Small Chem Biz

Division of Small Chemical Businesses American Chemical Society

August 2014



Volume 44, Issue 2

UPCOMING EVENTS

(See Page 14 for More Information)

June 18, 2014 to September 24, 2014 Green Chemistry Challenge

October 13-14, 2014 Entrepreneur Summit

November 19, 2014 Showcase West

December 1, 2014 Deadline for ERC Participants

CONTENTS



STEWARD OF A GREEN WORLD: Perkin Medalist John Warner

Jenny Lee, SCHB Newsletter Editor

"The green chemistry revolution is beginning" proclaimed Paul T. Anastas and John C. Warner in *Green Chemistry Theory and Practice* in 1998. Sixteen years later, the ACS agrees the revolution is still going strong based on its theme choice for the national conference: chemistry and global stewardship.

Dr. Warner, President and CTO of the <u>Warner</u> <u>Babcock Institute for Green Chemistry</u> (WBI), embodies an entrepreneurial spirit as a chemist who designs green technologies since they offer "superior performance, superior cost, and oh by the way, are more sustainable and better for the environment." As a new SCHB member, he finds that chemists in small businesses have a unique opportunity to create successful lives, profit, and simultaneously contribute to a more sustainable society.

Dubbed one of the founders of green chemistry and co-author of the seminal text that brought awareness of green chemistry considerations to the forefront of the chemical industry, Warner was awarded the prestigious Perkin Medal for his contributions in advancing the field. Despite his success, he exudes a humble disposition when he acknowledged "this award is really for the field of green chemistry and everyone that's working in that field."

Warner completed his Ph.D. at Princeton in organic chemistry and started his career at Polaroid for a decade, then became Professor at the (Continued on page 7)

CHEMISTRY & GLOBAL STEWARDSH

Message From the Chair



It is a singular honor and privilege as SCHB Chair to welcome you to our Division. The breadth, depth and sophistication of the talent and creativity of the individuals in the division are truly outstanding. We

have eminent researchers and professionals representing the triad of academia, government and industry from all sub disciplines of chemistry. We enjoy a cherished and hallowed tradition of excellence. The warmth and gracious hospitality with which we welcome participation by our members, collaborators and distinguished guests has been the hallmark of our tradition and the well-spring of our progress. We aim for increased participation of members in the division. This will also allow greater opportunities for networking among chemists, young and old and shy and bold.

So, dear members, please join us in what promises to be an outstanding years of progress and additional programs. Volunteers like you are a tremendous source of ideas that constitute the lifeblood of an organization. Join a committee of your choice, provide creative inputs into the programs and join us in increasing the public's awareness and enjoyment of Chemistry. We hope to proactively use your expertise as we move forward in achieving our goals. I truly value your advice, guidance and counsel and I look forward with enthusiasm and humor to our ongoing professional interactions.

Mukund S. Chorghade

PROGRAMMING

SAN FRANCISCO SUMMARY Joe Sabol, Program Chair

SCHB's technical program will be in Moscone South, Esplanade Ballroom 301, Sunday to Tuesday. See <u>http://</u> www.moscone.com/ for maps and <u>http://acs.org/meetings/</u> for program details. SCHB seeks **tech session** greeter volunteers; contact Joe Sabol program@acs-schb.org.

SCHB (with PROF) will host **luncheons for speakers and members**, Sunday through Tuesday, 11:45 a.m. – 1:15 p.m. This is a a free member benefit and chance to meet the speakers, but you must **sign up** as seating is limited. RSVP below:

> Sunday Lunch <u>ow.ly/yoq3T</u> Monday Lunch <u>ow.ly/yonMb</u> Tuesday Lunch <u>ow.ly/yorz2</u>

Sunday, August 10 SCHB's Executive Committee will have an open meeting from 8:00 – 11:30 a.m., with continental breakfast at 7:30 a.m. If you have an agenda item or want to become more active in SCHB, contact Patrick Kearney secretary@acs-schb.org.

SCHB TECHNICAL PROGRAM

SUNDAY AFTERNOON — Section A Intellectual Property 101: What Students and Post Doctorates Need To Know (Cosponsored

by PROF, Financially Supported by Osha Liang LLP) K. Hylton-Rodic, Organizer, K. Drake, Presiding

- 1:00 Introductory Remarks.
- **1:05** 1. Just because you have a patent, doesn't mean you have anything of value: How to assess patent counsel and work product of the same. *A. Johnson*
- **1:35** 2. Inventor beware: Potential pitfalls that every inventor should under-stand. *C. A. Burton*, *L. Huddleston*
- **2:05** 3. Withdrawn. [S. Sharma, Overview of licensing].
- 2:35 Panel Discussion.
- 2:55 Concluding Remarks.

BestPracticesinLaunchingaUni-versityStart-Up(CosponsoredbyPROF)

SCHB's technical program begins with intellectual property fundamentals, followed by tech transfer issues.

The **Expo** will open from 6:00 - 8:30 p.m., Moscone Center Halls B&C. Stop by **SCHB's booth 1325** to meet members and "discuss business." The Expo will be open Monday and Tuesday 9:00 a.m. - 5:00 p.m. SCHB **needs booth volunteers** (shifts are flexible and can fit your schedule); contact Anis Rahman <u>expo-booth@acs-schb.org</u>.

<u>Monday, August 11</u> The poster session will be followed by insight into computer and Internet threats and protection strategies from experts in information technology and law enforcement.

Current and Future Trends To Provide Equal Access in the Commercial Sector for Employees with Special Needs will present approaches to help employees with disabilities and special needs and will be recorded by ACS Presentations on Demand, followed by *Sci-Mix* with SCHB's posters in the evening.

Tuesday, August 12 SCHB's flagship ses-

sion, *True Stories from Entrepreneurs*, has lessons learned from small business principals. The afternoon session focuses on what does and doesn't work for small and growing businesses in the pharmaceutical and biotech sectors.

SCHB is a cosponsor (with PROF and CHAS) of the **Henry Hill Award Reception**, from 5:00 – 7:00 p.m. in the Savoy Room, 30th Floor of San Francisco Marriott Union Square. From Moscone, take Route 1, Blue shuttle to the Grand Hyatt and walk one block.



SCHB was nominated for a Chem-Luminary Award, Out-

standing Collaboration Between a Local Section and Division, with ceremonies at The Palace Hotel, (Route 1, Blue shuttle). The reception and posters from nominees will be 8:00 – 9:00 p.m. with winners announced afterwards. Please attend and keep your fingers crossed for another SCHB win!

Moscone Center, South Building, Esplanade Ballroom 301 (unless otherwise noted)

M. Vreeke, Organizer, J. Newsam, Organizer, Presiding

- 3:10 Introductory Remarks.
- **3:15** 4. Withdrawn. [D. Daly, Overview of tech transfer].
- **3:35** 5. Tech transfer from the eye of an investor. *T. M. Loarie*
- 3:55 6. Warner Babcock Institute for Green Chemistry: Inventions in sustainability. *J. Warner*
- **4:15** 7. Technology transfer is not always from a university. *M. Vreeke*
- **4:35** Panel Discussion.
- 4:55 Concluding Remarks.

MONDAY MORNING — Section A

SCHB Entrepreneurs' Poster Session (Cosponsored by PROF)G. Ruger, Organizer, Presiding8:00 - 9:15 Coffee and Discussion.

8. SCHB offers networking opportunities and benefits for small chemical businesses. *M. Chorghade, A.* Rahman, S. Seelig, P. Kearney, S. Vercellotti, J. Sabol, D. Deutsch, K. Hylton-Rodic, J. L. Maclachlan, J. J. Lee, G. Ruger

9. Chemical Angel Network: Chemists investing in chemical companies. *M. Vreeke, J. Giordan, S. White* 10. ACS Entrepreneurial Resource Center Showcase East: Guide to a successful entrepreneurial event. *J. L. Maclachlan*

11. Ecoken: Creative research for a beautiful planet. *H. Gokturk*

Cyber Security for Small Businesses (Cosponsored by CINF, Financially Supported by Osha Liang LLP) *J. Sabol, Organizer, Presiding, M. Nordstrom, Organizer*

- **9:30** Introductory Remarks.
- **9:35** 12. Withdrawn. [A. Hanson, Overview of cyber security]
- **10:00** 13. Protecting intellectual propety from world-wide threats and intrusions. *R. Scherer*

August 2014

- 10:25 14. Cyber security, threats, and intrusions: Perspective from law enforcement. M. K. Palmore
- **10:50** Panel Discussion.
- 11:35 Concluding Remarks.

Celebrating 40 Years of ACS Public Policy
Fellowships: When Chemists Go To Washington (Sponsored by PROF, Cosponsored by SCHB)
9:00 - 11:50 Hilton San Francisco Union Square, Union Square 17/18

Environmental Chemistry: 100 Years of Scientific Contribution for a Safer and Sustainable Environment (Sponsored by ENVR, Cosponsored by CEI, DAC, MPPG, PRES, and SCHB, Financially Supported by Agilent Technologies)
8:05 – 12:00 p.m. San Francisco Marriott Marquis, Golden Gate Section A/B

InnovationfromInternationalCollaborationslaborations(SponsoredbyIAC,CosponsoredsoredbyBGMT,I&EC,PROF,SCC,andSCHB)8:30 -11:45MosconeCenter,South
Bldg.,EsplanadeBallroom300

MONDAY AFTERNOON — Section A

Current and Future Trends To Provide Equal Access in the Commercial Sector for Employees with Special Needs (Cosponsored by PROF) *C. Supalo, Organizer, Presiding*

- **1:00** Introductory Remarks.
- 1:05 15. Dynamic, physical molecular model of the polypeptide chain as an interactive teaching aid. *P. Chakraborty, R. Zuckermann*
- 1:30 16. Text to speech interfaces used to provide equal access to labo ratory equipment for employees with blindness or low vision. *C. A. Supalo*
- **1:55** 17. Independence Science Foundation: Its mission on opening doors of opportunity for the blind and persons with disabilities in STEM. *R. D. Supalo*
- 2:20 Intermission.
- 2:35 18. Accessible images and video using interactive description technologies. J. A. Miele
- **3:00** 19. Use of 3D printer technology intheresearchlaboratory.*R.Jaquiss*
- **3:25** 20. Real world employment experiences for the blind in science. *B. Bashin*
- **3:50** Concluding Remarks.

Innovation from International Col-

laborations (Sponsored by IAC, Cosponsored by BMGT, I&EC, PROF, SCC, and SCHB)
1:30 - 5:05 Moscone Center, South Building, Esplanade Ballroom 300

MONDAY EVENING — Section A

Sci-MixG. Ruger, Organizer, PresidingMoscone Center, North Building, Hall D8:00 – 10:00 8-11. See previous listings.

TUESDAY MORNING — Section A

True Stories from Entrepreneurs (Cosponsored by PROF, Financially Supported by Young & Thompson) *G. Ruger, Organizer, Presiding*

8:00 Coffee and Networking.

- **8:30** Introductory Remarks.
- 8:35 21. Strategies for successful transition from full-time to project-based employment. *D. E. Levy*
- 9:05 22. Celebrating ten successful years at Lauterbach & Associates, LLC. J. H. Lauterbach
- **9:35** 23. Prelude to starting your own business, the academic to industry transition. *J. Gerlach*
- **10:05** Intermission.
- 10:20 24. Withdrawn.
- 10:50 25. From concept to market: Rewards and challenges in commercialization of "green" sustainable polyurethane technology. V. Mannari, P. Rufe
- 11:20 26. Nadjik pheromone: Where hypothesis merges with reality. *M. Hemp*
- 11:50 Concluding Remarks.

The Role of Entrepreneurship, Innovation, and Economic Development in Sustainability (Sponsored by BMGT, Cosponsored by MPPG and SCHB)

8:30 – 12:40 p.m. Moscone Center, North Bldg., Rm 132

What Does the Affordable Care Act (Obamacare)
Mean for Chemists and the Chemical Industry? (Sponsored by PROF, Cosponsored by SCHB)
9:15 - 11:20 Hilton San Francisco Union Square, Union Square 17/18

Women in Environmental Science and
Engineering (Sponsored by ENVR, Cosponsored by MPPG, PROF, SCHB, and WCC)
8:00 - 11:50 San Francisco Marriott Marquis, Club Room

<u>TUESDAY AFTERNOON — Section A</u> Start-Up Chemical Businesses in Drug

- Discovery (Cosponsored by MEDI and PROF) *P. Kearney, Organizer, S. Richards, Presiding* 1:00 Introductory Remarks.
- **1:05** 27. Chemistry start-up companies in the networked science era.
- *K. D. Lustig*1:35 28. Collaborative Research Opportunities Platform (CROPTM) program:
- Fast tracking drug discovery. A. J. Mendonca
- 2:05 29. Starting a biotech in the midst of the Great Recession. *D. Erlanson*2:35 Intermission.
- 2:35 Intermission
- 2:50 30. Leveraging organocatalysis to generate business opportunities: Chiromics, LLC unlocks value in novel chemical space.
 S. N. Gradl, D. W. MacMillan, P. J. Reider, H. Kim, J. F. Austin, J. C. Conrad
- **3:20** 31. Numerate: Data driven drug design platform as the basisforatherapeuticpipeline. *G.Lanza*
- **3:50** 32. Natural products for drug discovery and development: Inspiration from the "ancient" wisdom of Mother Nature. *M. S. Chorghade*, *R. S. Chorghade*
- 4:20 33. Successful chemistry outsourcing for today's startup companies.*D. E. Levy*
- 4:50 Concluding Remarks.

Chemical Angel Network: Chemists Investing in Chemical Companies (Sponsored by PROF, Cosponsored by SCHB) 1:30 – 4:05 Hilton San Francisco Union Square – Union Square 17/18

Women in Environmental Science and Engineering (Sponsored by ENVR, Cosponsored by MPPG, PROF, SCHB, and WCC) 1:30 – 5:00 San Francisco Marriott Marquis, Club Room

WEDNESDAY MORNING

- Over 50 and Got a Job (Sponsored by PROF, Cosponsored by SCHB)
- 9:00 11:05 Hilton San Francisco Union Square, Union Square 17/18

WEDNESDAY EVENING

Women in Environmental Science and Engineering (Sponsored by ENVR, Cosponsored by MPPG, PROF, SCHB, and WCC)

6:00 – 8:00 San Francisco Marriott Marquis, Golden Gate Section A/B ■

CHEMICAL INNOVATION AND ENTRE-PRENEURSHIP COUNCIL (CIEC) ROADMAP

Sessions, Workshops & Networking Events

SUNDAY

Business Plan Pitch Reviews Receive real-time feedback on your pitch or business concept. (Appointments are available on a first-come, first-served basis). ACS Career Fair 9:00 AM Register for a 30-minute appointment between 10:00 AM - 2:30 PM

Everything You Want to Know About Entrepreneurship, but Afraid to Ask ACS Career Fair – Career Pathways Workshop 1:00 – 2:30 PM Park 55 Hotel

Chemistry Plus Passions, Interests: Careers on

the Road Less Traveled BMGT with CHED, PROF, SOCED 1:30 – 5:20 PM Moscone Center, North Bldg. Rm 132

Henry F. Whalen, Jr. Award and Reception **RMGT** 3:00 - 6:30 PM Moscone Center, North Bldg. Rm 132

MONDAY, AUGUST 11, 2014 WCC Women in the Chmical Enterprise Breakfast Ticketed Event: WCC 7:30 - 9:30 AM Hilton San Francisco Union Square – Room TBD

TUESDAY, AUGUST 12, 2014 Women Leaders of the Global Chemistry Enterprise

WCC with HIST, IAC, PRES, PROF 8:30 - 11:35 AM & 2:00 - 5:05 PM Hilton San Francisco Union Square -Franciscan D

WCC Luncheon Ticketed Event: WCC 12:00 – 1:30 PM Hilton San Francisco Union Square - Room TBD

WEDNESDAY, AUGUST 13, 2014 **Chemical Small Business Mini-Summit** Check for time and location updates

ACS DALLAS NATIONAL MEETING (March 16–20, 2014)



Speakers from SCHB symposium "Benefits of Undergraduate Internships" cosponsored by CEPA, PROF, and YCC. L to R: Sharon Vercellotti of V-LABS, INC., Mukund Chorgade, Symposium Organizer, Arlene Garrison, Oak Ridge National Laboratory, Janet Bryant, Pacific Northwest National Laboratory, Rajeev S. Chorghade.



LEFT: At the joint SCHB and PROF reception at the Iron Cactus. L to R: Joe Sabol, Dan Libby, Joe Stoner, and Benny Chan. RIGHT: Ribbon for SCHB Officers and Members; they can be picked up at the EC meeting or Expo Booth 1325.

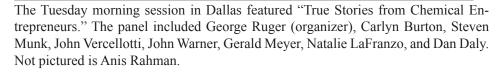
Present with SCHB and Benefit

One Day Free Registration Free Business Card Ad in Small Chem Biz

Contact Program Chair Joe Sabol program@acs-schb.org Contact Newsletter Editor Jenny Lee newsletter@acs-schb.org



CARLYN BURTON



REGIONAL MEETING REPORT

Joe Sabol

One down, four to go in 2014.

NORM was held in Missoula MT, June 22-25. *Small Business Symposium*, organized by Tony Haag, supported chemistry-based business development and encouraged interaction of growing businesses with other potential business and academic partners; financial assistance was provided by an ACS Innovative Project Grant and SCHB.

For the remaining regional meetings, please contact the organizers listed if you would like to participate or have any questions; you can also submit abstracts at <u>http://abstracts.acs.org/</u>.

SERMACS will be in Nashville TN, October 16-19, <u>http://sermacs2014.org/</u>.

- SCHB sessions are *Resources for Entrepreneurs* and *True Stories from Entrepreneurs*.
- Organizers: Patrick Kearney <u>secretary@acs-schb.org</u> and Joe Sabol <u>program@acs-schb.org</u>.

SMALL BUSINESS SYMPOSIUM AT THE NORTHWEST REGIONAL MEETING, 2014

Tony Haag, Chair of Montana Local Section

At the ACS Northwest Regional meeting in Missoula, Montana on June 23, 2014, small business leaders from the area gathered at a symposium to share their experiences. The purpose of the symposium was threefold: to encourage and support new and growing small chemistry-related businesses; to provide an opportunity for interaction among chemistry business professionals in this area; and to catalyze involvement of ACS members from the business community in local/regional activities. The day-long symposium featured the following general topics: business resources for new and growing companies; true stories from successful companies: and a panel discussion with five chemical

CERM will be in Pittsburgh PA, October 29-November 1, <u>http://acscerm</u> 2014.org/.

- SCHB sessions are *Resources for Entrepreneurs* and *True Stories from Entrepreneurs*. Note: *Resources* is full.
- Organizers: Ron Taylor <u>rtaylor@</u> <u>intellectualassetsinc.com</u>, Xiaoxi Ling <u>xil137@pitt.edu</u>, and Joe Sabol <u>program@acs-schb.org</u>.

MWRM will be in Columbia MO, November 12-15, <u>http://mwrm2014.</u> org/.

- SCHB sessions are *Resources for Entrepreneurs* and *True Stories from Entrepreneurs*.
- Organizer: Patrick Kearney <u>secretary@acs-schb.org</u>.

SWRM will be in Fort Worth TX, November 19-22, <u>http://swrm2014.</u> org/.

• Small business sessions being planned are: *True Stories of Small Business Success, Business Issues in Chemistry,* and *Inventing and*

Patenting - Overview of Patent System, Considerations and Challenges.

• If you would like to help organize one of the above sessions or have any questions, contact Kirby Drake, General Chair <u>kbdrake2000@yahoo.com</u>.

Planning ahead for 2015, SCHB will continue its participation in and support of ACS regional meetings. If you are interested in helping to organize a session, contact Joe Sabol, SCHB Program Chair program@acs-schb.org. Regional meetings scheduled for 2015:

- CERM & GLRM, May 27-30, Grand Rapids MI
- NERM, June 10-13, Ithaca NY
- NORM, June 22-25, Pocatello ID
- MWRM, Oct. 14-17, St. Joseph MO
- SERMACS & SWRM, November 4-7, Memphis TN
- WRM, November 6-8, San Marcos CA ■



Panel discussion moderated by Paul Gladen of University of Montana's Blackstone LaunchPad. L-R: Paul Gladen; Neal Blossom, American Chemet Corporation; Richard Hammen, Intellimet LLC; Nicolas Guilloteau, DermaXon LLC; Brenda Spangler, SensoPath Technologies, Inc; Jon Nagy, NanoValent Pharmaceuticals, Inc.

business representatives.

Thus, Amita Greer of Montana Community Development Corporation described the "Profit Mastery" program that helps businesses plan and manage their finances. Lisa Mueller of Michael, Best & Friedrich discussed intellectual property, patent trolls, and top 10 intellectual property mistakes by start-ups. Ray Friesenhahn of Montana State University TechLink described resources available for accessing SBIR/STTR funding (Continued on page 6)

PROGRAMMING / BOOTH

for new business growth and leveraging federal laboratory resources. Joe Fanguy of the University of Montana's Office of Research described efforts in Missoula to drive economic development through public-private partnerships.

Two true stories of successful business development were presented by John Amend, President of MicroLab, Inc. and Richard Hammen, President of Intellimet, LLC. Their 40-minute presentations provided a thorough description of their experiences during the inception and growth of their businesses, as well as some product technology background.

Finally, a panel discussion provided a

lively, interactive mechanism for five chemical business leaders to briefly describe their business then address the challenges they faced and overcame or are currently dealing with (this was referred to as "pivoting"). The panel (see photo) was moderated by Paul Gladen of the University of Montana's Blackstone LaunchPad.

Attendance averaged about 15 per session and the speakers each gave engaging and informative presentations. We were encouraged to see that last year's ACS President, Marinda Wu, joined us for a couple of talks and reminded the group of the ACS Entrepreneurial Resource Center. This symposium was modeled after small business programming at the national ACS meetings. In fact this type of program may be even more relevant on a local/regional level where it is more convenient for business leaders within their area to get together. The symposium was financially supported by a grant from the ACS Local Section Innovative Program and the ACS Division of Small Chemical Businesses. Thanks to Joe Sabol of the ACS Division of Small Chemical Businesses for his guidance in planning the symposium and preparing the Innovative grant proposal. Contact Tony Haag haagap@q.com for more information.

SHOWCASING SMALL BUSINESSES WITH SCHB BOOTH OPPORTUNITY

gain EXPOSURE | INTERACT with attendees | NETWORK | ACCESS opportunity | GROW your business display a BOOTH with SCHB

\$500 for SCHB Division Members • Free National Meeting Registration

Contact Booth Chair, Anis Rahman expo-booth@acs-schb.org

(Limited space available)

UPCOMING OPPORTUNITIES IN 2015

249th ACS National Meeting **Chemistry of Natural Resources** *March 22-26, 2015* Denver, CO 250th ACS National Meeting Innovation from Discovery to Application August 16-20, 2015 Boston, MA

SAN FRANCISCO BOOTH EXHIBITORS WITH SCHB

Visit the following booths at the Expo in the Small Chemical Businesses Row on Sunday 6:00 - 8:30 p.m. or Monday and Tuesday 9:00 a.m. - 5:00 p.m., Moscone Center Halls B&C.

Chemical Angel Network

Booth #1131 Sid White, Ph.D., Co-Founder sid.white@ chemicalangels.com Mark Vreeke, Ph.D. mark.vreeke@ chemicalangels.com Supra Sciences Booth #1037 Theresa Riley, Marketing Manager theresa@suprasciences.com 443-799-6084 Gretchen Englefield, Account Manager gretchen@suprasciences.com 916-287-3877 http://www.suprasciences.com

Magnnpro, LLCBooth #1538Thomas Macher, CEOtjmacher@crimson.ua.edu334-202-1936

Chemistry At Your Fingertips Booth #1333 Pete Bonk, Ph.D. peterjbonk@gmail.com 401-935-3534 Delight's Earthly Delights Booth #1437 Peter Edgell delightsearthlydelights@. hotmail.com 520-212-3343

Chemical Angel Network

The Angel Network for early stage chemical businesses

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

www.ChemicalAngels.com

Page 6

http://www.acs-schb.org

August 2014

STEWARD OF A GREEN WORLD: Perkin Medalist John Warner

(continued from page 1)

OHN WARNER



University of Massachusetts. In academia, he created the first Ph.D. program in green chemistry and received the Presidential

Award for Excellence in Science, Mathematics, and Engineering Mentoring.

The **Perkin Medal**, awarded by the Society of Chemical Industry (SCI), is the highest honor in America for "innovation in applied chemistry resulting in outstanding commercial development." The medal is named after Sir William Henry Perkin, who created the first synthetic dye that transformed the industry and was the first recipient in 1906.

In 2007, he transitioned into the world of small businesses, founding a non-profit educational organization, Beyond Benign, to instill the ideas of green chemistry into students, in addition to the WBI. Warner has delineated novel discoveries in hundreds of patents and papers, and was intrigued by the small business environment that provided him an avenue for innovation. After navigating the investment community, Warner credits his business partner for creating momentum for the WBI, "Over the last eight years, I've come to realize just how unique and special Jim Babcock is and his willingness to take risk for the benefit of making the world a better place."

Jenny Lee, SCHB Newsletter Editor

The WBI, according to Warner, is a "technology greenhouse" that focuses on conducting research to de-risk the development in the idea to prototype stage. In contrast to incubators that facilitate the prototype to market stage, he believes the greenhouse approach enhances a technology's chances for commercialization.

One central research area the WBI advances is Non-Covalent Derivatization, which capitalizes on temporarily-formed aggregates stabilized by weak non-covalent forces. In Polaroid Instant Photography, the aggregate stabilizes the target compound which is released by altering the pH after which the molecule is released to complete its function. The approach exemplifies green chemistry concepts by avoiding solvents and hazardous chemicals. The WBI similarly has created environmentally benign methods for applications across a variety of industrially-relevant sectors from renewable fuels to delivery methods for the pharmaceutical industry.

Warner illustrates that chemists can indeed be stewards of the world by innovating with green principles in mind to contribute to a sustainable future. Long live the green chemistry revolution.



MEMBERSHIP BENEFITS

Deeply-Discounted Booth at National ACS Meeting Expo (\$500)

Business Listing on SCHB website

Amazing Networking Opportunities

- ACS Meetings
- Social Media ACS Network, LinkedIn, Twitter, Facebook

Outstanding Programming at National, Regional, and Local Section Meetings

Eligible to Hold SCHB Office

Receive Monthly e-Blast Newsletter

Receive and/or Be Featured in Semi-Annual Newsletter *Small Chem Biz*

Eligible for Scholarships at ACS Leadership Institute Courses

Join SCHB today—Membership is **FREE** for the first year!

NEW PATRON MEMBER

Young & Thompson Dr. Robert Goozner, Partner

Corporations or organizations wishing to become Patron Members foster the Division's main objective to aid the formation, development, and growth of small chemical businesses.

Additional objectives defined in the SCHB Bylaws II, Section 3, broadly include addressing legal, social, ed-ucational, regulatory, economic, and legislative needs, encouraging personal interaction among members and other institutions or organizations interested in promoting free enterprise among chemists, being a liaison between small chemical businesses needing employees and chemistry students needing income and experience, and providing expertise and experience of its members to the Society and for the betterment of the public.

Annual dues are \$200; contact Treasurer David Deutsch <u>treasurer@acs-schb.org</u> for more information.

PARNTER WITH SCHB

Contact Mukund Chorghade at <u>chair@acs-schb.org</u> to partner on entrepreneurial local section events and/ or to collaborate with us on symposia at National or Regional Meetings.

MEMBERSHIP

<u>A CLOSER LOOK</u>: New Member Clifton McCann

Thompson Hine's Wa-Group ter serves cliwho ents create or use tech water in the chemical and chemical engineering



arts. We prosecute patent applications and build and manage patent portfolios; defend and litigate clients' positions in patent disputes; exploit and license patent rights; provide opinions on patentability, validity, infringement and design-arounds; conduct patent and trade secret audits; and conduct due diligence involving commercial transactions. Our backgrounds are in chemistry, bacteriology, chemical engineering, environmental engineering, materials science, mechanical engineering, fluid mechanics, electrical engineering and computer science, and we work with our corporate transactions and regulatory lawyers to ensure technological integrity in all our water-related work. We have been designated a Go-To Law Firm[®] in Intellectual Property by American Legal Media, based on their 2013 survey of Fortune 500 general counsel.

Thompson Hine also has a highly rated team of first- and second-chair patent litigators with a proven track record in water-tech litigation. We were designated a "Litigation Powerhouse" in a survey of those who should know best – corporate counsel who were asked who they would "most like to have by their side in head-to-head competition" (*BTI Litigation Outlook, 2013*).

than law firms in big cities. Thompson Hine's clients enjoy the second-tonone legal services of a full-service law firm at Midwest prices. We are ranked among the top 10 U.S. firms for client service and among the top four for value by in-house counsel (*BTI Client Service A-Team, 2014*).

As an Ohio-based law firm, Thompson

Hine offers a more economical solution

Please Contact: Clifton E. McCann Partner, Co-Chair and Co-Founder of Water Group Thompson Hine LLP 1919 M Street, NW Washington, D.C. 20036 Office: 202.263.4159 Mobile: 301.802.6955 Clifton.McCann@ThompsonHine.com www.ThompsonHine.com

THE SCIENTIFIC TRANSLATOR AS A COVALENT BOND

Amy Lesiewicz, SCHB Member

When I tell people that I hold degrees in chemistry and Russian, they sometimes joke "Wow, TWO foreign languages!" It's true that scientists use a language of symbols all their own, and chemical and structural formulae are universal. But scientists use language to communicate, and science is international. So how do you find a translator for your project?

Chemists know that valence electrons are those that can interact with other atoms to form covalent bonds. The number of valence electrons determines an atom's properties and behavior. Experience and education are like a translator's valence electrons: they allow him or her to make the right connections between the source language and the target language, and between concepts and words. Just like atoms need the right number of valence electrons to form a stable compound, your translator needs the right combination of linguistic and scientific qualifications in order to form a quality translation.

Where can you find a professional translator? The <u>American Translators</u> <u>Association</u> is a great place to start. You can use its <u>directory</u> of translators to find the person with the exact combination of skills you need. When discussing a project with potential translators, be prepared to discuss the subject matter with them and send them the documents you need translated, so that they can determine if they have

the right qualifications for the job and can give you a firm quote. In terms of timeline, think how long it took you to write the documents; it might take just as long to translate them. In terms of price, consider what you think a professional with these skills should be earning per hour, and consider the maxim that if you want "good, fast, and cheap" service you are likely to be disappointed: you can have any two of those at once, but not all three. Feel free to contact me at amy@russian-chem-trans. com for help finding the right covalent translator for your project.

VOLUNTEER WITH SCHB

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

Potential roles include Webmaster Assistant, Sponsors Development, Membership Support, or Graphic Designer. Contact Keisha Hylton-Rodic at membership@acs-schb.org to learn more about volunteer opportunities.

MEMBERSHIP

MEMBER SPOTLIGHT **Rita Boggs Receives 2013 E. Ann Nalley Western Region Award for Volunteer Service**



SCHB member Dr. Rita Boggs received the E. Ann Nallev 2013 Western Region Award

for Volunteer Service. She joined the ACS in 1968 and is a 2010 ACS Fellow. As a small chemical business entrepreneur, a former chemistry teacher, and extraordinary volunteer, she advanced the goals of the ACS through her sustained service at the

local, regional, and national levels, through promotion of chemistry education and literacy and as a chemistry ambassador to her local community.

Rita became involved in the Southern California local section in 1979 and is the 1992 recipient of the Agnes Ann Green Distinguished Service Award for her efforts in bringing sound administrative policies to the section and saving it from financial disaster. Rita has been the Southern California local section Councilor since 1993 and has served on the Task Force on Councilor Reimbursement Policy (1995, 1998), Committee on Nominations and Elections (1999-2004), Council Policy Committee (2004-2007), Local Section Activities Committee, Membership Affairs Committee, and Senior Chemists Committee.

At the regional level, Rita was the Southern California section delegate

BONNIE CHARPENTIER RECOGNIZED FOR ACHIEVEMENTS BY ASSOCIATION FOR WOMEN IN SCIENCE

The Northern California Chapters of the Association for Women in Science (AWIS) presented Bonnie Charpentier, Ph.D., with the 2014 Sherrie Wilkins Award for going above and beyond to mentor other women in science and for serving as a role model for all women. The award was presented at the AWIS Annual Awards and Recognition Banquet, hosted by four Northern California chapters to celebrate three distinguished women scientists and outstanding students.



Chapters of the AWIS, Sherrie Wilkins, Ph.D. (1942-2010). The award was established on the premise that assisting others is important to enhance career development. In particular, the award recognizes women who use science

The award is named after the past President of the Alto Palo Chapter and Co-Founder of the Northern California (1988-2004) to the Coordinating Committee of California Sections, a coalition of California sections that communicated state legislation affecting the chemical sector to local ACS members. Rita also was Registration Chair (1983, 1989) and Exhibits Chair (1992) for three Western Regional meetings.

Now retired from teaching and dayto-day operations at American Research and Testing Inc., Rita focuses her attention on local civics and community activism in the City of Carson where she is the voice of scientific thought and reason, as an activist-scientist who helps her community understand and confront technical matters including chemical pollution and safety issues, environmental impact reports, brownfields and superfund sites, and other technical matters to local residents and city officials.

outside the traditional research environment and who are committed to mentoring others in professional life.

SCHB member Charpentier received her B.S. degree in 1974 followed by her Ph.D. in 1981 from the University of Houston. She is currently Senior Vice President of Regulatory Affairs and Compliance at Cytokinetics, Inc., in South San Francisco and serves as Director of District VI on the ACS Board of Directors

SHARE YOUR ACHIEVEMENTS

Members in the SCHB are accomplishing great things. Notify



Newsletter Editor Jenny Lee at newsletter@ acs-schb.org for well-deserved recognition in an upcoming issue of Small Chem Biz.

August 2014

Page 9

2014 SCHB Division Officers

Chair Mukund S. Chorghade chair@acs-schb.org

Chair-Elect Planning & Booth Chair Anis Rahman chair-elect@acs-schb.org planning@acs-schb.org expo-booth@acs-schb.org

Past Chair Stanley S. Seelig past-chair@acs-schb.org

Secretary Patrick C. Kearney secretary@acs-schb.org

Treasurer / Webmaster David J. Deutsch treasurer@acs-schb.org webmaster@acs-schb.org

Councilor Sharon V. Vercellotti councilor@acs-schb.org

Program Chair Alternative Councilor Joseph E. Sabol program@acs-schb.org alt-councilor@acs-schb.org

Public Relations Chair Jennifer Maclachlan pr@acs-schb.org

Membership Chair Keisha Hylton-Rodic membership@acs-schb.org

Newsletter Editor Jennifer J. Lee newsletter@acs-schb.org

REPORT OF ACS COUNCIL MEETING DALLAS, TEXAS Wednesday, March 19, 2014

SCHB was represented at the Council Meeting by Councilor Sharon Vercellotti.

Program books will begin with the spring 2015 meeting. The searchable author index is now available via mobile application and other electronic means.

Dallas Stats: 13,680 Registrants 5,140 Students | 10,050 Papers Presented

Nominations & Elections

<u>2015 President-Elect</u>: Council voted to accept the following nominees as candidates on the fall 2014 ballot.

- Peter K. Dorhout of Kansas State University
- William A. Lester, Jr. of University of California, Berkeley

<u>2016 Society Directors and Officers</u>: Send all suggestions to Mr. D. Richard Cobb, N&E chair (<u>nomelect@acs.org</u>).

<u>Directors-at-Large Nominees for 2015-2017</u>: Councilors will elect two of the following nominees in the fall.

- Dawn A. Brooks of Eli Lilly & Co
- William F. Carroll, Jr. of Occidental Chemical Corp
- Barbara A. Sawrey of University of California, San Diego
- Ellen R. Stechel of Arizona State University

Officer Reports

<u>Diane Grob Schmidt</u>, *President-Elect*: The American Association of Chemistry Teachers (AACT) will include teachers in grades K

through 12 and will be launched in the summer of 2014.

<u>Marinda Li Wu</u>, *Past President*: The first ACS Symposium book, Vision 2025: How to Succeed in the Global Chemistry Enterprise, is published and available for purchase.

• Councilor **Sharon Vercellotti** and John Vercellotti will have a chapter, "Technical Entrepreneurship Serving Industry: A Personal Story" in the second book called Career Challenges and Opportunities in the Global Chemistry Enterprise.

<u>Madeleine Jacobs</u>, *Executive Director*: Announced retirement from the ACS at the end of 2014.

From the Committees

<u>Committee on Budget and Finance</u> (B&F): Recommended to set 2015 member dues at the fully escalated rate of \$158, which Council approved.

<u>Committee on Economic and Professional</u> <u>Affairs</u> (CEPA): ACS 2013 New Graduate Survey reveals that overall unemployment among new graduates rose from 12.6% in 2012 to 14.9%. The overall unemployment rate for chemists has dropped to 3.5%.

<u>Committee on Community Activities</u> (CCA): Produced Celebrating Chemistry in conjunction with the ACS Department of Volunteer Support. Local Sections can order up to 750 copies of this publication for Chemists Celebrate Earth Day.

<u>Committee on Minority Affairs</u> (CMA): ACS Scholars Program celebrates its twentieth anniversary in 2015. The program has enabled 1,400 students to achieve university degrees in the chemical sciences.

Rieke Metals Inc. began in 1991 with its foundation in 40+ years of active metal research. Today the company sells active Rieke Zinc and Magnesium, Grignard and Organozinc reagents, fine organic chemicals and organic semi-conducting polymers/monomers including P3HT and water soluble polymers. Headquartered in Lincoln, Nebraska, the facility personally manufactures over 10,000 research compounds and more than 350 thousand molecules under research contract. Rieke Metals offers a unique line of fine organic chemicals for drug discovery and among these fine organic chemicals are a large number of heterocyclic compounds. Rieke Metals supplies research to commercial quantities.



ACS ENTREPRENEURIAL RESOURCE **CENTER (ERC) SHOWCASE EAST EVENT**

Jennifer Maclachlan, SCHB PR Chair

On Wednesday April 9, 2014, the ACS Division of Small Chemical Businesses (SCHB) together with ACS National, Northeastern Local the Section (NESACS), Chemical Innovation and Entrepreneurship Council (CIEC), ACS Division of Business Development and Management (BMGT) and Nova Biomedical, presented the 2014 ACS Entrepreneurial Resource Center Showcase East Event, a chemistrybased business pitch competition, featuring a cash prize for the winning pitch. The daytime event took place at the Hilton Garden Inn and concluded with an evening program hosted by Nova Biomedical in Waltham, MA. Eighteen chemistry-based start-ups seeking investments and/or strategic partners gave their pitch on technologies materials. involving scientific instruments. therapeutic candidates. diagnostic devices, and cleantech products.

The organizing committee included the following ACS National staff members: Michael David. David Harwell. Kenneth Polk and Garretta Rollins and the following member volunteers: Mukund Chorghade, SCHB Chair and Chair NESACS Professional Relations

Committee. NESACS Driscoll. Public Relations and SCHB Member and Jennifer Maclachlan, SCHB PR Chair Chair CIEC PR and Communications and Member **NESACS** PR Committee. We couldn't have done it without the assistance of our reviewers. volunteers mentors. and judges. **Reviewers**:

Jack

Gianna Arnold, Esq., Partner, Saul Ewing LLP, Dr. Dan Daly, Director, the Alabama Innovation and Mentoring of Entrepreneur Center, Dr. Judy Giordan, Managing Director, ecosVC, Dr. Michael Lefenfeld, President and CEO, SiGNa Chemistry, Jeffrey A. Lindeman, Esq., Founder, J.A. Lindeman & Co. PLLC and Ralph T. Scannell, Ph.D. Mentors: Tony Brazzale, Founder and CEO, Gordian Biotechnologies, Anthony Buzzelli, Retired Partner, Deloitte and Dr. Dan Daly, Director, Alabama Innovation and Mentoring of Entrepreneur Center. Volunteers: The Manderson Graduate School of Business at the University of Alabama, Dr. Rob Morgan, Director, Steven Beard, Melissa Huynh, Max Mittenthal, Vincent Philippe, Michael Royko and



The cash prize for the best pitch goes to Andrew Bond of DeNovX! L-R: Mukund Chorghade, Jennifer Maclachlan, Andrew Bond, Chris Incarvito and Ken Polk.

Larry Wink. Special thanks to Mark Vreeke, Sid White and Judy Giordan of the Chemical Angel Network (CAN) for support of this endeavor. Judges: Mukund Chorghade, Chris Incarvito, Director of Research Operations and Technology at Yale University, and Ken Polk

Congratulations to Andrew Bond of DeNovX, who gave the winning pitch and received the \$10,000 cash prize!

Learn more about this event and what made it a success at the SCHB **Entrepreneurs'** Poster Session Monday morning August 11, 2014 Moscone Center, South Bldg, Esplanade Ballroom 301 and on Monday night August 11, 2014 at the SCHB poster session at Sci-Mix.

ANNOUNCEMENT FROM STANLEY S. SEELIG

Stanley S. Seelig, SCHB Past Chair

Stanley S. Seelig, Past Chair of SCHB and Owner of Seelig and As-



sociates, a chemical consulting firm for industrial and consumer cleaning markets, has accepted the position as Director of Product Development at Valtech Corporation in Livermore,

> CA. He will be leading the global R&D efforts on precision cleaning for numerous markets. He and his wife, Marcy, will be relocating to the Livermore area prior to the ACS national meeting in San Francisco. Stan was previously also

the founder and CTO of Waterless Cleaning LLC, a cleaning firm that was looking to use green solvents and ionic liquids to improve the dry cleaning of laundry.

Valtech Corporation, a global specialty chemical manufacturer of high-performance products, fulfills diverse market applications for the photovoltaic, semiconductor, computer disk drive, precision optical, ophthalmic lens, medical device and instrumentation, precision metal-(Continued on page 12)

http://www.acs-schb.org

working, ceramics, and LED markets. Their extensive line of products includes a broad range of custom-made epoxy adhesives and protective coatings, high-purity aqueous-based precision cleaning detergents and custom molded polymers. The products are used in the silicon and photovoltaic wafer manufacturing process for ingot mounting and slicing, high-performance cleaning of precision optics, metals and ceramics; as well as components for wire saw pulley and roller machining.

ARP TECHNOLOGY

Anis Rahman, SCHB Chair-Elect





Dr. Anis Rahman is the founder and Chief Technology Officer of Applied Research and Photonics Inc. (ARP), located in

Harrisburg, PA (www.arphotonics.net). Rahman is the current Chair-Elect and the Planning Chair of the Division of Small Chemical Businesses. Dr. Rahman is known for his work on dendrimer-based non-linear optics, photonics and terahertz technology. Rahman founded ARP in 2003 to harness the unique capabilities of a nanomaterial called Dendrimer. Coined the term "silicon for photonics," Dr. Rahman's approach makes it possible to fabricate chip based components for fiber-optic communication. Recently Rahman's invention has been discussed in terms of real world problem solving for different areas. Rahman appeared at a (www.ustream.tv/ press conference recorded/38602333) following the ACS National Meeting in Indianapolis where he discussed ARP's early cancer detection approach. Recently, Rahman's team has demonstrated detection of skin cancer by terahertz 3D imaging and spectroscopy.

Another successful area of application of ARP technology in the sub-surface defect inspection of semiconductor wafers. Modern fab processes involve construction and defining devices on a wafer where tens of layers are stacked and patterned one on top of the previous. Common optical inspection system can see only on the surface and

the resolution is limited. ARP deploys a 3D terahertz nano-scanner where the wafer is inspected on a layer-by-layer basis; thus provides a unique opportunity to non-destructively inspect wafers at early stage of defect formation as well as after-process device failure analysis. This capability is an important achievement and enables the researchers and the industry to save tremendous amount of labor and resources for wafer fabrication (Fig. 1).

Fostering America's small businesses is one of Rahman's passions. Recent-

ly Rahman has presented a keynote speech at the CLEO conference on this topic: *Becoming an Entrepreneur and Sustaining a Technology Business: What It Takes in Today's World.*

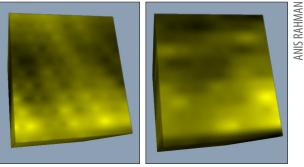


Fig. 1. Reconstructed 3D image of health skin (left) shows clear cellular pattern that is lacking in skin with basal cell carcinoma (right).

Dr. Rahman has contributed more than 80 publications and conference presentations and has produced a number of key patents. Under Dr. Rahman's leadership, ARP technology and products received prestigious awards including the NASA Nanotech Brief's nano-50 award (2007 & 2008) and CLEO/Laser Focus World's Innovation award (2011). Anis Rahman completed his graduate work (MS & PhD) at Marquette University (Milwaukee, WI) and a postdoctoral research position at Columbia University (NY).

SCHB AND SOCIAL MEDIA

To maintain and grow your connections with fellow SCHB members, join and follow SCHB on LinkedIn, Facebook, and Twitter. If you have SCHB member news you would like to share, contact PR Chair Jennifer Maclachlan at pr@acs-schb.org with your request.

linkedin.com/groups/ACS-Small-Chemical -Businesses-Division-4089020/about facebook.com/SCHBD twitter.com/ACSSCHB



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\$210	whole page	7 x 9 in.

Contact Newsletter Editor Jenny Lee at <u>newsletter@acs-schb.org</u>.

SHARON VERCELLOTTI RECEIVES HONORARY DEGREE

Sharon Vercellotti, SCHB Councilor

Sharon Vercellotti, Councilor for SCHB, delivered the commencement address at St. Mary of the Woods College (SMWC), Terre Haute IN in May. Graduates were from eleven states. During the commencement ceremony, Vercellotti received the degree of Doctor of Humane Letters Honoris Causa from SMWC.

"You will only fulfill your human potential by being a life-long learner," Sharon Vergez Vercellotti said to the graduates during her commencement remarks. "You must be eager to venture into new vistas, unafraid to be critical of what conflicts with your human experience. Yet be docile to explore history and science, unafraid to incorporate new ideas into your personal foundations." Vercellotti is featured in the book "Successful Women in Chemistry - Corporate America's Contribution to Science," spon-



sored by the ACS Women Chemists Committee. She has contributed eleven refereed scientific journal articles, three book chapters, two patents, obtained publication funding and co-edited one book, and has given more than fifty national, regional and local invited technical presentations. Additionally, she is listed in the Marquis "Who's Who in Science and Engineering" and "American Men and Women of Science.

Vercellotti's involvement in the American Chemical Society includes being selected as an ACS Fellow, and is a

member of the Presidential Strategic Planning Committee Innovation and Entrepreneurship Vision 2025. 2011-2013. She has served the Division of Small Chemical Businesses as Councilor 2006-present, Alternate Councilor, 2003-5, Chair 2002-3, Chair Elect 2000-2 Secretary 1996 -1999, 1999-2 Web designer and webmaster, Newsletter editor, 2002-2014. She also is a Carbohydrate Division member and served on the Committee on Economic and Professional Affairs, Member, 2011, Associate, 2010, and the Committee on Technician Affairs, American Chemical Society, 2003-9.

While president of V-LABS, a consulting, manufacturing and analytical organization specializing in carbohydrates for glycobiology research, Vercellotti has been awarded three Small Business Innovation Research Grants from the National Institutes of Health and National Science Foundation.



INNOVATIONS, INFORMATION, AND IMAGING

Joe Sabol, SCHB Program Chair

Joe Sabol's session proposal "Visual Insights from Big Data: Envisioning Science, Engineering, and Innovation," has been accepted for the upcoming AAAS Annual Meeting, February 12-16, 2015 in San Jose, California; details will be forthcoming at <u>http://aaas.org</u>. Session co-organizer is Katy Borner, Indiana University.

Speakers from the SCHB session at ACS Dallas, Cyber Security: What You Can Do To Protect Your Business L-R: Joe Sabol, Michael Nordstrom, Rob Scherer, Mike Carver and Chuck Ashman.

Absolute Macromolecular Characterization WYATT TECHNOLOGY SEC-MALS • FFF-MALS • DLS • MP-PALS Molar Mass • Size • Charge • Interactions

CONTRIBUTE TO THE NEWSLETTER

Articles or member news (250-300 words), photos, or advertising are welcome for the March 2015 issue of *Small Chem Biz.* Send your materials to Newsletter Editor Jenny Lee at <u>newsletter(a)</u> <u>acs-schb.org</u> by the submission deadline of **February 1, 2015**.



ACS ENTREPRENEURIAL RESOURCES CENTER (ERC)

Creating Jobs through Chemical Innovation



The mission of the ERC is to "enhance the value of ACS member chemical entrepreneurs and commercial potential of promising chemistry-based technologies to private investors or larger chemical innovators through targeted use of ACS's resources, including information services and networking events."

As an accelerator, the ERC helps chemistry-based startups by bringing their innovations to market. They employ a three-pronged approach to **empower**

GREEN CHEMISTRY MATTERS

Nancy Jackson, Science Advisor/Franklin Fellow, US Department of State

At LAUNCH, we see a future where the making of things has a positive impact on human prosperity and planetary sustainability. With this **SYSTEM CHALLENGE**: Green Chemistry, LAUNCH (www.launch.org) seeks innovations that leverage or advance green chemistry to transform the system of materials and manufacturing to one that advances global economic growth, drives human prosperity and replenishes the planet's resources. The current green chemistry challenge will run from **June 18, 2014** until **September 24, 2014**.

Up to ten innovators will be selected to attend the LAUNCH Forum in early 2015, where winners will present entrepreneurs with access to ACS resources, help **develop** a business plan, and **showcase** their venture to potential investors.

> Startups in chemistry-based products or services are encouraged to take advantage of ERC resources including those in the area of new materials, energy, pharmaceuticals, biotechnologies, instruments, and medical devices.

Upcoming Events

The ERC has two 6-month programs starting in January and July of each year. Participants benefit from technical and business mentoring, access to ACS Publications and SciFinder, introductions to sources of capital, pitch competitions, and educational events. Interested small chemistry-based businesses who are also ACS members can fill out an application for the class of spring 2015 (January through June) by the **December 1, 2014 deadline**.

This year's Entrepreneur Summit

to leaders from business, government, academia, science and the NGO community. At the Forum the LAUNCH team will facilitate targeted sessions between innovators and relevant subject matter experts who can provide guidance on how best to develop your innovation. Additionally, you will become part of the LAUNCH Network, a growing community of the most disruptive thinkers on the planet.



LAUNCH is an open innovation platform that was founded by NASA, NIKE, The U.S. Agency for International Development (USAID) and The will be held on **October 13 and 14** in Washington, D.C., at the National Education Association auditorium and at the offices of the ACS, respectively. The first day is free to attend and open to the public, featuring panels on current trends in chemical entrepreneurship, government involvement, crowdfunding, and more. The second day, featuring smaller workshops on more specific topics related to chemical entrepreneurship, is exclusively for members of the American Chemical Society.

The 2014 **Showcase West** will be held on **Wednesday, November 19** in the San Francisco Bay Area. Startups and small businesses from the Entrepreneurial Resource Center will be presenting their research, work, plans, and prospects to interested community members and investors from all over the West Coast.

For more information, visit the website at <u>http://www.acs.org/content/acs/en/</u> <u>careers/career-services/resourcecenter.</u> <u>html</u> or email <u>startup@acs.org</u>.

U.S. Department of State to identify and foster breakthrough ideas for a more sustainable world. LAUNCH aims to move beyond incremental change and make an impact at a system-wide level. Currently, LAUNCH is focused on positively transforming the system of materials and manufacturing, which can have dramatic social, environmental and economic impacts on the world. In order to harness the innovation needed to advance this system, LAUNCH has issued a series of global challenges to address key barriers. The current green chemistry cycle presents an opportunity to elevate and support innovators working on a crucial component of the sustainable materials and manufacturing system.

For more information, email Nancy B. Jackson, Ph.D., at jacksonnb@state.gov.

RESOURCES

CHEMICAL INNOVATION AND ENTREPRENEURSHIP COUNCIL (CIEC) **ACS Support for Business-Minded** Chemists

Janet Bryant, CIEC Chair

In any organization, large or small, new programs instituted by management i.e., "top-down" programs - require the support and implementation by the workforce for their long-term success. The ACS's Entrepreneurial Initiative is one such program. Piloted in 2012, the ACS's Entrepreneurial Initiative continues to carry out its mission: to respond to the recommendations of the ACS Presidential Task Force on Innovation in the Chemical Enterprise report-"Innovation, Chemistry, and Jobs"-and provide entrepreneurs with resources "that should foster the creation of small companies from startups". See C&EN, July 30, 2012, pg. 57; C&EN, March 31, 2014, pg. 41-43.

In addition, and perhaps more immediately visible to Division members, is the ongoing work by the "bottoms-up" of the ACS as an organization. For years, Technical Divisions and national Committees have, as part of their charters and goals, hosted programming, events and training directed at the business side of chemistry. In 2012, the ACS Chemical Innovation & Entrepre-



Judy Giordan and Janet Bryant at the WCC Just Cocktails at the ACS Spring National Meeting in Dallas. Judy will present ACS CIEC Role in Job Creation in BMGT symposium The Role of Entrepreneurship, Innovation, and Economic Development in Sustainability on Tuesday at the ACS National Meeting in San Francisco which is cosponsored by SCHB.

neurship Council (CIEC) was formally created to be the grassroots coalition of ACS organizations advocating for business development and innovation in the chemical enterprise.

CIEC members include Divisions, Committees and aligned partners and include the: Divisions of Small Chemical Businesses (SCHB), Business Development & Management (BMGT), and Professional Relations (PROF); Committees of Economic and Professional Affairs (CEPA) and the Women Chemists Committee (WCC); and allied partners, the Chemical Angel Network



Thanks to the 64 people who attended our joint networking lunches at ACS Dallas.

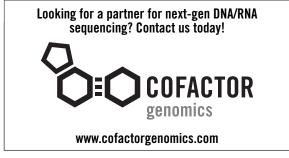
ENNIFER MACLACHLAN

and Innovators Alliance (NCIIA). In addition, both the Membership Affairs Committee (MAC) and the Younger Chemists Committee (YCC) have recently participated and received information on CIEC's activities and programming.

CIEC Member organization representatives teleconference monthly to share information about activities and programming to assist with schedule coordination, topical symposia and training opportunities. SCHB has proudly led the way as a leading member of CIEC to reach ACS members. In the past 3 vears, CIEC

- produced and disseminated symposia and event "roadmaps" of interest to business-minded chemists for national ACS meetings to assist with scheduling and publicity
- supported programming and events (aka a "Business Track" in parallel to traditional technical tracks of programming) at **Regional Meetings**
- leveraged social media (Facebook, Twitter, ACS Network, and LinkedIn) to real-time information, and reach ACS members who may not be able to attend national meetings.

(CAN) CIEC helps support the goals and offerings of the ACS's Entrepreand the Nationneurial Initiative and expands its al Colreach to ACS members. For more legiate information, contact Janet Brvant, CIEC Chair at janetlbryant@ Inventors pnnl.gov.



FUTURE MEETINGS

ACS 249th NATIONAL MEETING:

Denver Debut March 22-26, 2015 Joe Sabol, Program Chair

It's time to start planning for the ACS Spring 2015 meeting in Denver, theme: *Chemistry of Natural Resources*. In addition to SCHB's core programming, *Resources for Entrepreneurs, True Stories, Best Practices,* and *Entrepreneurs' Poster Session,* other sessions on topics of interest to the start-up and small business community, or that feature small businesses, are welcome. It's great if a symposium addresses the meeting theme, but it's not required.

Not planning to attend the Denver meeting? No problem: if you organize a session, you are not required to attend and we can find somebody to preside at the session, although most organizers like to attend and enjoy the fruits of their labor. Organizing a session is not difficult and you will gain valuable skills, expand your network, and will receive full meeting registration from SCHB.

Abstract submission opens on August 25, 2014. Look for the *Call for Papers* in *C&EN*. Sessions other than those listed may be added up to October 2014, but the publicity will be lost if you delay. So, what are you waiting for? Step up and organize a SCHB session at the Denver meeting.

Contact Joe Sabol, SCHB Program Chair <u>program@acs-schb.org</u>, to submit your session proposal or if you have any questions.

<u>Future ACS National Meetings</u> 250th, Boston

August 16-20, 2015 Innovation from Discovery to Application

251st, San Diego March 13-17, 2016 *Computers in Chemistry*

252nd, Philadelphia August 21-25, 2016 Chemistry of the People, by the People, and for the People

253rd, San Francisco April 2-6, 2017 Smart Materials and Systems

254th, Washington DC August 20-24, 2017 Chemistry Beyond Borders

PACIFICHEM Joe Sabol, Program Chair

Save the date: **December 15-20**, **2015**, **Honolulu**, **HI**. Final approved symposia will appear on the Pacifichem web site <u>www.pacifichem.org/</u> in September 2014; abstract submission opens on **January 1, 2015**.

Several SCHB members organized symposia at Pacifichem, Topic Area 11, Connecting Chemistry with Society:

SCHB members Adam Blunn (Australia) and Joe Sabol (USA) teamed up with Daphne Liaison (Canada) and Wilson Chung (Taiwan) organize Small Businesses to Reaching Out for Market Share: Tool Kit and Success Stories (#185), which intends to provide practical tools for small business owners and success stories from entrepreneurs in the chemical, high-tech materials, energy, pharmaceutical/bio-tech, and analytical instrumentation sectors. The session will offer perspectives on the challenges, excitement, and doovers inherent in launching and driving growth in the commercial sector and insight into leveraging entrepreneurial skills to overcome the market barriers that exist with large and established competitors.

SCHB member Jennifer Maclachlan (USA) teamed up with Antony Williams (USA), Kazuhiro Hayashi (Japan), David Martinson (USA), and Brenna Arlyce Brown (Canada) to organize The Evolving Nature of Scholarly Communication: Connecting Scholars with Each Other and with Society (#173), which intends to present the transition of publishing from hard copies to web-based, including the keywords and algorithms that are crucial to searching. This session will include discussion of the broader impact of research on society, including benefits to society in the form of identifying and building new and existing business relationships, resolving challenges of the digital classroom, and examining how traditional publishing models are changing as a result of the impact of social media and broad engagement with society.

SCHB member Anis Rahman (USA) organized *Advances in Terahertz Spectroscopy and Imaging* (#413) along with Choonho Kim (S. Korea), Wolfgang Jaeger (Canada), and Sing Kiong Nguang (New Zealand).

If you are aware of other SCHB members involved in organizing sessions at Pacifichem 2015, please advise Joe Sabol, SCHB Program Chair program@acs-schb.org so as to be included in future notices.

Look for more information on Pacifichem's website, posted as it becomes available.