

NEWSLETTER

No. 130

A Society for Applied Spectroscopy Affiliate
Editor: K. S. Kalasinsky

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Stop by the Coblentz booth at the Pittsburgh Conference and you meet your colleagues in spectroscopy. Arlene Garrison (past Coblentz president) may still be there!

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 request 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

After the Coblentz Society annual meeting in Orlando, I succeeded Arlene Garrison as the new president of the Society. I would like to personally thank Arlene for serving as president of the Society for the last two years. Arlene has given valuable advice to me on numerous occasions during the first six months of my tenure as president. I now appreciate even more her leadership, service, and hard work on behalf of the Coblentz Society. Arlene continues her service to the Society as immediate past president and as a member of the Coblentz Society Booth Committee.

At the Coblentz Society Board of Managers Meeting in Orlando, an important change in the Society-sponsored awards was made that is of general interest to the members. The board decided to increase the monetary value of the two awards for which the Coblentz Society is the sole sponsor. Therefore, the Coblentz Award and the Williams-Wright Award will both be increased from \$1500 to \$2500 (\$2000 for each award and \$500 each in support of travel to accept the award). The Coblentz Society continues to co-sponsor the Lippincott Award and provides independent evaluation and selection of the Bomem-Michelson Award winner each year. I would encourage ev-



Scenes from the past: (L to R) Dave Haaland (Coblentz Society president), Henry Buijs, and Bruce Chase enjoy discussions after one of the sessions at PittCon.

ery member of the society to consider submitting nominations for one or more of these awards. A highly competitive process will ensure that we continue to have award winners of the highest caliber. Nomination information about these awards can be found at our Web site at <http://www.Coblentz.org>.

One of my goals as president of the Coblentz Society was to elevate our Web site to such a level that vibrational spectroscopists would consider Coblentz.org as the first site to examine for finding information related to vibrational spectroscopy. In order to achieve this goal, I asked my son Ryan to help in the task of updating the Web site. Working to upgrade the site gave him an opportunity to learn Web authoring tools and allowed us to significantly increase the information content of Society's Web site. However, after over 60 hours of work, his computer crashed in early September. Unfortunately, the backup of the files was defective, and all our work on this project was lost. The next time around we will be more efficient and will use multiple backups, but clearly this effort will now be delayed until next year. In the meantime, I request that every member of the Society send me (dmhaala@sandia.gov) Web sites that they find useful in their pursuit of vibrational spectroscopy. I have already received a large number of useful Web addresses from James Duckworth, which has given us a good start for our upgrade efforts.

Another area of interest to the Society in general and to me in particular is the infrared database that is being generated through the joint Cooperative Research and Development Agreement (CRADA) between the Coblentz Society and NIST. This infrared library consists of some 8500 gas-phase digital IR spectra from NIST and ~ 10 000 spectra digitized from the Coblentz Society database. The database is currently expected to be complete by the end of the calendar year. Kathy Kalasinsky is the chairwoman of the NIST Oversight Board for the Coblentz Society, and Steve Stein is the principal investigator from NIST. Kathy and I met with Steve Stein at NIST in April of this year to discuss further progress of this project and to evaluate various strategies for marketing our joint product. In addition, I have had preliminary discussions with a number of commercial companies to identify appropriate marketing strategies. The topic of this new spectral library will be a primary discussion item at our Board of Managers meeting at FACSS in Vancouver. At the board meeting or shortly thereafter, I plan for decisions to be made about marketing the new database. It is also possible that the database will be made available for viewing at our Coblentz.org web site.

In evaluating the current by-laws of the Coblentz Society, I realized that some changes and clarifications are in order. I plan to discuss with the Board of Managers by-law changes that will provide a mechanism by which the members of the Board of Managers can designate an alternate to represent them when they are not able to attend the board meetings. Because of tight budgets and/or travel restrictions, there are often times when board members are unable to make the meetings of the Board of Managers. Each member of the board should be able to select from a list of former board members and Coblentz Society officers to represent their points of view at the board meetings. A change in this process will im-

prove the representation and orderly functioning of the Society. In addition, I will recommend that language be included in the by-laws to clarify that the president of the Society is a voting member of the Board of Managers of the Society.

As the new president of the Coblentz Society, it is my responsibility to make various committee assignments for the Society. I have been extremely gratified that everyone that I have asked to serve the Society has willingly agreed to the requested assignment. I wish to thank those who have finished their service to the Society on these various committees. I welcome those members who will now be joining these committees. Most of these assignments are for a three-year period. The former and future committee assignments are listed below.

Student Affairs. Rob McDowell completes 10 years of service as the coordinator for Student Affairs. In this capacity, Rob has solicited and helped select the many Coblentz student award winners over the past 10 years. Bob Messerschmidt has agreed to take over this position from Rob. Bob was asked to serve for three years.

Coblentz Award Committee. John Hellgeth finishes his assignment as chairman of the committee, but has agreed to continue on the committee for an additional three years. Mike Morris and Mounji Bawendi have completed their service on this committee. Pat Treado will be the chairman for the 2001 award. Joining Pat on the committee as new members will be Ed Stark and Mary Tungoll.

Williams-Wright Award Committee. Curt Marcott replaces Bruce Chase as chairman of the committee for the 2001 award. James Duckworth will replace Robin Garrell on the committee.

Bomem-Michelson Award Committee. John Coates has agreed to chair the committee for a second year for the 2001 award. Tom Niemczyk will be the chairman for the 2002 award. New committee members Connie Paralusz and Andy Sommer will replace Fran Adar and Peter Griffiths.

Lippincott Award Committee. Rich Palmer will replace Larry Nafie as one of two Coblentz representatives on the Lippincott Award Committee. Larry served as chairman of the committee last year.

Award Winners. New award winners have been selected for the 1999 Lippincott Award, the 2000 Williams-Wright Award, and the 2000 Bomem-Michelson Award. The winner for the Lippincott Award is Professor Mitsuo Tasumi. Larry Nafie chaired the selection committee, and Bruce Chase presented the award at the ICOFTS12 Conference in Tokyo. John Reffner was selected to receive the 2000 Williams-Wright Award. Bruce Chase chaired the selection committee and will present the award to John at the Pittsburgh Conference in New Orleans. John F. Rabolt was selected for the 2000 Bomem-Michelson Award. John Coates chaired the selection committee and will present the award to John at the Pittsburgh Conference in New Orleans.

In conclusion, I look forward to another 18 months as president of the society. With the cooperation and help of so many members and volunteers, I hope to see the Society continue to flourish and to foster the understanding and application of vibrational spectroscopy.

DAVID M. HAALAND



Scenes from the past: Mike Carrabba, who writes the Ode to Raman series, enjoys the beverage that stirs him to prose.

AN ODE TO RAMAN II, BY MIKE CARRABBA

We started the Raman symposium
back in 92' in Philly.
The codgity atomic spectroscopists
said we were silly.

They exclaimed, "You Ramn guys
spend too much time aligning your doubles and triples,
On the FACSS program, the most Raman will be
is a few lonely pimples."

I didn't listen to them then,
I knew that back in 92' we would not falter or stumble.
And added benefit to me that year,
was that I met Mary Tungol.

It is many years later;
the Raman Revolution has seen no sign of stopping.
At times it seems out of control,
but it keeps people like me hopping.

For you true Raman gurus
who have seen the Revolution unfold,
It is funny to see the old-school IR people
now being sold.

We have all known for years
that Raman is the best.
But now we only wish the equipment
cost less.

So you atomic spectroscopist stand up,
take notice and be forewarned:
Raman will eventually
rule the meeting before long.

So as you sip your wine and drink your beer,
Let's all thank Kaiser for providing the cheer.

COBLENTZ/NIST IR DATABASE

The Coblenz Society and the National Institute of Standards and Technology (NIST) have joined efforts to

produce a much needed digital infrared database for spectral searching and identification. The Coblenz 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 database and is now entering a joint effort to likewise produce an infrared database. 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 Coblenz will produce a digital infrared database for distribution through NIST as the *Coblenz/NIST IR Data Base*.

The initial product from NIST should be released soon and will contain approximately 20 000 spectra. Approximately half of the spectra are from the NIST/EPA library and half are spectra from digitized Coblenz reference data. Initially the IR database will include both gas-phase and solid-phase spectra but will be broken down into subsets by phase and compound class once the database is sufficiently large to warrant such. Specialty subsets of IR data much like the existing Coblenz reference volumes are on-line for production. The existing 10 000 spectra volume series of Coblenz data are also on-line for inclusion in the *Coblenz/NIST IR Data Base*. Updates of the database are scheduled to be produced periodically.

NIST will be providing additional data measurements and database compilation for distribution including software developments for data handling. The Coblenz 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 Coblenz Society will be collecting data sets and evaluating them for inclusion into the *Coblenz/NIST IR Data Base*. Contributors may retain the copyright for donated spectra or assign the copyright to NIST or the Coblenz Society.

If you are interested in this database 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 Coblenz Society requests nominations for the prestigious awards it supports:

Coblenz Award. The Coblenz 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 Campion (1987), Keith



Scenes from the past: Can you identify this FACSS astronaut?

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 \$2000 prize plus a \$500 travel allowance. Files of candidates will be kept active 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. Pat Treado, ChemIcon, Inc., 7301 Penn Avenue, Pittsburgh, PA 15208; phone (412)-241-7335; fax (412)-241-7311; e-mail treado@chemimage.com] on or before July 1, 2000.

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), Jean-

nette 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), Don Kuehl (1999), and John Reffner (2000).

This award includes a \$2000 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. Curt Marcott, The Procter & Gamble Company, Miami Valley Laboratories, P.O. Box 398707, Cincinnati, OH 45239-8707; phone (513)-627-2806; fax (513) 627-1233; e-mail marcottca@pg.com] before February 1, 2000.

Bomen–Michelson Award. This award is dedicated to the memory of Professor A. E. Michelson, developer of the Michelson interferometer. Bomen, 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, government, or private sector. The awardee must be 37 years of age. The award consists of a crystal symbol of the Bomen–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.

Previous recipients of the Bomen–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), Sandy Asher (1999), and John F. Rabolt (2000).

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 Bomen–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, 2000.

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 Delhay (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), Takeshi Oka (1998), and Mitsuo Tasumi (1999).

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 either 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, c/o Optical Society of America, 2010 Massachusetts Ave., N.W., Washington, D.C. 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, Coblentz Society Membership Chairman, 1330 Zephyr Court, Cummings, GA 30133.

Board Meeting. The Coblentz Society Board will hold its semi-annual meeting Monday evening, March 12th at the Pittsburgh Conference in New Orleans, Louisiana. Any article of business that you want the board members to consider needs to be sent in writing to Dr. David Haaland, Coblentz Society President (see address at end of newsletter), prior to the conference.

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

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

COBLENTZ SOCIETY BOARD

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John Hellgeth 1330 Zephyr Court Cumming, GA 30133	2002	(770)205-0607
Richard McCreery Ohio State University 100 West 18th Avenue Columbus, OH 43210	2002	(614)292-2021
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Dr. Andy Sommer Miami University Molecular Microspectroscopy Laboratory Oxford, OH 45056	2003	(513)529-2874

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