.00
   microfilm 1,865.75

14,221.75

2. Coblentz - Joint Committee
Spectra Preparation Program
RECEIPTS (Vols. 6-10 only)
Royalties from Sadtler
   hard copy plus microfilm 10,065.75

DISBURSEMENTS (Vols. 6-10 only)
Project management, professional payments Clara Craver 1,017.07
Photographic work 92.90
Loose-leaf binders 684.56

1,794.53

INVESTMENTS
Net income from joint effort in spectral data program, 1976 (8,271.22)
Investment in program at January 1, 1976 28,837.19
Cumulative investment at December 31, 1976 20,565.97

Dana Mayo (Bowdoin College) and Lowell Tensmeyer (Eli Lilly)

EDUCATIONAL MATERIAL

The following may be borrowed by Coblentz Society members without charge.

"Making a Mull" (IR Spectrometry)
Super-8 mm movie

"Optimizing the Spectrometer" (IR)
Super-8 mm movie

"Raman Techniques"
35 mm slide-tape

Requests should be addressed to Mrs. Marcia Snavely, The Standard Oil Co. (Ohio), 4440 Warrensville Center Road, Cleveland, OH 44128.

Bela Baslig and George Edwards, Florida Dept. of Citrus, at the Coblentz Society membership meeting.

Q AND A

If you have a question having to do with infrared spectroscopy--techniques, interpretation, or whatever--send it to

Q & A
The Coblentz Society, Inc.
P.O. Box 9952
Kirkwood, MO 63122

If you need an immediate answer, please enclose a self-stamped envelope. Otherwise, the answer (by a knowledgeable member of the infrared community) will be published in the next Newsletter. It is hoped that many Coblentz Society members will participate, either by submitting questions or sharing their knowledge with a questioner.

The Newsletter is published by the Coblentz Society, Inc. Editor is A. Lee Smith, Dow Corning Corporation, Michigan 48640. Comments and suggestions are invited.