December 2013 Newsletter

**American Chemical Society** 

Volume 35 No. 12

## DECEMBER 2013 NEWSLETTER TOPICS

- Mosher Award to Peter Wipf
- Chair's Message
- January Dinner Meeting
- From Strained Carbocycles to Heterocycles
- 246th ACS National Meeting: Indianapolis, Indiana
- The Peters Award of the ACS Division of CHAL to Hubert and Laurel Dubb
- Local Science Fairs in 2014
- ACS SCV Infused Chemistry at the Bay Area Science Festival 2013
- New Members for November
- INVITATION: Join the SCV Mosher Award Committee
- Councilor Report: ACS National Meeting in Indianapolis
- ChemPloyment Abstracts

# **Mosher Award to Peter Wipf**

Peter Wipf was born in Aarau, Switzerland. He received his Dipl. Chem. in 1984 and his Ph.D. in 1987 from the University of Zürich under the direction of Professor Heinz Heimgartner. After a Swiss NSF postdoctoral fellowship with Professor Robert E. Ireland at the University of Virginia, Wipf

began his appointment at the University of Pittsburgh in the fall of 1990. Since 2004, he has been a Distinguished University Professor of Chemistry and a Professor of Pharmaceutical Sciences. He also serves as the Director of the Center for Chemical Methodologies and Library Development (UPCMLD). He is a co-Leader of the UPCI Molecular Therapeutics and Drug Discovery Program.

Peter Wipf's research includes the total

synthesis of natural products, organometallic chemistry, heterocyclic chemistry, diversity-oriented synthesis, medicinal chemistry and computational chemistry. At the center of his research program is the study of chemical reactivity and the use of synthesis to augment the chemical toolbox and develop new therapeutic strategies.

A major emphasis involves the efficient preparation of polyfunctionalized nitrogen-containing building blocks for biological screening and synthesis of natural products and analogs. The discovery of fundamentally new reaction

continued on next page

# **January Dinner Meeting** 2013 Harry and Carol Mosher Award

Presentation

Date: Thursday, January 16, 2014 Time: 6:00 p.m. Social Hour

7:00 p.m. Dinner 8:00 p.m. Presentation

**Speakers:** Dr. Peter Wipf

University of Pittsburgh From Strained Carbocycles

to Heterocycles

**Location:** Biltmore Hotel & Suites

2151 Laurelwood Blvd. Santa Clara, CA

\$26.00, Pork Marsala or Cost:

Eggplant Parmesan

Reservations: www.scvacs.org

or Sally Peters 650-854-4614

Reservations should be made by January 13th stating your name, address, company/school affiliation, number of people in party. Watch the web site for more information. If you are unable to honor your reservation please cancel by Monday, January 13th.

# Chair's Message

Final Report Peter Rusch

Any good writing course will stress the basics of: 1) write what you know about; and 2) know your audience. With point number 1 I have no problem. I know my subject well. Point number 2 provides a huge difficulty. Believe it or not, I am writing this for all the SCV Members who we know do not read these messages. Seems futile, but as it says, this is my final message.

Where are you? Why haven't you come forward to participate in any of the activities of the SCV? Those of us who are active opine on any number of reasons that could answer these questions.

Truth be told, we don't know. We had the survey questionnaire in March of this year. Our expectation was that 3% to 5% of the members would respond. It turns out



that almost 9% responded! That's very gratifying and we located some members who volunteered for various activities.

It's important to note that all of the activities continue due to the relentless efforts of a small number of optimistic volunteers. My sincere thanks to all of them. All of

you not reading this should thank them too.

So, I leave you, both readers and nonreaders, with one question: How can we engage more Members in the more than twenty recurring activities of our local section?

A final note for the record. I seem to have accomplished one-and-a-half of my three goals for the year. Details will be in my part of the annual report due out in February.

#### Mosher Award, continued from previous page

pathways is stimulated by exploratory studies of transition metal complexes, in particular zirconocenes, and strained rings. One of his compounds, a PI3 kinase inhibitor, is currently in Phase II clinical trials in the US and Canada.

Among recent awards, Wipf is a recipient of the Morley Medal (2013), the Ernest Guenther Award in the Chemistry of Natural Products (2009), the ISHC Katritzky Award in Heterocyclic Chemistry (2003), and a Fellow of the American Chemical Society (2010), the Royal Society of Chemistry (FRSC, 2004), and the American Association for the Advancement of Science (AAAS, 2002). He received the ACS Pittsburgh Award in 2012 and the Chancellor's Senior Scholar Distinguished Research Award in 2008. He has been an Associate Editor of ACS Medicinal Chemistry Letters since 2009. In 1998, he received the Arthur C. Cope Scholar Award.

# **Mosher Award Lecture**From Strained Carbocycles to Heterocycles

Peter Wipf

Cyclopropanes and cyclobutanes are commonly used as scaffolds for conformational preorganization in pharmaceutical compounds and for the expansion of molecular diversity in chemical libraries. A few natural products also contain these building blocks, and a considerable number of organic methodologies has focused on their preparation and synthetic transformation. In contrast, applications of bicyclo[1.1.0]butanes in organ-

ic synthesis have been much more limited. Similarly, there are only a few applications of methylene cyclopropanes. Our group has been able to expand bicyclobutane and methylene cyclopropane chemistry toward the preparation of diverse ring fused pyrrolidines, many of which represent completely novel scaffolds. We are also applying this methodology toward the total synthesis of polycyclic alkaloids.

# 246th ACS National Meeting: Indianapolis, Indiana

Sally Peters, Councilor

The Indianapolis national meeting was held over two months ago, but I am still hearing positive comments about the meeting and venue. The majority of the hotels were connected to the convention center by enclosed overhead walkways. The majority of the technical sessions fit in the convention center. Those that did not were in nearby, connected hotels. If you did not want to venture outside in the heat, you did not have to. (And it did get warm!)

The Indiana local section members knocked themselves out to make us feel welcome. They joined with the Science Education Foundation of Indiana to sponsor a Celebrate Science Indiana Day at the Indianapolis Motor Speedway on Sunday, September 8th, for a gigantic public outreach event. Two pavilions were filled with hands-on chemistry and science exhibits staffed by ACS volunteers, many with support from companies including Lily, Dow, Roche, and P&G. My group from the Committee on Community Affairs ran 8 experiments and served over 400 kids! The cool event was the opportunity for those 18 and older to speed around the actual Indy 500 track with a race car driver at speeds from 100 to 140 miles an hour! Remember the theme of this meeting

was "Chemistry in Motion!"

Registration of 10,840 was close to the predicted number. That was much lower than San Francisco or San Diego meetings, but this was a late Fall meeting and many schools were just beginning the academic year. Personally, I feel registration was low because of the economy. Many companies were not sending chemists on any trips and the government labs were sequestered!

The exhibition was in a large, lovely hall with 361 booths and 229 companies. The ACS Career Fair, which was held adjacent to the Exhibition, had 99 jobs posted by 29 employers. There were 561 eager job seekers there for interviews. The chair of the Committee on Economic and Professional Affairs, CEPA, did announce that unemployment among chemists was down from 4.69% to 3.57%.

Elections were held at the Wednesday morning council meeting. New members were elected by the councilors to serve on 3 major committees: the Committee on Committees, the Committee on Nominations and Elections, and the Council Policy Committee. The 3 candidates for President-Elect were formally announced: Bryan Balazs, Charles Kolb, and Diane

Schmidt. The entire membership will vote for the 2014 President-Elect in November. Directors at Large and Directors from 2 other districts will also be elected by their districts in November. Our district, district 6, does not have a Director election this year. Don't forget to vote!

The seven councilors and alternate councilors from the Santa Clara Valley section are very pleased to announce that council voted to continue the activities of the joint Board-Council Committee on Nomenclature, Terminology and Symbols. This is the important committee our section chair, Dr. Peter Rusch, led for several years. Also, Dr. Rusch was honored by being made an ACS Fellow!

There were celebrities at the meeting in Indianapolis! The open Board of Directors' Meeting included a talk by actor Alan Alda on Communicating Science. He received an ACS Award for Public Service for being a science communication advocate. At the 90th anniversary celebration for C&EN, the famous chef, Alton Brown discussed the science behind cooking in a humorous presentation. The Society also helped local Stanford professor emeritus, Dr. Carl Djerassi, celebrate his 90th birthday with a special event and reception.

# The Peters Award of the ACS Division of Chemistry and The Law (CHAL) to Hubert and Laurel Dubb

Howard Peters

At the recent ACS national meeting in Indianapolis, Hubert Dubb and his late wife Laurel of Belmont, CA received the second CHAL Peters award for outstanding contributions to furthering non-traditional careers for chemists. Hugh earned a BS degree in chemistry at Cal Tech and then a Ph.D. in chemistry at Yale.

After some time in chemical research he then earned his law degree at San Fernando Valley College of Law in Woodland Hills, CA. He was an intellectual property (IP) attorney and partner with a number San Francisco based IP firms. He established Fleisler, Dubb, Meyer and Lovejoy LLP in 1982 and retired from the firm in 1996. Hugh has long been active in the ACS (a 50+ year member) serving as Chair of the Santa Clara Valley Local Section. He was a co-founder of CHAL in 1978. He served as the Chair of the Probationary Division and later the full active division. Hugh concurrently served in many capacities including the ACS Committee on Patents and Related Matters (CPRM) for over 30 years. In his retirement, Hugh continues to volunteer at local public schools.

Laurel earned an AB degree in history at UC Berkeley and later an MS in Library

Science at UCLA. She was very active in AAUW, particularly in supporting their TechTrek program, which sends 8th grade girls for short stays at Stanford and other universities to study science. This AAUW program recently expanded to a national level. She also ran AAUW local section activities including play reading and visits to Bay area historic sights. She is best remembered as supporting CHAL from its inception and accompanying Hugh to most ACS national meetings for CHAL and the Patent Committee. Hugh and Laurel were married for over 47 years before she passed away in April.

The named Howard and Sally Peters Award of CHAL was established by CHAL in 2012. The award recognizes ACS & CHAL members for significant contributions to nontraditional careers for chemists. One to two ACS members will be honored each year. At a CHAL event, the recipients are presented with an ACS plaque, along with an honorarium. A description of the award can be found in the December 2012 SCVACS newsletter, available online at: www.scvacs.org/newsletter/news1212.pdf. Further details can be found on CHAL's official ACS website at: www.chemistryandthelaw.org



# **Local Science Fairs in 2014**

Susan Oldham-Fritts

As we enter the holiday season, most of us will be out shopping for that "perfect" gift for our friends and families. But what better gift can you give to a young person than encouraging his or her foray into the world of STEM (science, technology, engineering, and mathematics)? The cost is minimal: a day of your time judging at your local science fair. Several area science fairs need category awards judges, especially in the areas of botany, biology, biochemistry, chemistry, microbiology, and the behavioral & social sciences. In addition, we need interested section members for our SCVACS sponsored special award judging team at the Santa Clara County ISEF (International Science and Engineering Fair) qualifier, the Synopsys Championship. To help with our Synopsys Championship please contact Susan Oldham-Fritts (sofritts@garlic.com) or Mark Kent, (marklent@yahoo.com). No matter which fair includes your home town, please volunteer now!

#### Sciencepalooza

Santa Clara County Fair Grounds, San Jose, CA

Saturday, February 8 http://www.outreach-foundation.org/judges.html

Many students at this East Side Union High School District fair are first time science fair participants.

## San Mateo County Science, Math and Technology Fair

Hiller Aviation Museum

Tuesday, February 25 http://www.usc.edu/CSSF/Fairs/400.html

#### Santa Cruz Science Fair

Santa Cruz County Fairgrounds, Santa Cruz, CA

Saturday, March 8 http://www.science.santacruz.k12.ca.us

## Synopsys Championship

San Jose Convention Center, San Jose, CA

Wednesday, March 12 http://www.outreach-foundation.org/judges.html

# Monterey County Science and Engineering Fair

Cal. State University, Monterey Bay – University Center

Saturday, March 15 <a href="http://www.montereycountysciencefair.com">http://www.montereycountysciencefair.com</a>

#### San Francisco Bay Area Science Fair

San Francisco County Fair Ground Building - Golden Gate Park

Wednesday, March 26 http://www.sfbasf.org

# ACS Santa Clara Valley Section Infused Chemistry at the Bay Area Science Festival 2013

Carmen L. Velez

On November 2, 2013, ACS the Santa Clara Valley Section volunteers met early in the morning for a science extravaganza at the Third Annual Bay Area Science Festival, which took place at AT&T Park. The 2013 Bay Area Science Festival was a smashing success with 30,000 people participating in over 150+ events! Our booth was hosted in collaboration with the ACS California Section. We presented two hands-on activities: "Colorful Lathering" and "Plant Smells". We had a steady stream of visitors from about 11:30 AM on to closing time. Many thanks to all the student volunteers from Skyline College, the ACS club at San Jose State University, the ACS club at San Francisco State University, Roxana Farjadi, and Jai Krishnamurthy.



Carmen Velez and Roxana Fajardi at the Third Annual Bay Area Science Festival (Picture courtesy of Alex Madonik)

# Welcome to the Santa Clara Valley Section of ACS

Each month the section receives a spreadsheet from national ACS with the names of members new to our section. The members are either new to ACS, have transferred in from other areas, or are the newest members — students. To welcome you to the section and get to know you, the Executive Committee offers new members a free dinner! To encourage you to attend a monthly section dinner meeting, we would like you to be our guest. When you register, make certain to mention that you are a new member and you and a spouse (or friend) will be our guests. The dinner meetings are often the 3rd Thursday of the month at a local spot, somewhat convenient to the entire section. If you are unable to attend in the evening, perhaps you would join us for an outreach event, like judging a science fair, participating in the Chemistry Olympiad, or a National Chemistry Week event in October. Then, there is our annual wine tasting and awards picnic in July. The local section is a volunteer organization. Please attend an event, volunteer to help, and get to know your local fellow chemists. Welcome!

# **New Members List for November**

Huiyong Hu

John Gustave Adams Jr. Sylvie Asselin Dr. Scott C. Benson Dr. Marie-Gabrielle Braun Joseph Brenninkmeijer Daryl Bulloch Dr. Russell G. Burge Lei Cai Dr. Richard E. Carlson Adam D. Catherman Dr. Indranil Chakraborty Ning Dai Calvin daRosa Kristyna Marie Elbel Dr. Joseph Ellul Ryan Fishell Dr. Lori Friedman Arveh Gold-Parker Dr. Francis Gosselin Michael Gottschalk Glenn David Graham Dr. Terra D. Haddad

Zahra Harati Taji

Dr. Miriam Inbar Daniel F. Jarosz Alex Johnson Dr. Michael Kappler Jing Ke Christian H. Kjaergaard Dr. Jennifer Kovacs-Nolan Dr. Scott E. Lazerwith Lin Li Ying Liu David Edward Longwell Yen Low Michael Ryan Martinez Dr. Robert Scott McDowell Christopher Kyle McKenzie Michael Mish Andreas Mylonakis Dr. Diane L. Neff Kiel Neumann Jing Nie Robert Ono

Drazen Ostovic

Caitlin Renee Pursley Dr. Christopher Shawn Regens Jack W. Rose Sophie Shevick Pooja Singhal Eaindar Soe Iulia Elaine Tryhorn Paul Tschida Dr. Heidi R. Vollmer-Snarr Huiliang Wang Qiongyu Wang Enrico Westenberg Tashica T. Williams Dr. Erik D. Woodbury Yan Xia Jiang Yang **Jacqueline** Yim Rachael Hannah Youngworth Birong Zhang Dr. Jing Zhang Dr. Genhua (Frank) Zheng

Dr. Bilal Zuberi

# INVITATION: Join the SCV Mosher Award Committee

The Harry and Carol Mosher Award was established in 1980 by the ACS Santa Clara Valley Local Section.

More information can be found on the SCV website at www.scvacs.org/Local\_Folder/Awards.html#Mosher

The Mosher Award Selection Committee is inviting SCV members to volunteer for the Award Committee in its future selections. The time requirement averages about an hour per month with most action occurring in June, December and January. Travel involved is within Silicon Valley. The present committee consists of long –term members: Howard Peters, Chair; Lois Durham; David Parker and Natalie McClure. Please contact Howard Peters at peters4pa@sbcglobal.net for more detail.



Happy Holidays

# Councilor Report: ACS National Meeting in Indianapolis, September 7-11, 2013

George Lechner

I attended the ACS National Meeting and participated in the Council Meeting on Wednesday, Sept. 11. The Council discussed and voted on candidates for various committees and ACS Districts as well as for next year's President-elect. Most of the Council committees reported their status on a variety of projects.

I also participated in meetings of the Council Committee on Chemical Safety (CCS) on Saturday, Sept 7, and Monday, Sept 9. The CCS has published a document on Creating Safety Cultures in Academic Institutions and is working on a variety of subjects, such as, Minimum Safety Guidelines for Chemical Demonstrations, Developing Reproductive Protection Programs in Industrial and Academic Settings, safety guidance documents on a variety of laboratory topics. The CCS website is www.acs.org/safety. In addition, I heard several papers on chemical safety and visited the exhibit hall.

Among the committee reports from the meeting:

#### **Society Committee on Education**

SOCED recognized the achievement that is present in the Next Generation Science Standards, including their basis in research on teaching and learning, their formulation as performance standards, and their basis in the NRC framework and its dimensions of Science and Engineering Practices, Disciplinary Core Ideas, and Cross Cutting Concepts. SOCED supported the Standards as a document

that is broadly applicable as a basis for K-12 science instruction and called upon the Society to develop innovative programming to support the implementation of the Standards.

# Standing Committee on Economic and Professional Affairs (CEPA)

Committee on Economic and Professional Affairs reported that employment is up and unemployment is down for ACS chemists. The complete review of the Comprehensive Salary Survey appeared in the September 23 issue of C&EN.



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# CHEMPLOYMENT ABSTRACTS DECEMBER 2013

For a complete list of current abstracts, please visit: www.scvacs.org/Local\_Folder/abstract.htm

#### **CHEMPLOYMENT ABSTRACT 3985**

Position Title: Medicinal Chemistry Scientist (Permanent and Temporary Positions Available)

Job Description: Design and independently synthesize novel molecules directed at one or more of our biological targets. Integrate large amounts of data on previously synthesized molecules into the design of novel molecules anticipated to possess increasingly optimal biological profiles. Participate in identification of novel drug candidates and their advancement into clinical evaluation.

#### **OUALIFICATIONS DESIRED:**

Education: Ph.D. in organic/synthetic chemistry required.

Experience: Post-doctoral research on a synthetic or biological project. Furthermore, the candidate is expected to have a minimum of 4 years of research experience in a high-performance biotechnology environment. The successful candidate will have an excellent scientific publication record and national reputation as a leader in his/her chosen field.

#### LOCATION, SALARY, EMPLOYER:

Job Location: San Carlos, California

Salary: Competitive. Includes stock options. Reflective of candidate experience. Employer: Flexus Biosciences is a new company founded by a group of seasoned researchers from the biotechnology industry with the vision of creating new cancer therapeutics through the innovative application of unexploited insights in immunology. Application Instructions: Please email CV and cover letter to: careers@flexusbio.com

#### **CHEMPLOYMENT ABSTRACT 3986**

Position Title: Medicinal Chemistry Associate (Permanent and Temporary Positions Available)

*Job Description:* Design and synthesize (with minimal supervision) novel molecules directed at one or more of our biological targets. Integrate large amounts of data on previously synthesized molecules into the design of novel molecules anticipated to possess increasingly optimal biological profiles.

# QUALIFICATIONS DESIRED:

Education: M.S. in Organic/Synthetic Chemistry

Experience: Proficient in modern organic synthetic methodology. Minimum 4 years of research experience in a high-performance biotechnology environment. Ability to productively participate in complex, time-sensitive team projects. The candidate should also enjoy operating in an exceptionally dynamic and cooperative environment in which the "rules book" has not yet been written.

#### LOCATION, SALARY, EMPLOYER:

Job Location: San Carlos, California

Salary: Competitive. Includes stock options. Reflective of candidate experience. Employer: Flexus Biosciences is a new company founded by a group of seasoned researchers from the biotechnology industry with the vision of creating new cancer therapeutics through the innovative application of unexploited insights in immunology. Application Instructions: Please email CV and cover letter to: careers@flexusbio.com

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# SANTA CLARA VALLEY SECTION

2013	Section	Officers
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ChemPloyment Abstracts				

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# **FUTURE MEETINGS**

FUI	UKE MILETINGS
Jan 16	Mosher Award Dinner
	Dr. Peter Wipf, Awardee
	Biltmore Hotel & Suites
	Santa Clara, CA
Jan 20	BioScience Forum
	www.biosf.org/programs.htm
	Biltmore Hotel & Suites
	Santa Clara, CA
Jan 29	Sessler Distinguised Alumni Lecture
https://chem	sistry.stanford.edu/events/sessler-lectures
Feb 20	Dr. Paula Findlen, Stanford University
	History of Science
	Biltmore Hotel & Suites
	Santa Clara, CA
Mar 16-20	ACS Spring National Meeting
	Dallas, TX
Jun 23-27	National Organic Chemistry
	Symposium
	Seattle, WA
www.organica	livision.org/ama/orig/NOS/index.html