Small Chem Biz

Division of Small Chemical Businesses
American Chemical Society



August 2020

Volume 50, Issue 2

SCHB CALENDAR

August 16-20, 2020 260th National Meeting Virtual Meeting & Expo

October 14, 2020

Southwest/Southeastern Regional Meeting (SWRM/ SERMACS)

New Orleans, LA

March 21-25, 2021

261st National Meeting San Antonio, TX

August 22-26, 2021

262nd National Meeting Atlanta, GA

December 16-21, 2021

Pacifichem Honolulu, HI

CONTENTS

Chair Message1
Programming2-3
National2
Regional3
Division News4
Member News4
Membership5-6
Booth6
Exec Committee7
Articles8-12

MESSAGE FROM THE CHAIR



Dear Division members,

This year has been very different from what many of us had anticipated. Due to the effects of Covid-19 and the related travel restrictions, many events that we have been accustomed to have been cancelled. Both National Meetings have been converted into virtual meetings. Regional meetings and Local Section events

have been impacted. Many of you have been participating in virtual meetings through Zoom or other platforms. The Fall 2020 ACS National Meeting will be taking place entirely in a virtual format. For those of you who register for the meeting, you will have access to all of the sessions live and after the meeting is over. There will be a number of Technical Sessions as well as some Networking Events for attendees to participate in. Council will also be conducted online. In the following pages, information is presented on SCHB's Technical Sessions, poster session, and Sci Mix posters, and our annual SCHB Business Meeting. Keep in mind, because this meeting was scheduled to be in San Francisco, all meeting times are listed in the **Pacific Time Zone**. I hope you will join us for some or all of our events.

Some upcoming SCHB events include our participation in Pacifichem. The organizers postponed Pacifichem until 2021. SCHB has two sessions being organized by our members. We also have a technical session scheduled to be part of SERMACS in October. At press time, the meeting is scheduled to take place on time in New Orleans.

The next National Meeting is scheduled to be in San Antonio, Texas, in March 2021. Details will be forthcoming this Fall. Abstracts will also open this Fall. We will be looking for presenters for our sessions. In addition. SCHB has many great volunteering opportunities, and WE WANT YOU! So please keep an eye out in the coming weeks for SCHB eBlasts with details about upcoming events and chances to volunteer. Sincerely,

George Ruger SCHB Chair

August 16 - 20, 2020 | Virtual

ACS National Meeting & Expo

Moving Chemistry from Bench to Market

PROGRAMMING

ACS Fall 2020 VIRTUAL MEETING & Expo

Chemistry from Bench to Market
Judy Giordan & Janet Bryant (thematic chairs)
Broadcast Sessions

SCHB's Technical Program:

Don't miss the first virtual ACS National Meeting! SCHB members Judy Giordan and Janet Bryant are thematic programming co-chairs. Great job, way to go, ladies! All times shown are PDT - please adjust for your time zone! The official meeting is Monday to Thursday, August 17-20, 8 A.M. - 5 P.M. SCHB's program includes Sustainable Green Chemistry: Bench to Market (CELL, MPPG) for three days of broadcast sessions, organized by ACS President-Elect H.N. Cheng. Abstracts will be posted no later than Friday, August 14 at www.acs-schb.org.

Monday, Tuesday, and Wednesday 8-10 A.M. and 1-3 P.M. PDT - Sustainable Green Chemistry: Bench to Market

Look for SCHB at Chemical Business Poster Session, from Bench to Market (BMGT) and Sci-Mix, Tuesday 3-5 P.M. PDT

SCHB, CHAS, and BMGT will host a virtual social reception via Zoom, Monday, 5-7 P.M. This event is "after hours" and "off site" and registration for the meeting is not required, but you need an invite code; contact PR@acs-schb.org.

Want to "discuss business" with other SCHB members and meeting attendees? Meet old friends and make new relationships? ACS is providing each technical division with breakout Zoom rooms: from the meeting portal, just click the link to enter. SCHB's schedule, as well as other divisions, is posted at:

SCHB Zoom Networking Schedule

The schedule for all presentations, broadcast, ondemand and posters is at:

https://www.acs.org/meetings

On Saturday, August 15, SCHB will hold its Annual Business Meeting and Semi-Annual Executive Comimttee Meeting, starting at 6 P.M. and 6:15 P.M., respectively. Both meetings are open, all are welcome, and meeting registration is not required. For a Zoom invite, code, contact PR@acs-schb.org.

Stay tuned to our Facebook page for frequently updated content: fb.me/SCHBD and/or follow SCHB on Twitter @ACSSCHB. Be sure to use #ACSFall2020.

In these times of COVID, if you would like to attend the National Meeting and request hardship support, please send a message to the treasurer at www.acs-schb.org/contact-us.

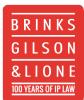
Business-related SWAG!!!



Contact SCHB for business-related SWAG!

SHARE YOUR ACHIEVEMENTS

Notify Newsletter Editor Adam Sussman at: acs-schb.org/contact-us/ for recognition of your accomplishments in an upcoming issue. Please send any content to be included in the next newsletter by October 1, 2020.



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Adam D. Sussman, Ph.D. Intellectual Property Attorney asussman@brinksgilson.com

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to partner on entrepreneurial local section events and/or to collaborate with us on symposia at National/Regional Meetings.

REGIONAL MEETING REPORT

At press time, Vercellotti (CARB, organizer Jane Thomas) and Chemical Business Resources & Best Practices (organizer Joe Sabol), www. swrm2020.org/.

The next regional meeting that SCHB has eyes on is 44th GLRM (Minneapolis), June of Diversity and Inclusion in Chemistry, https://www.glrm2021.org.

contact the program committee, http://acs-org. schb.org/contact-us/. Thank you!

PACIFICHEM PREVIEW

Pacificem is re-scheduled for Honolulu, December 16-21, 2021, with theme ACreative Vision for the Future. Symposia organized by SCHB members include:

- Chemical Business Best Practices for Global Challenges (Adam Blunn & Joe Sabol)
- Chemists and the Public: The Role of org Informal Science Education (Jennifer Maclachlan)

400+ other symposia are on the program. Abstract submission opens January 4, 2021. For more information, See www.pacifichem. org.

Stay tuned to our Facebook page for frequently updated content: SCHBD and/or follow SCHB on Twitter @ACSSCHB. We hope to see you at a Regional Meeting!

MOLECULES MISBEHAVING? Gremlins in your resin kettle? Equilibrium shifting? pH imbalance? We can help! Semiconductors, metals/oxides, polymers, coatings, chemical and materials analysis, market research, regulatory issues,...and more! www.chem-consult.com

SCHB Friday Sessions

SCHB was planning Starting in late March, SCHB implemented a weekly to participate at 76th SWRM & 72nd zoom/call-in video conferencing opportunity to "discuss SERMACS (New Orleans), October 14-17, business" with other members and guests. A mix of specifwith Symposium In Honor of Sharon & John ic topics of interest in chemical business and entrepeneurship, or a general open forum on what's working and what isn't - just like we would in person, at an ACS conference.

These sessions are generally, but not always, late Friday afternoons around happy hour time. SCHB members take this time to engage with others and share informal advice on the business and personal challenges facing everyone. Until we can again meet in person at ACS National, Re-6-9, 2021, theme: Elevating the Importance gional, or Specialty meetings, this is the way SCHB members stay in touch!

The schedule rotates to accommodate the time zones and is posted at www.acs-schb.org but is also in your weekly If you have an opinion of SCHB participation SCHB e-blast news. If you are not an SCHB member, just at any ACS Regional Meeting, please request a complimentary invite code from PR@acs-schb.

OTHER UPCOMING EVENTS

10 Start-Ups to Watch, virtual event in November 2020, Melody Bomgardner and C&EN

Pittcon 2021, Connections That Matter, March 6-10, New Orleans

44th GLRM, June 6-9, 2021, Minneapolis, https:// www.glrm2021.org/

Pacifichem, Honolulu, December 16-21, 2021, A Creative Vision for the Future, www.pacifichem.

Jennifer Y. Tanir, Ph.D.TOWARD Founder SAFER LLC

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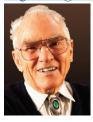
Mark Vreeke mark.vreeke@chemicalangels.com Sid White sid.white@chemicalangels.com Judith Giordan judy@giordan.com

www.ChemicalAngels.com

Call for Papers: Honoring Gerry Meyer

Catalysis Today and the American Chemical Society (ACS) Divisions of Energy and Fuels (ENFL) & Small Chemical Businesses (SCHB) are pleased to announce a special issue highlighting research around the symposium, *In Honor of Gerry Meyer: The First 100 Years*, at the 2019 ACS National Meeting in San Diego.

Catalysis Today Editors and ENFL & SCHB Division leadership look forward to highlighting Gateway to Novel Energy Conversion Technology In Honor of Dr. E. G. (Gerry) Meyer, to recognize high-quality energy, and catalysis research. All manuscripts are peer-reviewed. The submission window remains open until October 2020: https://www.journals.elsevier.com/catalysis-today/call-for-papers/special-issue-gateway-to-novel-energy-conversion. For any questions, please contact Prof. Jingbo Louise Liu at Jingbo.Liu@tamuk.edu.



Photos of Gerry Meyer, ACS Fellow, and University of Wyoming Professor Emeritus of Chemistry





SCHB Member News

SCHB members are always making news! Here are the ones we know about. If we missed you, please send a short copy, in a style similar to shown below, to news@acs-schb.org and we'll add it to the list. If you can keep to <140 characters great, but send what you have. We'll also share on the SCHB website, LinkedIn, Twitter, and Facebook, so include your tags so you'll know when we post.

Mukund Chorghade, SCHB member, was interviewed in ACS Industry Matters in innovation, published April 16, 2020, where he answered the questions, "Who should be the CEO of your entrepreneurial venture? What kind of products could oxidation improve?" <u>Link</u>

Lisa Balbes, SCHB member, was interviewed in ACS Industry Matters, published April 23, 2020, "What I Learned". Link

Natalie LaFranzo, SCHB member, was interviewed in ACS Industry Matters in Career Perspectives, published April 16, 2020, where she answered the question, "What are some ways to cope with or combat gender bias in in the workplace?" Link

Natalie also discussed "Ways to Deal with Workplace Conflict in ACS Industry Matters, August 6, 2020. Link

Bill Carroll, SCHB member & ACS Past President, in ACS Industry Matters on COVID-19: "Science matters. Scientific method and methodologies matter. Being careful and getting it right matters." Link

Bill also published "Comment: Advancing sustainability in the pharmaceutical industry" in C&EN, May 4, 2020. Link

Bill further discussed "What are my options if I'm ready for a change but not ready to retire?" in ACS Industry Matters, July 16, 2020. HIs advice may have applications to other areas of your life, too. Link

Beth Bosley, SCHB member & Boron Specialties CEO, was interviewed in C&EN on March 23, 2020, about keeping staff healthy & continuing operations during COVID. Link

Beth also discussed her plans to brace for recession in May 4, 2020 C&EN. Link

Wilson Hago, SCHB member, reports that he is a participant in the NASA CO₂ Conversion Challenge. <u>Link</u> the workplace?" <u>Link</u>

K.M. Abraham, SCHB member, was featured as an expert in C&EN's Discovery Report, "Future of Batteries." ACS and C&EN sought advice from experts to weigh in on the materials and process that matter most for future technology. The work Dr. Abraham and his team carried out in the late 1970s and early 1980s contributed to an early practical rechargeable lithium battery. K.M. is alo an inventor of the ultrahigh energy density lithium-air battery, has authored more than 200 publications, and holds 16 U.S. patents.

MEMBERSHIP

SCHB PATRON MEMBERS

Thank you to all of the **SCHB Patrons**, who as corporate members wish to foster the Division's objectives to aid in the formation, development, and growth of small chemical businesses.

Corporations or organizations wishing to become Patron Members are those that wish to foster the Division's objectives as defined in the SCHB Bylaws II, Section 3. These objectives include the following:

- To aid in the formation, development, and growth of small chemical businesses.
- To address the legal, social, educational, legislative, regulatory, and economic needs of self-employed chemists and ACS members who are employed by small chemical businesses.
- To encourage, promote, and organize personal interaction among members of the Division and other chemists, institutions, or organizations interested in the promotion of free enterprise among chemists.
- To serve as a clearinghouse for information about services available to members engaged in or planning to start small chemical businesses.
- To provide liaison between small chemical businesses needing part-time employees and chemistry students needing income and experience.
- To provide the expertise and experience of its members to the SOCIETY and for the betterment of the public.

Hats off to our Patrons and Sponsors of SCHB events, and their Liaison Members.

Interested in becoming an SCHB Patron?

Annual Dues: • Patron \$200. Sponsorship Opportunities: • \$500 • \$1,000 • \$1,500

Annual dues for Patron Members are \$200. An alternate way to be a Patron Member is to Sponsor an event at an upcoming ACS National Meeting at the \$500, \$1,000, or \$1,500 level. Ask any SCHB Officer on how your organization can qualify for Patron Membership. Pay Now via credit card (http://acs-schb.org/patron-member-ship/), or (preferably) ask for an invoice by emailing SCHB Treasurer David Deutsch (at treasurer@acs-schb.org), and pay via check.

Further details at: http://acs-schb.org/pa-tron-membership.

Find out more about SCHB!

To find out more about SCHB, membership benefits, events, and how you can contribute, visit the SCHB websites:

http://acs-schb.org/

https://schb.sites.acs.org/

Listen to Jennifer Maclachlan talk about how SCHB is the home for entrepreneurs in ACS - whether chemists or not!

https://youtu.be/YxCHgwfOvSg

Share Your Thoughts with SCHB Members

We hope you enjoy *Small Chem Biz!*Your articles, comments, and suggestions are welcome. SCHB's mission includes publishing articles relevant to chemical business - small or large. Submission deadline for the next issue is

October 1.

If you have an idea, but are not sure it would suit an article, contact newsletter@asc-schb.org.

VOLUNTEER WITH SCHB

None of SCHB's valuable benefits and activities would have been possible without volunteers like you. If you want to expand your professional network, enhance your leadership skills, or shape the future of SCHB, consider volunteering in a more active role to further SCHB's mission.

Potential roles include Webmaster Assistant, Sponsors Development, Membership Support, Graphic Designer, Assistant Newsletter Editor, or any other ideas you have. Contact any SCHB officer to learn more.

Business-related SWAG!!!



Contact SCHB for your business-related SWAG!

FOLLOW SCHB ON SOCIAL MEDIA

@ACSSCHB and @ACSNatlMtg Use #ACSFall2020! www.acs-schb.org

CONTACT THE SCHB EXECUTIVE COMMITTEE

http://acs-schb.org/contact-us/

OPPORTUNITY for Entrepreneurs - Start-ups - Small Businesses

ACS National Meeting Expo Booth at a Deep Discount

SCHB Members Only! Low-cost Expo Booth Space: \$700 Booth Cost | \$500 Registration
This is one of many SCHB membership benefits.

Showcase your business in front of 12,000+ chemical professionals, from all chemical disciplines, who attend each live American Chemical Society (ACS) National Meeting and Exposition:

- Experience the promotional opportunities of a professional trade show booth at a special introductory rate, which is a fraction of its usual cost (and also includes a technical-meeting registration to the ACS meeting a \$490 value) with fully furnished 10x10 ft. booth.
- Only the SCHB Division can offer you this special discount for a display booth at live ACS National Meetings.
 DON'T MISS OUT!
- Act now by reserving for the next live ACS National Meeting at special rates.
- Contact: Dr. Niteen Vaidya, SCHB Booth Coordinator, at expo-booth@acs-schb.org.

Who: Chemical Entrepreneurs, Start-ups, and Small Businesses.

What: Exhibit space at ACS National Meeting Expositions.

When: Spring 2021, San Antonio (March 21-25).

Cost: \$700 for SCHB members, who are first-time participants.

How: (1) Must be SCHB Member (if not, Join: http://acs-schb.org/join-schb/)

(2) Must apply via SCHB.

(3) Must be a small business (less than 50 chemical employees).

(4) Must have a minimum \$1 million liability insurance policy.

(Past exhibitors at an ACS Expo do not qualify for this special rate. To discuss: Contact Dr. Niteen Vaidya, SCHB Booth Coordinator, at expo-booth@acs-schb.org.)

SCHB promotes formation and growth of small businesses; organizes programming on educational, legal, legislative, regulatory, economic issues; and networking, mentoring, and discussion to put chemists at the innovation vanguard. It's easy to join SCHB! Go here or contact ACS Member Service 800-333-9511 (US); +614-447-3776 (Outside the US); or service@ acs.org.

MEMBERSHIP BENEFITS:

Discounted Expo Booth at National Meetings

Advance Copy of Newsletter and Monthly E-Blast

Listing in Member Links Business Directory

Scholarship for ACS Leadership Institute Courses

Reception with Speakers and VIPs at National Meetings

"Discuss business" with like-minded Members

In-person & 24/365 Social Media Networking

Eligible to hold SCHB office and shape direction

Business-related SWAG...and More!

To join SCHB, contact ACS Member Services or contact SCHB Membership Chair. Join today:

www.acs-schb.org/contact-us/

Membership is FREE for the first year for ACS Members!

FUTURE NATIONAL MEETINGS

261ST ACS Meeting

San Antonio, TX March 21-25, 2021

Bonding through Chemistry

262nd ACS Meeting

Atlanta, GA August 22-26, 2021 Resiliance of Chemistry

263rd ACS Meeting

San Diego, CA March 20-24, 2022

Bonding Through Chemistry

263rd ACS Meeting

Chicago, IL

August 21-25, 2022 Sustainability in a Changing World

264th ACS Meeting

Indianapolis, IN March 26-30, 2023

Crossroads of Chemistry

265th ACS Meeting

San Francisco, CA

August 13-17, 2023 Harnessing the Power of Data



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SCHB PRESENTERS' BENEFITS

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acs-schb.org/contact-us/

Celebrating Sharon and John Vercellottis' Careers and Lifetime Dedication to SCHB

by Adam D. Sussman, SCHB Newsletter Editor

In 1978, Sharon Vergez Vercellotti went to her husband John with an idea for a small chemical business to implement the fifteen years of research and expertise that she had developed in carbohydrate chemistry. At the time, John Vercellotti was a visiting professor at the G. Ronzoni Institute of the University of Milan in Italy. Sharon was performing research at the Institute, related to the structure and function of glycosaminoglycans. Together, Sharon and John could envision that glycobiology would be a growing field, with a need not only for analytical and synthetic work, but also for supplying all of the stereoisomers and interglycosidic linkages. Sharon and John would go on to develop V-LABS, INC., in Sharon's hometown of Covington, Louisiana, at which Sharon would serve as the President for forty years, and John as Vice-President and Senior Chemist. For over four decades, V-LABS, INC. has provided consulting, manufacturing, and analytical chemistry services to chemical researchers, primarily in the field of sugar carbohydrates. But when V-LABS opened its doors, none of its customers were located in the state of Louisiana. Sharon and John credit the company's international recognition to outreach fostered through the American Chemical Society, and specifically, the Division of Small Chemical Businesses ("SCHB"), the development of which principally featured the Vercellottis.

Sharon and John's partnership didn't begin in Milan, and it didn't originate at V-LABS. Rather, at the Ohio State University, John obtained his Ph.D. in Chemistry in 1963, and became a lecturer in general chemistry, and Resident research associate thereafter. Meanwhile, Sharon graduated with a B.S. in Chemistry from Louisiana State University in 1963, and then began pursuing her Masters research as a Research Fellow at Ohio State. John was assigned five "available" graduate students, and Sharon was the one who captured his attention.

From Ohio State, the pair moved as a team, John teaching, and Sharon gaining knowledge and expertise. John first taught Chemistry at Marquette University, then at the University of Tennessee, while simultaneously a USDA funded researcher at the Northern Regional Laboratory in Peoria and the Oak Ridge National Laboratory. Meanwhile, Sharon performed research at the Graduate Research Center of the Southwest, in Dallas, Texas; subsequently, at Marquette's School of Medicine in Milwaukee; then at the University of Tennessee Memorial Research Center in Knoxville; and finally as a Laboratory Specialist at Virginia Polytechnic Institute in Blacksburg. By 1978, when working at the G. Ronzoni Institute, Sharon had developed broad expertise in enzymology and complex reaction mechanics.

Though Sharon's father provided the property in Covington at which V-LABS has spent 40 years, Sharon designed the laboratory herself and it was built according to her specifications, including the latest instrumentation for analytics, such as HPLC, GC, SEC, and UV-Vis. V-LABS opened in March 1980, and was the only company in the United States performing its niche analytics. Though V-LABS would go on to form business relationships throughout the Americas, it had no customer base in the state. Creating another set of challenges for the new company during the same time period, the Toxic Substances Control Act was being re-enforced, and the EPA was announcing its intention to drive out of the market small chemical businesses that weren't going to tow the EPA line for strict cradle-to-grave handling of toxic chemicals. The impetus to develop the SCHB arose from both the desire to source customers through national outreach, and the need to give small chemical businesses a voice in the enforcement of the TSCA. The SCHB held its first provisional meeting in 1979 in Washington, D.C. as a result. Sharon volunteered her time, performing outrach to provide experience to ACS members trying to start small businesses.

Sharon and John credit V-LABS' success to attending National and Regional ACS meetings, and to the SCHB booth at these meetings, which allowed them to speak to volunteers in various areas of chemistry. As a result, V-LABS was awarded grants for research from the National Institutes of Health and the National Science Foundation, and contracts with such prestigious companies as Becton Dickinson, the Tennessee Eastman Company, the Procter & Gamble Company, and Immudyne, Inc., the last of which has continued through to the present day. V-LABS has also worked with the activated carbon and sugar industries in the refining of sugar for thirty years, accumulating sugar samples from all over the world.

V-LABS' relationship with Immudyne came from Sharon's expertise in immunopotentiation, or the nutritional value of carbohydrate isomers in stimulating the immune system for resistance to disease. Immudyne tasked V-LABS with isolating and purifying several of Immudyne's products, including an extract from yeast, as well as purifying a polysaccharide very significant to the human immune system.

Further, V-LABS teamed with Dextra Laboratories, headquartered in the United Kingdom, and which had

(continued from page 8)

limited distribution advertising access in the U.S.; Sharon, through her ACS SCHB outreach, became a "flagship" domestic advertiser for them. Consequently, V-LABS became the sole distributor and consultant for Dextra in the United States, generating thousands of new customers. Sharon and John exchanged with Dextra the advantages of using the thousands of various monosaccharide stereoisomers and glycosidic linkages that are now featured in the Dextra catalog.

On her own, Sharon designed a plant set of drawings for Immudyne to duplicate her bench chemistry from V-LABS, calling on her unit processing undergraduate studies in chemical engineering. The first plant was built in Florence, Kentucky, functioned there for fifteen years, and now construction has been completed on the second plant in Pensacola, Florida, where all of Immudyne's manufacturing is located today. Sharon also served as a mentor for numerous high school and college students at V-LABS, many of whom subsequently pursued studies and careers in the sciences, and four of whom obtained their doctorates in chemistry; three of the four doctorates were awarded to women.

Throughout the years, Sharon and John have remained active in paying it forward in outreach and education through SCHB. Together, they have authored book chapters that are essentially working manuals for anyone wanting to succeed in the chemical industries today, including basic business management and business development materials. In the 1980s, the NSF invited Sharon to be a representative of small chemical businesses in its review of grants to small technical industries. In this capacity, Sharon reviewed all proposals and performed site visits, which increased opportunities for outreach by SCHB. Sharon was also picked by the Committee for Economic and Professional Affairs ("CEPA") of the ACS, and served for 15 years, even while being Councilor for SCHB. Further, Sharon was picked by Marinda Wu for, and contributed a great deal of work to, the ACS' Presidential Task Force, "Vision 2025: Helping ACS Members Thrive in the Global Chemistry Enterprise."

Sharon and John have great memories associated with SCHB. Sharon helped to organize the 60th Northwest Regional and Small Chemical Businesses Meeting of the ACS in Fairbanks, Alaska, in 2005. All of the national officers of the ACS attended the meeting, which included a midnight softball game that was played in sunlight thanks to the summer solstice. Gerry Meyer arrived at the meeting to cheers and applause, having driven his motorcycle up the Yukon Highway to Fairbanks at 85 years old. Sharon extended the SCHB outreach to SERMACS in San Juan, Puerto Rico, in 2009, generating small chemical business interest and connections in Puerto Rico. Sharon and John presented on Opportunities in Small Chemical Business at the 42nd Midwest Regional Meeting in Kansas City in 2007, in partnership with the Kauffman Foundation. They also participated in the development of the SCHB website and newsletter beginning in 1996, which generated significant interest.

Asked to consider their ultimate successes, Sharon and John do not mention the commercial success of V-LABS. Sharon and John do recount the generation of the pentahelicene logo for SCHB. In 2010, Sharon held a competition at Southeastern Louisiana State University, and asked the chemistry and art students to propose logos for SCHB that would make a connection between chemistry and art. The winner actually came from the art department. Coincidentally, both Sharon and John were taught by Professor Melvin S. Newman, the distinguished organic chemist at Ohio State, who first synthesized pentahelicene. Further, Sharon and John mention their joy in reviewing the research of chemistry students at universities throughout the years, and awarding prizes. Numerous winners and competitors have come to work at V-LABS, and in no small part because they were mentees of Sharon, some have become active in government and large industries.

Among their greatest challenges, Sharon and John cite maintaining the input and output of finances and keeping ahead on the overhead of maintenance of the equipment necessary for their work at V-LABS, including all of their instrumentation.

As the work originally pioneered at V-LABS shifts to other companies and to individuals personally trained by the Vercellottis to continue their work, John is entering the "autumn" of V-LABS, managing the cradle-to-grave handling of the chemicals of the company and offloading of instrumentation. John notes, "There's a point when you have to slide into home plate." No sliding necessary, for as Sharon and John pass third base, the entirety of SCHB runs out from the dugout to cheer the Vercellottis' grand slam.

Business Mentors ARTICLES

by Harry J. Elston, Ph.D., CIH, PMP, Principal, Midwest Chemical Safety, LLC

You are an expert in your field and you're tired of working for someone else, and you believe you can do it better than your current employer. Emotionally, you're ready to break free, but where and how do you start? Recognizing that you need advice is as humbling as it is wise. "If you're going to build a house, ask someone who's built one first," the construction adage goes. Substitute "small business" with "house," and that piece of advice becomes invaluable as you make the decision to move from traditional employment to working for yourself.

Choosing A Mentor

A good mentor is best described as "one who has gone before." Mentors have, as the saying goes, "been there and done that." More importantly, they have learned valuable lessons from their time in business and are willing to share those lessons with whomever wants to listen. I have noticed some common characteristics among the best mentors I've had during my life:

- Passion for the profession: They have a passion for what they do, and they don't lose that
 passion when the going got rough.
- Passion for excellence or success: They strive to be successful.
- They are honest with those with whom they speak. I prefer brutal honesty over an attempt to make me feel good over a bad situation.
- They listen first, then speak with authority and clarity.

Ask: "What do I need in a mentor?" Do you need help choosing a business structure? Do you need help finding start-up funds or financing? Networking opportunities? All of the above and more? It can be a little overwhelming, but it doesn't need to be...

Finding A Mentor

Once you recognize what you want in a mentor, you need to find one. In general, small businesses may start with the U.S. Small Business Administration (www.sba.gov) and will be led to the private-public partnership of the Service Corps of Retired Executives, or "SCORE" (www.score.org). There are loads of SCORE chapters all over the United States; Illinois has over 100 of them, meeting primarily around larger cities. After working with SCORE for just a few months, I found them to be generalists with respect to business, and the offices near my residence were all retail-based experts as opposed to service or consulting experts. I needed something that was more closely aligned to my business type and needs, so I turned to my professional societies. "Societies" here is plural. For my consulting business, I belong to three large professional organizations: The American Industrial Hygiene Association, Project Management Institute, and, of course, the American Chemical Society. Without a doubt, I have received more value or returnon-investment from my membership in the American Chemical Society.

The American Chemical Society, through its division structure that includes a Division of Small Chemical Business (SCHB), provided a perfect resource: Small business owners and operators with whom I could network and exchange ideas. Likewise, ACS has a host of divisions in every specialty of the chemical enterprise, should you need information, and they offer the opportunity to keep up to date with the latest trends in the chemical professions. Many small business owners belong to multiple technical divisions of the society that align with our expertise and interests.

If you are in need of some business advice, I would encourage you to connect with ACS' Division of Small Chemical Business, either in-person at a meeting or virtually during one of the Division's Friday happy hours.

by Denise Lynn Merkle, Ph.D.

Get A Mentor! Great Suggestion, but How do I Get a Mentor? Here you go...

When initiating any endeavor - mentored or not - recognize that you must honestly assess what you'll need to advance - and whether you have it. Identify your strengths, weaknesses, and the areas in which advice is required. No one is perfect, and no one can fully advance in life without others' involvement. Often overlooked (unfortunately) in all of this is: Unless you treasure missed opportunities, control your ego. Don't let your sense of self-worth increase the Activation Energy of your progress. Must you be a sniveling mess? Of course not, but recognize that it's not possible to know everything, and that people who care enough about you to offer guidance (a.k.a. Mentors) might actually know what they're talking about. It's also possible that you're so annoying that others feel compelled to assist you. Don't lose any sleep over the reasons for this one – just listen to the advice and follow it if it's reasonable. This is actually a good way to find a mentor, because knowledgeable people who are willing to take this kind of initiative are also usually brave. When you've worked out what you need, you're in a better spot to accept a Mentor.

More than twenty successful professionals graciously responded to an e-request for information about their Mentors*. They each answered a short poll consisting of the questions: Did you have a mentor/mentors? How did you find your mentors, if any? Give one or two Positives about being mentored. Give one or two negatives, if any. This article shares their insights.

For the e-poll, the definition of "Mentor" was taken as a Given, but responses made it obvious that "Mentor" is individually defined. Clearly, Mentors' skills are quite varied, the knowledge required for academe and industry/business is diverse, and having more than one Mentor to address specific issues can be important. Again, be aware of why the advice or support is needed - and when. Do not rush to develop rapport with a potential mentor. It is crucial to interact - pleasantly - with trustworthy, competent people This is difficult to do in an initial meeting, or three. In business, it's sometimes necessary to do projects with people you dislike. It's an occupational hazard - but don't accept a mentor who is difficult to get along with, or who treats you badly. This is a good rule for pretty much everything. If someone is not behaving well, don't interact any longer than you have to (if possible, though, don't leave the project until the client has paid you).

Academic advisors are seen as mentors, but often the advisor's ability to guide is less important than the research in the advisor's lab. If you're not self-motivated, or if you're aware you'll need a lot of guidance, add an "Advisor's Availability" line to your checklist for finding a potential research lab. If you know you want to chat every day with your advisor, but the graduate students in the lab aren't quite sure what the advisor actually looks like, don't join the lab. Conversely, if you like to craft the hypothesis and run with it until you're published in JACS or the data indicate that the idea won't land anywhere but in an archived folder, don't pick an Advisor who has lab meetings all the time or who requires frequent data updates. Regardless of your style and that of your Advisor, understand and accept the fact that, in order to maintain career and personal health, you might have to change labs. If things aren't working correctly, you know you've done everything you can do to improve the situation, and you're still miserable, change labs. Change departments or schools if you have to. This holds for just about anything in life - Advisors, Experiments, Apartments, Mentors - whatever. You're a Scientist! If it's not working, Change it!

Advisors/Mentors for educational purposes are intrinsic to the degree process. Usually, even after ensuring you don't join an unpleasant lab, you slog it out until your degree is awarded. And then you emerge in the real world, where Mentors may just appear in your life, or you may have to go looking. You may also be introduced by someone who knows both you and a Potential Mentor. Don't dismiss introductions. They can be supremely useful, and a personal introduction can elevate your interaction with a valuable person who might otherwise not know you exist. One of the best ways to locate a trustworthy guide is to keep an open mind and a genuine interest in other people (the latter can be painful for "nerds"). Do not fake interest - people can sense fibbers - and pretending does you no favors. While you're attending ACS meetings or those of other professional societies, Chambers of Commerce functions, departmental meetings in your new company, angel investment groups, or even networking meetings for a language or sports car club, listen to what peopleare telling you.

Pay attention to how they interact with others. If they offer advice while you are chatting, figure out if they know what they're talking about, or if they're just yapping. This is the reason Mentor-type relationships should develop over time. Bad advice can be hard to spot in the short term, especially if delivered authoritatively.

(continued from page 11)

ARTICLES

It's totally fine of seek short term help from someone you've met and are fairly certain you can trust. That being said, DO NOT share important data or business information with anyone, unless you've protected your intellectual property. There's trust, and there's *perceived* trust - and neither are as important as intelligent business practices. Don't find yourself in a situation where your status as a Mentee knocks out your patentability.

Ideally, Mentor-Mentee relationships develop organically, without a lot of effort on either party's part. Mentoring can exist before either party knows that an information sharing process occurred, and, if the need is finite, are sometimes acknowledged as mentoring situations only after the interaction has dissolved. In small businesses, the interpersonal ties are often longer and stronger than for larger businesses or schools, and the identification of a Mentor can be especially challenging.

Small businesses are their own beast. Because small businesses are often started by one or two friends or colleagues who are seeking autonomy, or who don't want to move to Alaska with a relocating company, for example, or who are the next generation ("NextGens," as I call them) in a family concern, what's needed by the Mentee can vary from "How do I fund this?" to "What can we do with Great Grandaddy, who still goes on sales calls but can't hear the customers?" An ideal Mentor for a nascent company is a more established, successful businessperson, preferably in a closely related, but not competing, field. Again, go "out and about" - in person, when possible, or online in Zoom Meetings and Social Hours (which you'll have to do while promoting your business, anyway) - and talk to those whose advice seems sound. Continue to seek out those who are enjoyable to talk to. See which initial meetings turn into good, solid mutual regard and assistance. A word of advice here: if you don't have much financial background, you can ask a friend who is a CPA to advise you on your company's financial issues, but you should also consider paying an expert firm for the information. There's no need to put friends and loved ones in the kind of uncomfortable situations that can result from misunderstandings or even bad advice.

If you're in a family business and you're fortunate, your family members know an astonishing amount about the business' processes, products, customers, sales - you name it. Further, your family members can convey this to the NextGens without strangling them with the interpersonal ties. Often NextGens already know a lot of the information and so are ideally suited, at least theoretically, to take the company into the future. NextGens should be ready to seek mentors from outside the business, because to some family members, the future may look very much like the past. Networking groups specific for small business, the ACS Small Chemical Business Division, business incubator events, and local colleges' business school events are only some of the places to meet others. There also exist professionally run groups in which small business owners and employees can gather with others in the same situations, so that the Mentors/Advisors have empathy for their peers, in addition to having experience with the same issues.

Of course, it is possible to be very successful without a formal Mentor relationship, just as it is possible to blaze your own path and figure things out as you go along. Of the 4 or 5 poll respondents who said they didn't really have a Mentor, all wished they'd had someone to consult. One or two people expressed dismay at the strain that developed with an Advisor or Mentor, or at how the relationship ended. Most of those who answered wound up with mentors due to Business- or Academic- Family bonds, and many met through networking groups or Professional Development organizations such as Toastmasters.

Be honest about what you need. Be willing to consider advice. Allow relationships to develop organically. Don't stay in a bad situation. Evolve when the pressure's on. Be Brave and Persevering. Succeed.

*Many thanks to those friends and colleagues, successful professionals all, who answered the call for insight into Finding a Mentor and helped to drive this reaction to completion. Of the 40 successful professionals polled, >20 responded. An equal number were in business and academics, with ~20% being lawyers or financial professionals. All are well established in their careers. Many share their knowledge by mentoring nascent scientists and entrepreneurs, and at least one, a Ph.D. immunologist who started a Career Coaching firm to assist Scientists, is a professional mentor. Thank you!