

The Coblenz Society

Newsletter

A Society for Applied Spectroscopy Affiliate
Interim Editor: Mary Carrabba

No. 165

Fall 2019

EDITOR'S COMMENTS

As announced in our last several issues, the Newsletter needs a new editor or editors. If you have an interest in writing about Society events, or cajoling others into service, please contact the Society's office.

PRESIDENT'S MESSAGE

Dear Coblenz Society Colleagues,

I hope this message finds you well and your scientific ventures successful. I am pleased to provide you an update on the Society's many activities in the latter part of our 65th year. As part of our mission to foster the understanding and application of vibrational spectroscopy, we are offering three grants to assist students and young career professionals. These include travel and childcare grants as well as scholarships for courses offered by our affiliate, Infrared and Raman Courses, Inc. For more information, please refer to our website: <http://www.coblenz.org/awards/grantsandscholarships>. I would like to thank officers Ellen Miseo and Luisa Profeta, and Board members Rohith Reddy and Shawn Chen, for their tremendous efforts to establish and publicize these three grants.

Furthermore, to cultivate the understanding and application of vibrational spectroscopy, the Society has expanded our wonderful speed mentoring program to the Eastern Analytical Symposium and Exhibition (EAS). For those of you unfamiliar with this program that will be held at SciX and EAS, it is a fun, fast-paced session where you can interact one-on-one with other scientists, as either a mentee or mentor, to expand your professional network. This event is free of charge, but registration is required. Again, I direct you to our website for more information. Many thanks to our past mentors and mentees for your participation and to Jim Rydzak for leading this outstanding event.

I am pleased that several members have volunteered to run for our governing board. You will learn more about these nominees in our upcoming election. I would like to thank Katherine Cilwa and David Tuschel, whose terms will be complete in October 2019, for their remarkable service as Coblenz governing board members. Although their terms are coming to an end, I am confident that Katie and David will continue to do wonderful things for the Society.

Additionally, my term as President will come to an end in October 2019. I am excited for Ellen Miseo, who has already done so much for the Society, to be taking over the role of Society President. I am so appreciative to have served with such dedicated and innovative governing board members and officers: Mary Tecklenburg, Richard Crombe, Katie Cilwa, David Tuschel, Shawn Chen, Rohith Reddy, Zachary Schultz, Fred Haibach, Nancy Jestel, Peter Larkin, Mark Druy, Luisa Profeta, and Ian Lewis. I give a special thanks to our amazing office manager and former President, Mary Carrabba who is essential for the Society. It is tremendous people like you that make the Coblenz Society great.

Finally, but most importantly, I give thanks to you, our members, for your service to the Coblenz Society. Through your membership and efforts, we can bestow prestigious awards to students, academics, and industrialists, to organize quality and representative spectroscopy focused sessions at conferences, to provide networking opportunities, and to deliver resources to advance your scientific endeavors. By encouraging the visibility, recognition, and community of quality science, we hope to highlight solutions and chart new opportunities in vibrational spectroscopy.

Regards,



Brandye Smith-Goettler
President of the Coblenz Society

COBLENTZ MEMBERSHIP REPORT

Contributed by Mary Carrabba, Office Manager

Good News! Our paid membership (at the time of this writing) is holding steady at 442 vibrational spectroscopists. In addition to the recurring renewal option we introduced last year, the Society now also offers a Lifetime membership. Welcome to our newest lifetime member, Marcal Plans Pujolras of Nestle Purina. Thank you for your commitment to your Society.

Of course, you can still pay your dues through the Society for Applied Spectroscopy (SAS). Renewals made through SAS should show up in your Coblenz account within one month. Anyone wishing to join the Society as a new member may do so by submitting an application at the Coblenz web site (www.members.coblenz.org/join), selecting the Coblenz Society when completing your SAS application, or by contacting the Society office (mary.carrabba@coblenz.org). As always, we welcome suggestions for honorary memberships in the Society from all members.

TREASURER'S REPORT

Contributed by Ian R. Lewis

The Society's financial position remains strong. We have a ladder of CDs valued at \$100,000 (with yields from 2.00 to 2.75%), which mature over a 30-month period, as well as approximately \$20,000 in our bank accounts. In addition to the CDs, the investment account includes a balanced mutual funds account and a federal money market fund. At the end of August approximately \$681,000 was in mutual funds, \$23,000 in the money market fund, and \$121,000 in CDs. The total value of the CDs and the maturity dates were chosen so that the Society could operate for two to three years, assuming no income, without needing to

tap into our mutual funds (a very conservative approach that provides some immunity from a potential stock market decline during that time period). Our investments have seen their value increase this year and our total assets now stand at approximately \$805,000.

In the table that follows you can see that the Society lost money last year. The budget for 2019 is also negative to the tune of \$22,000. This reason for the loss is that the Board is pursuing a policy of giving-back to the spectroscopic community by increasing award expenditures. This is being done by creating conference travel and child-care awards for early career scientists, increasing funding for member events, raising expenditures for educational activities, and increasing funds set aside to support conferences that support the Society's mission. Given the strong financial position of the Society, the Board is prepared to operate the Society at a loss for several years (if necessary) to deliver programs aligned with the Society's purpose. Putting the financial position of the Society in perspective with respect to our programs, the Society could operate at the current expense level with no income for the next 15 years (from this year, our 65th anniversary, through to the Society's 80th anniversary) before its resources were exhausted.

Why did I take up so much space in my report on finances? Well, I am the Treasurer! On a serious note, however, the Board is currently encouraging member input on member programs and needs; please submit your ideas and proposals to the Society's office or to the Society's President for consideration. The Society's mission is to foster the understanding and application of vibrational spectroscopy and is not to hoard a large unused financial reserve. However, having sufficient reserves to cover the short-term needs of the Society to deliver on its mission during changing times is prudent. As the financial income as well as the membership models of Societies like ours are changing, we owe a debt of gratitude to those in the Society's leadership who came before us and who had the foresight to invest in vehicles which allowed the Society to fulfill its purpose then and set the Society in good stead for tomorrow.

In closing let me, on behalf of the Society, thank those members and organizations that have chosen to make donations to the Society (and thus its purpose) in the last calendar year. I ask each of you to consider donating to the Society in 2019; even a \$10 donation from each member would allow us to fully support programming for another vibrational-spectroscopy-focused meeting or partial support for several early career scientists to attend meetings.

2019 PITTCOON REVIEW

Williams-Wright Award

Submitted by Ellen Miseo

The Coblentz Society's Williams-Wright Award is presented annually 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, instrumental development as well as theory, and applications of vibrational spectroscopy. 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 Coblentz Society.

The 2019 Williams-Wright Awardee was **Professor Dr. Wolfgang Petrich** of Roche Diagnostics GmbH, Penzberg, Germany and

2018 and 2019 Finances (through August 31)			
Income	2018 Actual	2019 Budget	2019 YTD
	(in dollars)	(in dollars)	(in dollars)
Member dues	8,583	7,000	6,700
Book sales and IR collection revenue	5,000	5,000	5,000
Sponsors and donations	208	2,500	125
Merchandise sales	787	600	544
FACSS/SciX Surplus Funds	426	0	0
Conference support (Pittcon and EAS)	5,000	5,000	500
Anticipated investment disbursement	5,097	11,075	6,323
Misc. (interest)	5	0	2
Total Income	25,146	31,175	23,713
Expenses	(in dollars)	(in dollars)	(in dollars)
Booth expenses (Pittcon, ISMS, FACSS/SciX, EAS)	98	250	75
Awards	6,958	20,965	6,323
Pittcon	319	350	118
ISMS (including reception)	500	750	500
SciX (including membership breakfast)	2,018	2,950	0
EAS (including reception)	2,397	3,000	0
ICTRVS, IR Courses, Spring SciX	750	5,250	0
New booth merchandise (shirts, etc.)	2,288	300	0
Educational Committee activities	0	400	0
General operating expenses (taxes, legal fees, insurance, office management, shipping, etc.)	14,793	19,089	10,069
Total expenses	30,420	53,304	17,085
Budget Total	(5,275)	(22,129)	6,628

Heidelberg University. This award was presented to Prof. Dr. Petrich in recognition of his work in the development and application of biomedical applications of infrared-based clinical laboratory instrumentation in the fields of metabolism, rheumatology, cardiology, and veterinary medicine



Long-time Coblentz Society member Gloria Story (right) discusses Society activities with a potential new member in the booth at Pittcon 2019.



Prof. Dr. Wolfgang Petrich, 2019 Williams-Wright Awardee.

as well as pioneering applications of quantum cascade laser (QCL) technology to biology and medicine.

Wolfgang studied physics at the Heidelberg University, Germany and at the ETH Zurich, Switzerland; he subsequently obtained his Ph.D. for research in atomic physics and quantum optics at the Max Planck Institute for Nuclear Physics (Heidelberg, Germany). He was awarded a Feodor-Lynen Research Fellowship by the Alexander von Humboldt Foundation to work as a postdoc on the topic of Bose-Einstein condensation with the later Nobel Laureates Eric Cornell and Carl Wieman at JILA, Colorado, USA.

Wolfgang engaged in academic research for two additional years at the University of Constance, Germany before he joined Boehringer Mannheim GmbH (later Roche Diagnostics GmbH). Here, he substantially contributed to biomedical applications of infrared-based clinical laboratory instrumentation in the fields of metabolism, rheumatology, and cardiology, as well as in veterinary medicine. Notably, he and his team conducted by far the largest and most comprehensive study of infrared-spectroscopy of serum in medicine at that time. He also performed the first direct comparison between NIR-Raman spectroscopy and mid-infrared spectroscopy of serum under clinically identical conditions with respect to the quantification of analytes. Wolfgang and his teams also pioneered the application of quantum cascade laser (QCL) technology to biology and medicine. The use of QCLs almost became an obsession such that Wolfgang (in addition to his full-time employment at Roche!) founded a small research group on biophotonics at Heidelberg University's Kirchhoff-Institute for Physics. This endeavor turned out to be quite successful; not only was this group among the first teams worldwide to design and build QCL-based infrared microscopes, but it was the first team to apply the technique to the microspectroscopy of biomedical samples. They were able to show that the usual measurement times for thin tissue sections for histopathology could be reduced by two to three orders of magnitude when

compared to FT-IR-based microspectroscopy. A typical tissue thin section can now be measured in seconds or minutes rather than hours or days without sacrificing spatial or spectral quality, thus constituting a big step on the path from benchtop to bedside. Recently, Wolfgang and his team were able to show fixed-frequency mid-infrared microscopy of living microorganisms in real time (i.e., 0.02 seconds/image) at VGA (640x480) format.

Today, Wolfgang is with Roche Diagnostics GmbH, Penzberg, Germany and, in his spare time, continues to research and teach at Heidelberg University. He has authored and co-authored many publications and patents and has served as an organizer of many biophotonics conferences such as SPEC 2006 and SPIE's biannual conference on biomedical vibrational spectroscopy at Photonics West.



2019 Williams-Wright Award Symposium speakers (from left to right): Ellen Miseo, Nick Stone, Laura Masson, Niels Kröger-Lui, Rohit Bhargava, Wolfgang Petrich. (©2019 Roy Engelbrecht – royephoto.com)



Ellen Miseo, Williams-Wright Award Committee Chair (left), Wolfgang Petrich, 2019 Williams-Wright Awardee (right). (©2019 Roy Engelbrecht – royephoto.com)

2019 ISMS REVIEW

2019 Coblenz Award

Contributed by Mary Carrabba

The Coblenz Society presented the 2019 Coblenz Award to Dr. Aleksandra Foltynowicz at the International Symposium on Molecular Spectroscopy (ISMS) in June 2019.

Aleksandra Foltynowicz studied physics at the Adam Mickiewicz University in Poznań, Poland, and Umeå University, Sweden; she received her M.Sc. in 2005. In 2009 she completed her Ph.D. in ultra-sensitive cavity-enhanced molecular absorption spectroscopy under the supervision of Prof. Ove Axner at Umeå University. Afterwards she spent two years at JILA, University of Colorado at Boulder, Colorado, USA, as a postdoctoral researcher in the group of Prof. Jun Ye. In 2012 she was appointed assistant professor in the Department of Physics, Umeå University, and in 2018 she was promoted to associate professor. She is married and has two daughters, born in 2015 and 2018.

Dr. Foltynowicz's research focuses on optical frequency comb spectroscopy for broadband precision measurements and multispecies trace gas detection. Her group develops new methods of near- and mid-infrared direct and cavity-enhanced comb spectroscopy, pushing the limits of sensitivity, resolution, and accuracy of the technique. She collaborates with many international and national partners. Her group pioneered a method of comb-based Fourier transform spectroscopy



2019 Coblenz Awardee Dr. Aleksandra Foltynowicz.

that overcomes the nominal resolution limit and enables acquisition of broadband spectra with kHz resolution. Her laboratory was the first to demonstrate comb-based photoacoustic spectroscopy, Faraday rotation spectroscopy, cavity-enhanced complex refractive index spectroscopy, and NICE-OHMS.

The contributions of Dr. Foltynowicz to science have been recognized by many awards and grants, including the Peter Werle Early Career Scientist Award (2016), Knut and Alice Wallenberg Foundation Academy Fellow (2015), the Royal Skytteen Society Award (2015), Swedish Research Council Project Grants (2013, 2017), and the Ingvar Carlsson Award from the Swedish Foundation for Strategic Research (2013).

2019 SCIX PREVIEW

Annual Membership Meeting Breakfast

The Society's annual membership meeting will be held at 7:00 a.m. Monday morning, 14 October, at SciX 2019 in Palm Springs, California. Please plan to join us for breakfast, networking, and a review of Society business matters. We will send out the official invite via an upcoming email announcement. Stay tuned!

Speed Mentoring Event

Once again, the Coblenz Society in partnership with the Society for Applied Spectroscopy will hold our Speed Mentoring session. This event has been well received, fun, and enlightening for all who have attended in past years. Speed Mentoring is a fast-paced session that enables a structured interaction with a dozen or more spectroscopists from various industries, academia, and government labs that enable the mentees to get an understanding of what it's like to work in those areas. These interactions can be the basis of an ongoing mentoring relationship session if that is of interest and is a wonderful networking opportunity for job hunting or just getting a better understanding of life as a spectroscopist. The session will be held Monday, 14 October from 11:45 to 1:15 p.m.

Mentees will have the opportunity to meet chemists from various phases of industry, academia and government labs and discuss career options in those fields and what it is like to work in those environments.

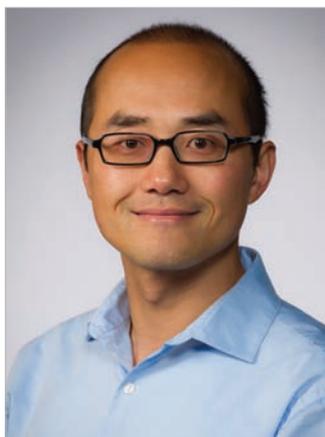
Mentors will have the opportunity to share your work experiences with young analytical chemists eager to learn about career opportunities and the best way to pursue them. It's a great way to share your experiences with the next generation of spectroscopists!

You can register on-line for the Speed Mentoring session at the Coblenz website members.coblenz.org. Those who register will get a free boxed lunch! Please register for the 2019 Speed mentoring event!

Craver Award

Contributed by Mary Carrabba

The Craver Award recognizes the efforts of young professional spectroscopists that have made significant contributions in applied analytical vibrational spectroscopy. The Society named this award for Clara D. Craver in recognition of her pioneering efforts in promoting the practice of infrared vibrational spectroscopy, and her many years of service to the Coblenz Society. Clara Craver was the editor of the Coblenz Society's *Desk Book of Infrared Spectra*, and other subsequent libraries, that later became databases of infrared spectra. These libraries are the foundation for the application of modern vibrational spectroscopy. Her efforts resulted in



Dr. Shawn (Xiaoyun) Chen, winner of the 2019 Craver Award.

the creation of the investment fund that supports the Coblenz Society and many of its annual awards.

The 2019 Craver Award goes to one of our Society's own, Dr. Shawn (Xiaoyun) Chen. Shawn is currently a senior research scientist working at Core R&D Analytical Sciences, the Dow Chemical Company, where he applies all types of optical spectroscopy tools for problem-solving in both R&D and manufacturing and engineering projects. Shawn has been leading Dow's global optical spectroscopy technology network since 2013 and the molecular structure capability since 2016. Shawn has mentored many junior spectroscopists and introduced many non-spectroscopist users such as process engineers and synthetic chemists to the wonderful world of in situ spectroscopy for reaction and process monitoring and in-field deployment. Shawn's current work involves collaboration with many world-class experts in their own fields such as organic synthesis, catalyst discovery and development, reaction scale-up and optimization, and process analytical, to accelerate and improve their R&D processes by optical spectroscopy. Shawn has successfully introduced and implemented in situ spectroscopy to more than ten Dow sites globally, which has won him multiple awards within Dow.

Prior to joining Dow, Shawn obtained his Ph.D. at the University of Michigan (2002-2007), under the guidance of Professor Zhan Chen. His research focused on the development of sum frequency generation vibrational spectroscopy as a powerful tool to investigate bio-interfaces. His thesis research won him multiple prestigious awards such as the 2007 Kasimir Fajans Award, nomination for the 2008 National Distinguished Dissertation Award, and 2007 Distinguished Dissertation Awards. Shawn received his B.S. from Tsinghua University, Beijing, China, studying polymeric materials and their applications in tissue engineering.

Shawn has been a member of the Society for Applied Spectroscopy and the Coblenz Society since 2013. He is currently serving on the Board of Managers for the Coblenz Society and as the Newsletter Editor for the Society for Applied Spectroscopy. Shawn has been chairing a session on industrial applications of vibrational spectroscopy at SciX every year since 2015.

Lippincott Award

Contributed by Mary Carrabba

The Ellis R. Lippincott Award is presented annually to an outstanding vibrational spectroscopist. It is co-sponsored by the Coblenz Society, the Society for Applied Spectroscopy, and The Optical Society (OSA). The award is presented in memory of Professor Ellis R. Lippincott to scientists who have made significant contributions to vibrational spectroscopy as judged by their influence on other scientists.

The 2019 Ellis R. Lippincott Award will be presented to Ji-Xin Cheng of Boston University "for outstanding contributions in inventing and developing a broad spectrum of vibrational spectroscopic imaging technologies with groundbreaking discoveries and clinical applications." Ji-Xin Cheng attended the University of Science and Technology of China from 1989 to 1994 and pursued a PhD study on bond-selective chemistry from 1994 to 1998. In 2000, he joined Sunney Xie's group at Harvard University as a postdoc. Cheng subsequently joined Purdue University in 2003 as Assistant Professor and was promoted to Associate Professor in 2009 and Full Professor in 2013. He joined Boston University as the Inaugural Moustakas Chair Professor in Photonics and Optoelectronics in 2017.

Ji-Xin Cheng has devoted his career to transforming molecular spectroscopy from an in vitro analytical tool to a set of in vivo



2019 Ellis R. Lippincott Awardee Ji-Xin Cheng.

label-free chemical imaging platforms for the discovery of hidden signatures inside living systems and further translation of the discoveries into medical diagnosis and treatment strategies.

Student Awards

For many years, the Coblenz Society has recognized outstanding young scientists pursuing studies in vibrational spectroscopy with Coblenz Student Awards. The awardees receive the Society's *Desk Book of Infrared Spectra*, a certificate, SciX registration, and a year's membership in the Society. Two students have been selected for 2019 and will be attending SciX. They will be recognized during the Sunday night poster session and conference opener supported by SAS and FACSS. Get a sneak peek of our Coblenz and Fateley Student awardees by visiting <http://www.coblenz.org/awards>.

Do you have a student in mind that you'd like to see recognized? Nominate them for our next round of awards. Check out our Call for Award Nominations section to find out how.

EASTERN ANALYTICAL SYMPOSIUM 2019 PREVIEW

Contributed by Brandy Smith-Goettler

2019 will be an exciting year for EAS with the theme being "Enhancing Analytical Chemistry with Sustainable Solutions." EAS will be at the Crowne Plaza Princeton Conference Center in Plainsboro, New Jersey, 18–20 November 2019. EAS serves scientists in the analytical and allied sciences via an annual meeting consisting of technical papers, short courses, workshops, an exposition, and other activities. The Coblenz Society contributes to EAS by having scientifically relevant vibrational spectroscopy focused sessions and networking opportunities. The Coblenz Society has organized two sessions and a speed mentoring session to serve our objective of fostering the understanding and application of vibrational spectroscopy. These sessions are titled "Applying Data Science to Spectroscopy" and "Process Analytical Technology - Modeling Applications to Support Continuous Manufacturing." Speed Mentoring is a fun, fast past session that enables a structured interaction with a dozen or more Analytical Chemists with different specialties from various industries, academia, and government labs that enable the mentees to get an understanding of what it's like to work in those areas. As is our tradition, we will host a Coblenz members reception Monday evening, 18 November. Members, please join us at the reception and our booth as we celebrate Coblenz's 65th anniversary.

COBLENTZ LINKEDIN GROUP

If you have not already joined, the Society encourages you to join us in the Coblenz LinkedIn group! It is a lively, useful tool where members can share professional news and articles of interest, ask questions, or post jobs. We currently have 594 members and growing! We hope to see you online at: <http://www.linkedin.com/groups?gid=1831157>.

CALL FOR AWARD NOMINATIONS

The Williams-Wright Award is presented to an industrial spectroscopist who has made significant contributions to vibrational spectroscopy while working in industry. Government labs are not considered industry in this definition. The Awardee must still be working at the time the award is presented. Nominations will be accepted until **May 1**.

The Coblenz Award is presented annually to an outstanding young molecular spectroscopist under the age of 40 (as of January 1 the year of the award). Nominations will be accepted **January 3–July 15**.

The Craver Award recognizes young spectroscopists for efforts in applied analytical vibrational spectroscopy. Candidates must be under the age of 45 on January 1 of the year of the award. Nominations will be accepted until **October 30**.

The Lippincott Award honors Dr. Ellis R. 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. Nominations will be accepted until **October 1**.

Coblenz and William G. Fateley Student Awards are awarded to graduate or undergraduate students who have shown excellence in vibrational spectroscopy research and/or coursework. The three leading graduate students selected by the award committee will also qualify for consideration for the William G. Fateley Student Award. Nominations will be accepted **November 1–February 15**.

Honorary Membership: The Coblenz Society awards honorary memberships in the Society to people who have made outstanding contributions to the field of vibrational spectroscopy or any other field related to the purposes of the Society. Nominations close on **February 1**.

Additional information regarding nomination eligibility, requirements, procedures, and past awardees can be found at <http://www.coblenz.org/awards>.

SOCIETY ANNOUNCEMENTS

Membership

Member Business Suggestions and Requests

The Society's Board of Managers hosts Board meetings via teleconference regularly throughout the year. Any article of business that you want the Board to consider must be sent to the Coblenz Society President prior to meetings.

Anyone wishing to join the Society or renew their annual dues may do so at the Coblenz web site (www.members.coblenz.org/join) or by contacting Dr. Katherine Cilwa, Coblenz Society Membership Chair (katherine.cilwa@coblenz.org). We also welcome suggestions for honorary memberships in the Society.

COBLENTZ SOCIETY OFFICERS

President: Brandy Smith-Goettler
(brandymichelle_smithgoettler@merck.com)

President-Elect: Ellen Miseo
(ellen.miseo@gmail.com)

Secretary: Luisa Profeta
(lprofeta@fieldforensics.com)

Treasurer: Ian R. Lewis
(ian.Lewis@endress.com)

Newsletter Editor: open

Office Manager: Mary W. Carrabba
(mary.carrabba@coblenz.org)

COBLENTZ SOCIETY BOARD

Term expires October 2019

Katherine Cilwa (kcilwa@gmail.com)
David Tuschel (dtuschel@gmail.com)

Term expires October 2020

Xiaoyun (Shawn) Chen (XChen4@dow.com)
Rohith Reddy (rkreddy@central.uh.edu)

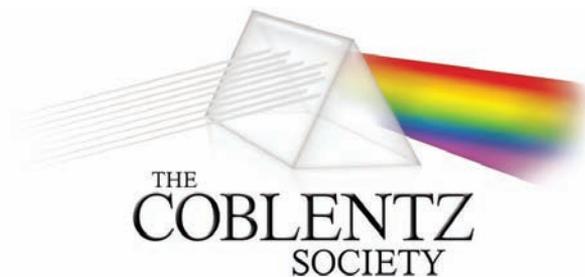
Term expires October 2021

Fred Haibach (fhaibach@confluentscience.com)
Zachary Schultz (schultz.133@osu.edu)

Term expires October 2022

Nancy Jestel (nancy.jestel@gmail.com)
Peter Larkin (larkin.peter.j@gmail.com)

Call for Award Nominations
The Coblenz Society
www.coblentz.org



Coblentz Award
Williams-Wright Award
Ellis R. Lippincott Award
Craver Award
Coblentz and Fateley Student Awards
Honorary Membership

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Honorary Membership in the Coblenz Society is awarded to people who have made outstanding contributions to the field of vibrational spectroscopy. Nominations close on February 1st each year.

All nominations for the Coblentz, Williams-Wright, Craver, Student and Fateley Awards should be submitted in a timely fashion to: nominations@coblentz.org

For detailed instructions on The Lippincott Award nomination submission process visit http://www.osa.org/en-us/awards_and_grants/awards/award_description/ellislippincott/

Additional information regarding eligibility, nomination requirements, and nominations procedures can be found at <http://www.coblentz.org/awards>