

NEWSLETTER

EDITOR'S COMMENTS

The Coblentz Society continues to grow and expand. This newsletter is your link with the rest of the Society. You are welcome to contribute articles and comments for those items or events that you wish to broadcast. The next due date for newsletter submissions is May 1st for the August issue. Regardless of the number of contributions we will always be printing the events and progress of the Society so you can keep in touch with the board members and officers. Newsletter requests can be mailed directly to the newsletter editor as noted in the officer section at the end. Be sure to look for the "Coblentz Society Newsletter" in every February and August issue of *Applied Spectroscopy*.

KATHY KALASINSKY

PRESIDENT'S MESSAGE

For this edition of the "Coblentz Society Newsletter" I am breaking from the recent tradition. Details of awards, conferences, and other significant events in the Society will appear in other articles and a quick summary will be included at the end of this message.

What do you as a member of a very focused Society believe to be the greatest challenge to the Coblentz Society? As I near the end of my term as president, and as the Society nears its 50th anniversary, I have reflected at some length on this topic. We have a clear understanding of our mission to support the practice of vibrational spectroscopy. We have identified and implemented a number of tools to achieve our goals, including awards, affordable data bases, and targeted conferences. Through cooperation with other groups, such as FACSS and the Pittsburgh Conference, we have found cost-effective means of accomplishing our goals. New opportunities are on the horizon though partnerships already established with NIST and in discussions with the Chemical Heritage Foundation and others. The membership has proved to be an incredible source for volunteer effort, as board members and as members of the award committee, organizational support committees, and spectral review committees, to mention only a few.

What does your Coblentz Society need? Funds. Through aggressive management of resources, the Soci-

ety maintains an endowment, which is sufficient to fund the current awards. Income from the endowment is not sufficient to support the award symposia, and we have been fortunate to identify sponsors for many of these important events. Careful spending by the board has kept expenses low (board members pay their own expenses to attend semi-annual board meetings). Often, the board has been forced to choose between excellent requests for support because of limited funds. Budget is a major topic in all venues, and numerous ideas have been presented to address the challenge.

The many active members of the Society serve as volunteers and often incur significant personal expenses. The level of commitment to the mission and goals of the Society is tremendous. We maintain an endowment to maintain perpetual support of awards. I believe that the Coblentz Society can ensure a permanent role in the broader future of vibrational spectroscopy by an expansion of that endowment.

How can you help? There are at least three ways to contribute to the endowment. First, when you receive your annual invoice for membership, consider an additional contribution directed to the endowment. The board and officers believe that it is critical to maintain low annual dues to encourage participation in the Society. Please do not assume that you cannot donate additional funds. A second means of giving is through lump-sum gifts in cash or stocks, bonds, or real estate. An opportunity exists to avoid capital gain tax on such items that have appreciated value. A third opportunity exists in remembering your Society through your will. Consult your accountant or attorney for further information about tax-deductible gifts and bequests. The Society treasurer, Bruce Chase, and I are also available to answer questions.

As I complete my term as your president, I will continue to work on the growth of the endowment. My dream is a self-sufficient Society that can support the awards, conferences, volunteers, and mission of the Society as it celebrates its 50th anniversary in 2003.

Other news in summary:

- The board met at FACSS in Austin, and the spring 1999 board meeting will be held Monday evening,



Rod McDowell, Coblentz Society Past-President (R), presents the Coblentz Award to Pat Treado of ChemIcon, Inc. at The Ohio State Molecular Symposium in Columbus this past June.



Arlene Garrison (middle), President of the Coblentz Society, conducts the Coblentz Society Board of Managers Meeting at Austin during the FACSS Conference. Also attending the board meeting are (L to R) Fran Adar, John Bertie, Rachael Barbour (hiding behind John), Dave Shiering, and Jim Rydzak.

March 8, in Orlando, in conjunction with the Pittsburgh Conference.

- The 1999 Coblentz Award will be presented in June at the Ohio Symposium. The winner is Brooks Pate, and John Hellgeth chaired the selection committee.
- The 1999 Bomen–Michelson award will be presented Wednesday afternoon, March 10, to Sandy Asher of the University of Pittsburgh. The committee was chaired by Nancy Ferris, who arranged the award symposium.
- The Williams–Wright Award for 1999 will be awarded to Don Kuehl of Galactic Industries Corp. Dave Haaland is presiding over the award symposium on Tuesday morning, March 9, at Pittcon.

Thanks to the four candidates who graciously agreed to stand for the board election. Tom Niemczyk, Bob Messerschmidt, Jim Rydzak, and Andy Sommer are all excellent candidates. By the time you read this, two of these excellent spectroscopists will have been selected to serve on the decision-making body of the Coblentz Society and will be preparing to take their places on the board immediately after the annual meeting of the Society on Tuesday at the Pittsburgh Conference.

Thanks to all of you for your support and for giving me the opportunity to serve as your president. I look forward to seeing you at the annual meeting in Orlando in March, where Dave Haaland will take over as your new president.

ARLENE GARRISON

COBLENTZ/NIST IR DATA BASE

The Coblentz Society and the National Institute of Standards and Technology (NIST) have joined efforts to produce a much needed digital infrared data base for spectral searching and identification. The Coblentz Society has long been noted for its high-quality evaluated

infrared reference data and for the recommended standards for infrared data productions. NIST has long had the reputation of producing the highly circulated mass spectral data base and is now entering a joint effort to likewise produce an infrared data base. This new joint effort is initiated under a Cooperative Research and Development Agreement (CRADA) pursuant to 15 U.S.C. section 3710a. Under this agreement, NIST and Coblentz will produce a digital infrared data base for distribution through NIST as the *Coblentz/NIST IR Data Base*.

The initial product from NIST is targeted for a fall 1999 release and will contain approximately 20 000 spectra. Approximately half of the spectra are from the NIST/EPA library and half are spectra from digitized Coblentz reference data. Initially the IR data base will include both gas-phase and solid-phase spectra but will be broken down into subsets by phase and compound class once the data base is sufficiently large to warrant such an approach. Specialty subsets of IR data much like the existing Coblentz reference volumes are on-line for production. The existing 10 000 spectra volume series of Coblentz data are also on-line for inclusion in the *Coblentz/*



Dave Haaland (middle), President-Elect of the Coblentz Society, listens during the Board of Managers meeting in Austin and readies himself to take the helm of the Society in March after the Pittsburgh Conference. Also in attendance are (L to R) Jim Rydzak, Nancy Klymko, Bruce Chase, John Bertie, and Rachael Barbour.



Enjoying the Texas BBQ in Austin at the FACSS meeting at (L to R) Marie Streusand, Kathy Kalasinsky, Rachael Barbour, Bill Fateley, and Barry Streusand.

NIST IR Data Base. Updates of the data base are scheduled to be produced periodically.

NIST will be providing additional data measurements and data base compilation for distribution including software developments for data handling. The Coblentz Society will be spearheading data solicitation and data evaluation. Any individuals or organizations that have produced IR reference data sets are encouraged to participate in this effort. The Coblentz Society will be collecting data sets and evaluating them for inclusion into the *Coblentz/NIST IR Data Base*. Contributors may retain the copyright for donated spectra or assign the copyright to NIST or the Coblentz Society.

If you are interested in this data base or contributing data to this national/international effort, please contact either Kathy Kalasinsky (301/319-0055) or Clara Craver (573/358-2589) for further information.

CALL FOR NOMINATIONS FOR THE COBLENTZ SOCIETY'S AWARDS

The Coblentz Society requests nominations for the prestigious awards it supports:

Coblentz Award. The Coblentz Award is presented annually to an outstanding young molecular spectroscopist under the age of 36. The candidate must be under the age of 36 on January 1 of the year of the award. Previous recipients of this award are: John Overend (1964), William Fateley/Robert Snyder (1965), Edwin Becker (1966), Peter Krueger (1967), Jon Hougen (1968), James Durig (1969), Guiseppi Zerbi (1970), Clive Perry (1971), George Leroi (1972), C. Bradley Moore (1973), C. K. N. Patel (1974), Bernard J. Bulkin (1975), Geoffrey Ozin/George Thomas, Jr. (1976), Peter Griffiths (1977), Lester Andrews (1978), Lionel Carreira (1979), Richard Van Duyne (1980), Laurence Nafie (1981), Christopher Patterson (1982), Dave Cameron (1983), Steve Leone (1984), John Rabolt/Graham Fleming (1985), Joel Harris (1986), Alan Champion (1987), Keith Nelson (1988), Geri Richmond (1989), Hai-Lung Dai (1990), Paul Bohn (1991), Tom Rizzo (1992), Peter Felker (1993), Paul Alivisatos (1994), David J. Rakestraw (1995), Xiaoliang Sunney Xie (1996), Mounji Bawendi (1997), Pat Treado (1998), and Brooks Pate (1999).

The award carries with it a \$1000 prize plus a \$500 travel allowance. Files of candidates will be kept active



Enjoying the Texas BBQ and the company in Austin at the FACSS meeting is Peter Griffiths with Clara Craver, Rachael Barbour, and Arlene Garrison. (Rachael seems to be everywhere.)

until the date of age eligibility is exceeded. Annual updates of files of candidates are encouraged.

Nominations, which should include a detailed description of the nominee's accomplishments, a curriculum vitae, and as many supporting letters as possible, must be submitted to the award chairman [Dr. John Hellgeth, 1330 Zephyr Court, Cumming, GA 30133; phone (770)205-0607; e-mail jhellgeth@aol.com] on or before July 1, 1999.

Williams-Wright Award. This award is presented annually at the Pittsburgh Conference to an industrial spectroscopist who has made significant contributions to vibrational spectroscopy while working in industry. The work may include infrared and/or Raman spectroscopy and instrumental development as well as theory and applications of vibrational spectroscopy. Government labs are not considered industry in this definition. No restrictions are placed on the selection of the awardee because of age, sex, or nationality, but the awardee must still be working at the time the award is presented. The nominating document should clearly state the significance of the contribution made by the nominee, e.g., the introduction of novel methods, techniques or theories; innovative work in the field of vibrational spectroscopy; significant improvement on existing methods, theory or techniques; or important impact on the field of vibrational spectroscopy arising from the volume of contributions in a specific area. The nomination should include a resume of the nominee's career and highlight the accomplishments any publications and talks. Seconding letters to the nomination are useful, but not necessary. Files on nominees will be kept active for three years, after which either the candidate must be renominated with an updated file or the file will be closed.

Previous recipients of the Williams-Wright Award are: Norman Wright (1978), Norman Colthup (1979), Jeanette Grasselli (1980), Paul Wilks/James Harrick (1981), Robert Hannah (1982), Harry Willis (1983), Robert Jakobsen

(1984), Clara D. Craver/Richard A. Nyquist (1985), Abe Savitzky/Joseph J. Barret (1986), A. Lee Smith (1987), Darwin L. Wood (1988), D. Bruce Chase (1989), John F. Rabolt (1990), Robert J. Obremski (1991), Timothy Harris (1992), Curtis Marcott (1993), John M. Chalmers (1994), Michael R. Philpott (1995), Bob Messerschmidt (1996), Michael J. Pelletier (1997), Henry Buijs (1998), and Don Kuehl (1999).

This award includes a \$1000 cash prize plus \$500 toward travel expenses to the Pittsburgh Conference. Nominations should be sent to the chairman of the Williams–Wright Award Selection Committee [Dr. Bruce Chase, CR&D 328/163, Experimental Station, E.I. du Pont, Wilmington, DE 19880-0328; phone (302)695-4434; fax (302)655-5819; e-mail chase@esvax.dnet.dupont.com] before February 1, 1999.

Bomem–Michelson Award. This award is dedicated to the memory of Professor A. E. Michelson, developer of the Michelson interferometer. Bomem, Hartman & Braun sponsors the award to honor scientists who have advanced the technique(s) of vibrational, molecular, Raman, or electronic spectroscopy. Contributions may be theoretical or experimental or both. The recipient must be actively working and may be associated with the academic, industrial, governmental, or private sector. The awardee must be 37 years of age. The award consists of a crystal symbol of the Bomem–Michelson award and an honorarium. In order to ensure that the award is based on an independent evaluation of the candidate's achievements, the selection is made by a committee chosen by the Coblenz Society. The presentation will be made at the Pittsburgh Conference in March 1998.

Previous recipients of the Bomem–Michelson Award are: Thomas G. Spiro (1987), Carl Linberger (1988), Richard J. Saykally (1989), William Klemperer (1990), Alan Pine (1991), Jyrki Kauppinen (1992), Jack L. Koenig (1993), Herbert L. Strauss (1994), Terry Miller (1995), Ira Levin (1996), William H. Woodruff (1997), Bruce Chase (1998), and Sandy Asher (1999).

The nomination should include a resume of the candidate's career as well as the special research achievements that make the candidate an eligible nominee for the Bomem–Michelson Award. Files on nominees will be kept active for three years, after which either the candidate must be renominated with an updated file or the file will be closed. The nominating letter and supporting letters should be sent to: Dr. John Coates, 12 North Branch Road, Newton, CT 06470; phone and fax (203)426-8495. Nominations will close March 31, 1999.

Ellis R. Lippincott Award. The purpose of the Ellis R. Lippincott Award is to honor Dr. Lippincott's memory by the recognition of significant contributions and notable achievements in the field of vibrational spectroscopy. The medal is sponsored jointly by the Coblenz Society, the Optical Society of America, and the Society for Applied Spectroscopy. It is awarded annually at an appropriate scientific meeting. The award consists of the medal and travel allowances to the meeting. The awardee will present an address related to contributions for which he/she is being honored. In addition there may be a symposium of talks by invited speakers.

Recipients of the medal must have made significant contributions to vibrational spectroscopy as judged by

their influence on other scientists. Because innovation was a hallmark of the work of Ellis R. Lippincott, this quality in the contributions of the candidates will be carefully appraised. The contributions may be theoretical or experimental or both, and may have been made in the course of applied as well as basic research.

No restriction is placed on the citizenship or national origin of candidates. A candidate need not be a member of any of the sponsoring societies. The award will not be made posthumously unless an awardee should die after the procedure of selection has been completed.

Previous recipients include: Richard G. Lord (1976), Lionel Bellamy (1977), Bryce Crawford, Jr. (1978), E. Bright Wilson (1979), George C. Pimentel (1980), Ian Mills (1981), Michel Delhaye (1982), John Overend (1983), Jon T. Hougen (1984), Ira W. Levin (1985), Wolfgang Kaiser (1986), C. Bradley Moore (1987), Andreas C. Albrecht (1988), Marilyn E. Jacox (1989), Robert W. Fields (1990), Richard J. Saykally (1992), John F. Rabolt (1993), Herbert L. Strauss (1994), Giacinto Scoles (1995), Giuseppe Zerbi (1996), Robin Hochstrasser (1997), and Takeshi Oka (1998).

Nominations should contain the name and affiliation of the nominee and sufficient background information to justify the nomination. A nominator is expected to believe sufficiently strongly in the quality of the work of his or her candidate to provide evidence for that belief. No restriction is placed on who may nominate, and all nominations received by the committee prior to October 1 in any given year will be considered for the award to be presented in the following year. Files on nominees are kept active for three years, after which the candidate must be renominated with an updated file or the file will be closed. Nominations should be submitted to: Chairman, Lippincott Award Selection Committee, % Optical Society of America, 2010 Massachusetts Ave., N.W., Washington, DC 20036; phone (202)416-1420; fax (202)416-6134.

SOCIETY ANNOUNCEMENTS

Membership. Anyone wishing to join the Society may do so by sending \$10 to John Hellgeth, Coblenz Society Membership Chairman, 1330 Zephyr Court, Cummings, GA 30133.

Board Meeting. The Coblenz Society board will hold its semi-annual meeting Monday evening, March 8th, at the Pittsburgh Conference in Orlando, Florida. Any article of business that you want the board members to consider needs to be sent in writing to Dr. Arlene Garrison, Coblenz Society President, Director of MCEC, 102 Eastbrook Hall, University of Tennessee, Knoxville, TN 37996-2350, prior to the conference.

Annual Meeting. The annual meeting of the Coblenz membership will be held prior to the Williams–Wright Symposium Tuesday morning, at the Pittsburgh Conference. Be sure to attend, since the general business of the Society will be conducted.

Wine & Cheese. The Coblenz Society wine and cheese reception will be held immediately following the Williams–Wright Symposium on Tuesday at the Pittsburgh Conference in Orlando (in the symposium lecture room).

COBLENTZ SOCIETY BOARD

<u>Name</u>	<u>Term Expires</u>	<u>Telephone</u>
Dr. Fran Adar Instruments S.A. 3880 Park Ave. Edison, NJ 08820	1999	(732)494-8660
Dr. Terry Gustafson Department of Chemistry The Ohio State University Columbus, OH 43210	1999	(614)292-1832
Dr. Nancy Klymko IBM Corp. Hudson Valley Research Park Route 52 Hopewell Jct., NY 12533	2000	(914)894-5752
Professor M. D. Morris Department of Chemistry The University of Michigan 930 N. University Ave. Ann Arbor, MI 48109-1055	2000	(313)764-7360
Dr. John Coates 12 North Branch Rd. Newtown, CT 06470	2001	(203)426-8495
Dr. Concetta M. Paralusz 1365 Carlisle Road North Brunswick, NJ 08902	2001	(732)828-9136
Dr. John Hellgeth 1330 Zephyr Court Cumming, GA 30133	2002	(770)205-0607
Dr. Richard McCreery The Ohio State University 100 West 18th Ave. Columbus, OH 43210	2002	(614)292-2021

COBLENTZ SOCIETY OFFICERS

President:	Dr. Arlene Garrison Director MCEC 102 Eastbrook Hall University of Tennessee Knoxville, TN 37966-1600	(423)974-2375
Secretary:	Dr. David Schiering Spectra-Tech, Inc. 2 Research Drive Shelton, CT 06484	(800)243-9186
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