

## Nanoparticles and Their Use in Diagnostics for Global Health

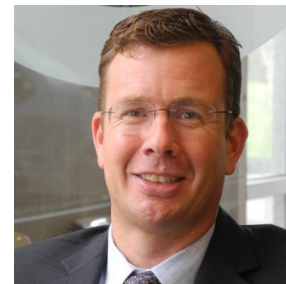
**Marco Biamonte, Ph.D.**

**Drug Discovery for Tropical Diseases**

## New Nanoparticles and Their Industrial Applications

**Steven J. Oldenburg, Ph.D.**

**nanoComposix**



**DATE:** Tuesday, January 26, 2016

**TIME:** 6:00 PM Social Hour, Light Meal  
7:00 PM Lecture

**PLACE:** The Scripps Research Institute  
Keck Amphitheater, Beckman Building  
10550 N. Torrey Pines Road, La Jolla

**RSVP:** <http://nanoparticles.eventbrite.com>

**Marco Biamonte** is the founder of Drugs & Diagnostics for Tropical Diseases (2011-present), a San Diego based non-profit research organization developing new products for Global Health. Prior to that, Marco was a Senior Scientist at Biogen Idec (San Diego, 2006-2011) and Scientist at Conforma Therapeutics (2001-2006) where he contributed to advancing three compounds to development, including the cancer drugs BIIB021 (Phase II) and BIIB028 (Phase I). Marco holds a Ph.D. in Organic Chemistry from the University of Cambridge, UK, and completed his postdoctoral work at the Swiss Federal Institute of Technology (ETH Zürich).

Marco will discuss the importance of new diagnostics for Global Health and focus on a device being developed at DDTD to detect parasitic worms. The device is a "lateral flow assay", which is the same format as the home pregnancy test. Marco will describe the anatomy of a lateral flow assay and show how advances in nanoparticle chemistry can maximize the efficiency of such devices.

**Steven Oldenburg** is the founder of nanoComposix (2004-present), a San Diego based company with a mission to help its customers maximize the benefits of nanotechnology through the use of precisely manufactured and highly characterized nanomaterials. nanoComposix has been ranked by the Department of Defense as one of the top 10% small companies in terms of commercialization success. Prior to that, Steven was Senior Scientist at Seashell Technology, where he was responsible for identifying and developing commercial applications of nanotechnology, raising capital, and managing the scientific research team. Steven holds a Ph.D. in Applied Physics from Rice University.

Steve will describe novel nanoparticles made at nanoComposix and their application to different fields, such as defense, security, dermatology, nanosafety, and diagnostics. Steve will discuss the chemistry of one or two selected nanoparticles and provide details on their synthesis and characterization.

### CHAIR NOTES

Dear ACS Members,

I am looking forward to spending 2016 as Chair of the San Diego Section of the American Chemical Society. We have an exciting and vibrant local scene here in San Diego and I hope to represent all sectors of it during the coming year.

I would like to start by thanking our 2015 Chair, **Ben Pratt**, for all his hard work and dedication during this past year. He did an exceptional job and I'd like to keep the momentum going that he generated.

The 2016 executive team includes **Jonathan Lockner** (Chair-Elect), **Bill Tolley** (Secretary), and **Bill Szabo** (Treasurer). In addition, the Executive Committee consists of a dedicated team of committee chairs, councilors, alternate councilors, and members-at-large who all contribute to planning the many events throughout the year that our members enjoy.

Our next Executive Committee Meeting will take place on Tuesday, January 5<sup>th</sup>. I invite any and all members to come and attend. This is the perfect place to start if you have any ideas for meetings you'd like see, interest in volunteering, or just an idea of what it takes to run a local section. Our volunteers are the lifeblood of the local section and we couldn't do anything without each and every one of them, so I will start the year by thanking them in advance for all the time they will dedicate during 2016.

The theme for 2016 is *The Diversity of Chemistry in San Diego*. The San Diego Section has members from all disciplines under the broad umbrella that is chemistry, and I hope to pay homage to this with a wide range of topics for our monthly meetings.

To start off the year, we will have **Marco Biamonte** of Drug Discovery for Tropical Diseases and **Steven J. Oldenburg** of nanoComposix giving presentations on some of the advances in the use of nanoparticles. Marco will discuss the importance of new diagnostics for Global Health and focus on a device being developed at DDTD to detect parasitic worms. Steve will describe novel nanoparticles made at nanoComposix and their application to different fields, such as defense, security, dermatology, nanosafety, and diagnostics.

Come February we will be hosting **Carol Gallagher**, currently a partner with New Enterprise Associates. She will be discussing her previous experience as President and CEO of venture-backed Calistoga Pharmaceuticals, where she led the development of the company's novel PI3K inhibitor (recently approved by the FDA for multiple indications in chronic lymphocytic leukemia and lymphoma) and the successful acquisition by Gilead Sciences in 2011.

In addition to these events I am looking forward to our yearly favorites. These include the medicinal chemistry seminars "Academics to Industry", Earth Fair, Mad Science, Seniors Breakfasts, Education Awards Banquet, Family Picnic, 50-/60-Year Member Luncheon, MedChem Symposium, ChemExpo, Distinguished Scientist Award Banquet, Holiday Party and the many events from the Law, Professional Development, the Women Chemists Committee and the Younger Chemists Committees.

Finally, on behalf of the Executive Committee of the San Diego Section of the ACS, I'd like to wish you all a very Happy Holiday Season and a peaceful and prosperous New Year.

Graeme Freestone  
2016 Chair

American Chemical Society – San Diego Section

E-mail: [gfreestone@sandiegoacs.org](mailto:gfreestone@sandiegoacs.org)

Web: [www.sandiegoacs.org](http://www.sandiegoacs.org)

### FREE EVENT ANNOUNCEMENTS FOR NON-PROFIT ORGANIZATIONS!

Does your non-profit organization have an upcoming event that might be of interest to members of the ACS – San Diego Section? If so, please send your announcement to our 2016 Chair, Graeme Freestone, at [gfreestone@sandiegoacs.org](mailto:gfreestone@sandiegoacs.org). Once approved, Graeme will see that your announcement is published on our website ([www.sandiegoacs.org](http://www.sandiegoacs.org)) and, if received by the 23<sup>rd</sup> of the month before the event, in *The San Diego Chemist* newsletter. This is a free service of the ACS – San Diego Section. Take advantage of it!

### ATTENTION ADVERTISERS

**Did you know** that *The San Diego Chemist* is the only monthly e-newsletter that targets chemists and chemical engineers in San Diego and Imperial Counties? As soon as our newsletter is uploaded on [www.sandiegoacs.org](http://www.sandiegoacs.org) a separate notification is sent to the **2,400 members** of the ACS-San Diego Section, each potential customers for your products and services! **Quick turnaround:** Ad copy submitted by the 23<sup>rd</sup> of each month will be published by the end of that month. For more information, please contact: Renate Valois, [renate@sandiegoacs.org](mailto:renate@sandiegoacs.org).

### CHEMISTRY JUDGES NEEDED

Judging by professional societies at the 62<sup>nd</sup> Annual Greater San Diego Science & Engineering Fair will take place on **Wednesday, March 16<sup>th</sup> at 12:15 pm** in Balboa Park. If anyone is able to help choose exhibits for our Section's chemistry awards or wants more information, please contact Ken Poggenburg at [jkp135@att.net](mailto:jkp135@att.net).

**THE SAN DIEGO CHEMIST**, the official newsletter of the San Diego Section of the American Chemical Society, published on a monthly basis, can be viewed at <http://www.sandiegoacs.org/newsletter/>.

All contents are published at the discretion of the Section's Executive Committee. Events of interest to chemistry professionals in the community may be included in the events calendar as space permits and are subject to editing for brevity. Advertisements and announcements from the chemistry community are accepted at published rates. The deadline for items submitted is **the 23<sup>rd</sup> of the month** for publication by the end of that month.

**Advertisers:** Ad prices as of January 1, 2015:  
Size (w x h)      Number of Issues & Price/Issue

	1	3	6
2" x 3"	\$ 75	\$ 68	\$ 58
4.5" x 1.5"	\$ 80	\$ 74	\$ 67
4.5" x 4.75"	\$200	\$184	\$163
8.5" x 5.5"	\$400	\$360	\$310
full page	\$655	\$590	\$510

Discounts will be available for issues not shown  
Please send your jpg to:

**Renate Valois** at [renate@sandiegoacs.org](mailto:renate@sandiegoacs.org).

Make checks payable to:

**American Chemical Society** and mail to:

**Bill Szabo, Treasurer**  
**3950 Mahaila Avenue, B-36**  
**San Diego, CA 92122**

### SECTION E-MAIL LISTSERVER!

Get up-to-the-minute reminders of local events and develop dialogs with your fellow members!

To subscribe to our moderated listserver:

1. Send an e-mail with SUBSCRIBE TO LISTSERVER in the subject line, and your name and e-mail in the body of the message to Ken Poggenburg at [jkp135@att.net](mailto:jkp135@att.net).
2. If you receive a message from the postman, reply to confirm that you wish to be added to the list, otherwise it will not take effect.
3. You will receive reminders approx. 5-7 days prior to upcoming events and messages of general interest to members.
4. To post topics for discussion, or informational items to the listserver members, send the message to [sandiego-chemist-l@ucsd.edu](mailto:sandiego-chemist-l@ucsd.edu).
5. If the moderator approves the post, it will be sent to the members.

**NOTE:** That is the letter "l", not the number "one" following the word "chemist".

### Executive Committee Meeting Dates 2016

6:00 – 8:00 pm

<b>Tuesday</b>	<b>January</b>	<b>5</b>
<b>Thursday</b>	<b>February</b>	<b>4</b>
<b>Tuesday</b>	<b>March</b>	<b>1</b>
<b>Thursday</b>	<b>April</b>	<b>7</b>
<b>Tuesday</b>	<b>May</b>	<b>3</b>
<b>Thursday</b>	<b>June</b>	<b>2</b>
<b>Tuesday</b>	<b>July</b>	<b>5</b>
<b>Thursday</b>	<b>August</b>	<b>4</b>
<b>Tuesday</b>	<b>September</b>	<b>6</b>
<b>Thursday</b>	<b>October</b>	<b>6</b>
<b>Tuesday</b>	<b>November</b>	<b>1</b>

**Meetings will be held at:**

**9381 Judicial Drive, Suite 160**  
**San Diego, CA 92121**



SCHRÖDINGER.



SheppardMullin



Wilson Sonsini Goodrich & Rosati  
PROFESSIONAL CORPORATION



The San Diego Section of the American Chemical Society would like to thank our Corporate Sponsors. Here are a few examples of our annual outreach programs that are made possible by their generous donations:

**Mad Science** - Stage demonstrations for 4<sup>th</sup> and 5<sup>th</sup> graders which make science fun for kids! Last year the program was viewed by over 8000 students in low-income areas and from military families.

**ChemExpo** - A science event for middle and high school students held annually for the past 28 years. It features live stage demonstrations and interactive booths that teach kids about applied science. Last year over 1000 local students participated!

**Monarch Elementary School Program** - This unique school accommodates children who are impacted by homelessness, and who would otherwise have little or no exposure to hands-on science.

**EarthFair** - We participate in the world's largest free annual environmental fair, held in Balboa Park.

#### **CONSIDER SPONSORSHIP OF THE ACS SAN DIEGO SECTION**

The San Diego Section of the ACS is looking for organizations that are committed to advancing science and education in the greater San Diego area by providing financial support. There are several ways to get involved, and each one comes with its own benefits and privileges. For further information please contact: **Fang Zhao**, Chair, Fundraising Committee, at [fangzhao\\_2000@yahoo.com](mailto:fangzhao_2000@yahoo.com)

#### **2016 ACS PROJECT SEED REQUESTS FOR FUNDING NOW BEING ACCEPTED!**

The Executive Committee of the San Diego Section of the American Chemical Society has again approved limited funding for the ACS Project SEED program in 2016.

This 47-year-old summer research internship provides economically disadvantaged high school juniors and seniors with an opportunity to work side-by-side with scientist-mentors on research projects in local academic, government, and industrial laboratories. Click <http://www.acs.org/content/acs/en/education/students/highschool/seed.html> for more information about ACS Project SEED.

If you are an institutional coordinator or high school teacher and have an interest in applying for support from the ACS-San Diego Section in 2016, please send details (including the level of funding requested) to:

**Mark Tichenor** - [mtichenor@sandiegoacs.org](mailto:mtichenor@sandiegoacs.org)

The deadline for receipt of your request for funding is **January 31, 2016**. Student selection is the responsibility of the participating institution(s).

Give a young student the unique chance to experience real-world scientific research!

#### **The 213<sup>th</sup> Meeting of the Two-Year College Chemistry Consortium (2YC3) <http://www.sdcity.edu/2yc3>**

We invite you to attend the 213<sup>th</sup> 2YC<sub>3</sub> meeting on **March 11-12, 2016**. The conference will take place at **San Diego City College**, located on 1313 Park Blvd, San Diego, CA 92101. We currently are looking for colleagues who would like to contribute to our program by giving a presentation, leading a workshop, or participating in a panel discussion. We especially encourage topics related to our theme, **"Teaching Chemistry Through Its Social Impacts."** If you would like to present on a different topic, please do not hesitate to submit an abstract, as we encourage as diverse a program as possible. The due date for submitting abstracts (via email to the Program Co-Chairs) is **February 15, 2016**.

##### **Program Co-Chairs**

Nancy Crispen: [ncrispen@sdccd.edu](mailto:ncrispen@sdccd.edu)

Joann Um: [jum@swccd.edu](mailto:jum@swccd.edu)

Haim Weizman: [hweizman@ucsd.edu](mailto:hweizman@ucsd.edu)

##### **Local Arrangements Chair**

Robert Kojima: [rkojima@sdccd.edu](mailto:rkojima@sdccd.edu)

##### **Exhibits Coordinator**

Shane Haggard: [mhaggard@sdccd.edu](mailto:mhaggard@sdccd.edu)

#### **ORGANIZERS NEEDED!**

The San Diego Section of the American Chemical Society is looking for volunteers to organize an **ACS Western Regional Meeting**. Exact dates are flexible and yet to be determined, but it will be held between 2018 and 2020. We are currently looking to fill the positions of General Meeting Chair and Program Chair(s). If you are organized, work well with others and want to expand your professional network to a national scale, you may be a great fit for either of these positions. The **General Meeting Chair** will be responsible for overseeing the planning of the meeting venue and logistics while the **Program Chair(s)** will fill events and speaker lists. Location, duration and desired attendance are based on the vision of the organizers. If you have an idea for a large meeting held here in San Diego, this is your way to make it happen.

For more information please contact:

**Graeme Freestone, 2016 Chair**  
**San Diego Section of the American Chemical Society**  
[gfreestone@sandiegoacs.org](mailto:gfreestone@sandiegoacs.org)



## ANNUAL MEETING AND HOLIDAY PARTY

Our last Annual Meeting and Holiday Party took place on December 3<sup>rd</sup> and was held at The Butcher Shop Steakhouse. We did see some new faces who seemed to be interested in getting involved in the Local Section.

Outgoing Chair, **Ben Pratt**, summarized the events of 2015, and incoming Chair, **Graeme Freestone**, presented his plans for 2016. We are looking forward to an interesting year ahead.



Past Chair Ben Pratt



Chair Graeme Freestone



Bill Szabo, Rodney Harris, Valerie Kuck



Paul Bruinsma, Ken Poggenburg, John Schindler



James Caldwell, Ben Pratt, Graeme Freestone



What is Kevin Entzminger discussing?



Valerie Kuck in food line



Desserts



The crowd



Ben Pratt getting "pinned" by Graeme Freestone

Renate Valois  
Photo credits: Jim Shih

## **CONGRATULATIONS!**

**Dr. Kate Murashige**, senior of counsel with Morrison & Foerster, has been named a Fellow of the American Association for the Advancement of Science (AAAS) for outstanding contributions to IP law. For more information, please see the press release at: <http://www.mofo.com/resources/news/2015/12/151201murashigenamedaaasfellow>

## **CHEMPLOYMENT 777**

### **Position Title**

Research Scientist, Medicinal Chemistry

### **Description of the Position**

We are seeking a highly motivated chemist to join our drug discovery team. The qualified candidate will have recent industry experience in modern synthetic methods and a strong knowledge of current synthetic advances. Working on our interdisciplinary drug discovery programs, they will further develop the company's technology and intellectual property. In addition, within a discovery project, the candidate will analyze SAR, propose target molecules, develop and execute a synthesis of the targets for biological assays. The successful candidate will work closely with other scientists to efficiently evaluate and progress lead compounds. The qualified individual must be adaptable to a fast-paced and dynamic environment, and be strongly motivated to succeed.

### **Duties and Responsibilities**

- Develop and execute synthetic routes of target molecules, including work up, purification, isolation, and characterization of products; work on mg to 100g scale; develop scalable routes of preclinical drug-candidates.
- Overcome challenging synthetic problems; ability to troubleshoot, come up with alternative synthetic strategies, and develop innovative and practical chemistry solutions.
- Understand the goal and strategy of the project and positively and proactively contribute to project success.
- Design of novel organic compounds drug candidates using data and SAR analysis from all aspects of a small-molecule research program including, enzyme assays, cell-based assays, DMPK, toxicology, structural information, molecular modeling, physiochemical properties, literature reports, and other information.
- Communicate effectively both in oral and written form, including preparing short reports and delivering internal and external presentations in a timely manner; including for CROs and other collaborators.
- Ensure that the company's intellectual property is fully protected by keeping detailed experimental details in laboratory notebooks according to company policy, including analytical data and other scientific information.
- Contribute to the writing of patents, scientific presentations, and publications.
- Perform routine maintenance on laboratory equipment and instruments.
- Command of the relevant and latest scientific literature in order to advance research projects.
- Organize and prioritize workload to meet timelines; investigate the feasibility of applying a wide variety of scientific principles and concepts to potential inventions, products and problems.
- Work effectively in a multi-disciplinary environment that requires close collaboration with scientists with different expertise and experience. Exhibit flexibility and adaptability as projects and goals often shift.
- Maintain a clean and safe laboratory environment; take personal responsibility for individual and co-worker safety and strictly adhere to all safety procedures and policies.

### **Qualifications**

- B.S./M.S. degree in Chemistry with 5-8 years experience or Ph.D. degree in Organic/Medicinal Chemistry with 0-5 years of related experience.
- Expertise in synthetic organic chemistry, including methodologies, transformations, and mechanisms.
- Demonstrated expertise in multi-step synthesis and strong knowledge of techniques related to purification and characterization of organic compounds (NMR, MS, HPLC, etc).
- Able to work independently and apply experience and knowledge to solve difficult synthetic challenges and provide useful guidance to other chemists on the project team.
- Maintains an excellent scientific expertise in organic synthesis, conversant with the current literature.
- Proven track record of innovative project contributions including peer-reviewed publications.
- Excellent organization, written and oral communication skills; strong interpersonal skill, able to interact effectively within a multidisciplinary team and dynamic environment.
- Self-motivated and enthusiastic; self-leadership and management skills required along with the ability to be adaptable and have a high degree of flexibility.
- Demonstrates intellectual curiosity and scientific versatility by a willingness to take on challenging and complex problems and finding innovative solutions.

### **Company Description**

**Kalyra Pharmaceuticals, Inc.** is a San Diego founded small molecule drug discovery company with a core technology based in organic chemistry. We strive to create value and benefit patients by addressing unmet medical needs across multiple therapeutic areas through innovative science and breakthrough solutions. We offer a stimulating, challenging and productive discovery environment with a strong commitment to developing both the synthetic and medicinal chemistry skills of our team.

### **Application Instructions**

Qualified applicants please send CV and Research Summary to [careers@kalyrapharma.com](mailto:careers@kalyrapharma.com)

## CHEMPLOYMENT 778

### Position Title

Senior Research Scientist, Medicinal Chemistry

### Description of the Position

We are seeking a highly motivated medicinal chemist to join our drug discovery team. The qualified candidate will have substantial medicinal chemistry experience in an industry environment and a strong knowledge of modern synthetic methods. In addition, the candidate will help lead and drive drug discovery program, analyze SAR, propose target molecules, develop and execute synthesis of the targets for biological assays. The candidate will work closely with other scientists to efficiently evaluate and progress lead compounds and further develop the Company's technology and intellectual property portfolio. The qualified individual must be adaptable to a fast-paced and dynamic environment, and be strongly motivated to succeed.

### Qualification

- Ph.D. in Organic or Medicinal Chemistry with 8+ years of pharmaceutical industry and medicinal chemistry experience
- Excellent knowledge of medicinal chemistry principles with a solid understanding of the basic biology and pharmacology of programs, the ADME issues, and series SAR. Able to effectively integrate this knowledge and apply the key principles of medicinal chemistry, literature precedent, and drug design to direct medicinal chemistry programs to phase transitions or series go/no go decisions.
- Ability to make inventive contributions towards new chemical target structures or templates for programs, and employ sound judgment in the evaluation and strategic decision making around early screening or literature hits.
- Strong skills in gathering, documenting, and analyzing information from competitive sources such as patents and meetings and using this information to guide program strategy.
- High level of creativity and productivity with strong synthetic problem solving skills; excellent scientific expertise in organic synthesis, conversant with the current literature. Ability to champion the chemistry efforts into new directions to achieve project milestones.
- Strong working knowledge of protein-ligand interactions, conformational and structural analysis, experienced in partnering closely with computational chemists through appropriate use of computational tools, models and visualization applications.
- Proven leadership capability in cross-functional team setting, either as project team leader or co-lead; able to effectively manage and prioritize resources to deliver on timelines; able to make hard decisions to ensure project success on timelines and budget.
- Strong evidence of conceptual thinking and active follow through, recognized by establishing new projects or new directions within projects, new strategies and/or enabling technologies for drug discovery. Vigorous scientific curiosity evidenced by contributions to diverse medicinal chemistry strategies.
- Communicate effectively both in oral and written form, including preparing short reports and delivering internal and external presentations in a timely manner; including for CROs and other collaborators.
- Work effectively in a multi-disciplinary environment that requires close collaboration with scientists that have different expertise and experience. Exhibit high degree of flexibility and adaptability as projects and goals often shift. Self-motivated and enthusiastic; self-leadership and management skills required.

### Company Description

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### Application Instructions

Qualified applicants please send CV and Research Summary to [careers@kalyrapharma.com](mailto:careers@kalyrapharma.com)

## ACS-HACH PROGRAMS

### ACS-Hach Land Grant Teacher Scholarship

Provides financial support to obtain a chemistry undergraduate degree and chemistry teaching credentials at one of our 72 partner institutions.

**Application Period:** [Contact participating universities directly for application details](#)

### ACS-Hach Post-Baccalaureate Teacher Scholarship

Provides financial support for chemistry graduates with limited work experience to obtain a masters degree in education or teacher certification in chemistry.

**Application Period:** **February 1st – April 1st**

### ACS-Hach Second Career Teacher Scholarship

Provides financial support for chemistry professionals to obtain a masters degree in education or teacher certification in chemistry.

**Application Period:** **February 1st – April 1st**

### About ACS-Hach Programs

[Learn more.](#) Contact us: Email: [hach@acs.org](mailto:hach@acs.org)

Phone: (800) 227-5558 ext. 8178



## CHEMISTRY FOR YOU AND YOUR KIDS

### Which Mixture is the best Mixer?

In the following activity you will learn which soap or detergent makes oil and water mix the best.

#### You will need

Safety glasses - 5 zip-closing plastic bags - Vegetable oil -  
Measuring cups - Measuring spoons - Water - Newspaper -  
Soap - Dish detergent - Laundry detergent - Shampoo - Grater

1. Cover your work surface with a double layer of newspaper. You can use your soap and detergent mixtures from the first activity or make new mixtures using the instructions in the first activity.
2. Use your masking tape and pencil to label 5 plastic bags "water," "soap," "dish detergent," "shampoo," and "laundry detergent." Ask your adult partner to help you pour 1/2 cup of water into each bag. Now add 3 tablespoons of oil to each bag. Close the bags and make sure they are sealed tightly.
3. Look at your bag marked "water." Do the oil and water mix? Shake the bag hard up and down three or four times. Hold the bag still. Do the oil and water stay mixed or do they separate again?
4. Now add 2 tablespoons of each soap or detergent mixture to each of the four labeled bags. You and your adult partner should hold one bag in each hand and shake them hard 3 or 4 times.
5. Which soap or detergent seemed to make the oil and water mix the best? How did the other ones work? Which soap or detergent would you sue to clean an oily mess? Why?

Excerpt: "The Best of WonderScience," pg. 77, Delmar Publishers, 1997

## SLAS AND ACS SAN DIEGO COLLABORATIVE CONFERENCE

### SLAS2016 Conference and Exhibition

January 23-27, 2016

#### San Diego Convention Center

ACS San Diego members are invited to participate in SLAS2016, an international event expected to draw some 5,000 life sciences R&D professionals to the San Diego Convention Center, January 23-27. SLAS2016 offers a full scientific program featuring more than 130 podium presentations, exhibition, poster presentations, short courses, career workshops and much more.

[ SLAS2016 links to <http://www.slas2016.org/index.cfm> ]

Admission to the SLAS2016 Exhibition is free, but you must register. Exhibits-only registration includes the opportunity to tour the Exhibition featuring more than 300 leading multinational providers of laboratory technology and related products and services, as well as the opportunity to participate in a wealth of career-focused events:

- Workshops on mentoring, transitions, work/life balance and negotiations
- SLAS Career Connections (job board and more)
- One-on-one mentoring sessions (advance sign up required)

[ register links to <http://www.slas2016.org/registration/> ]

[ career-focused events links to

<http://www.slas2016.org/conference/earlycareer.cfm> ]

Members of ACS San Diego are assisting SLAS by serving as mentors for this popular program.

### LINKS TO STEM

*Links to STEM* provides enrichment for students in grades 4-8 from schools throughout San Diego. *Links to STEM* introduces the students to a broad spectrum of STEM-related topics and emphasizes the skills necessary to participate on a robotics team. *The time commitment is from 9:00 am - 12 noon, 2 times monthly/every other Saturday at Francis Parker School in Linda Vista.*

Volunteers are needed in the following areas:

- Computer programming
- Scientific experiments, practicing
- Elementary & middle school math
- Robotics competition preparation

**Volunteer today to work with students in the *Links to STEM* Program which ends April 2016!**

If you are interested please contact Kemi Akinlabi at [olakemi.akinlabi@hp.com](mailto:olakemi.akinlabi@hp.com)

## ACS Webinars™

### Featured Events

ACS Webinars® is a free, weekly online event serving to connect ACS members and scientific professionals with subject matter experts and global thought leaders in the chemical sciences. Each session is about 60 minutes, comprised of a short presentation followed by Q&A with the speaker. Live presentations are held on **Thursdays from 2-3pm ET**. Recordings of the webinars are available online to ACS members at <http://acswebinars.org/>.

**January 14, 2016**

### Chemistry of Hello: Making the Glass of Tomorrow

The first session of our Material Science Series will dive in to the chemistry of that made Corning the number one name in portable electronics.

**January 21, 2016**

### Is Your Etiquette Holding Back Your Career?

Patricia Simpson demonstrates that we expose our own weaknesses when we fail to use proper etiquette.

\*\*\*\*\*

### 2016 Drug Design and Delivery Symposium

#### I - Time: The Fourth Dimension in Drug Discovery

- |                    |  |
|--------------------|--|
| <b>January 28</b>  | The Importance of Drug-Target Kinetics in Drug Design          |
| <b>February 25</b> | Long Acting Subcutaneous Therapeutics                          |
| <b>March 23</b>    | Modified Release Formulations for Solubility Starved Compounds |
| <b>April 28</b>    | <i>The Medicinal Chemist of Tomorrow (Special Topic)</i>       |

#### II - Beyond Traditional Small Molecules

- |                  |   |
|------------------|---|
| <b>May 19</b>    | Design of Deliverable Macrocycles                                       |
| <b>June 23</b>   | Culture Clash - Antibody Drug Conjugates                                |
| <b>July 28</b>   | Nucleic Acids Therapeutics - Making Sense of Antisense Oligonucleotides |
| <b>August 18</b> | <i>Special Topic (To Be Announced)</i>                                  |

#### III - Pharmacology Revisited

- |                     |   |
|---------------------|---|
| <b>September 29</b> | Designing Around Toxicophores                             |
| <b>October 27</b>   | RNA by design and phenotypic screening                    |
| <b>November 11</b>  | Cell Penetrating Peptides to Improve Cellular Drug Uptake |

## 251ST AMERICAN CHEMICAL SOCIETY NATIONAL MEETING & EXPOSITION

Convention Center

**San Diego, CA**

March 13-17, 2016

For more information, please visit:

<http://www.acs.org/content/acs/en/meetings/spring-2016>

### 2016 ACS REGIONAL MEETINGS

<a href="#">CERM</a>	May	18 - 21	Cincinnati, OH
<a href="#">MARM</a>	June	9 - 12	Riverdale, NY
<a href="#">NORM</a>	June	26 - 29	Anchorage, AK
<a href="#">ICS (Specialty))</a>	July	17 - 21	New Orleans, LA
<a href="#">NERM</a>	October	5 - 8	Binghamton, NY
<a href="#">SERMACS</a>	October	23 - 26	Columbia, SC
<a href="#">MWRM</a>	October	26 - 28	Manhattan, KS
<a href="#">SWRM</a>	October	10 - 13	Galveston, TX



### YOUR AD HERE!

Place your ad in the next issue of  
**The San Diego Chemist**

Please contact Renate Valois at  
[renate@sandiegoacs.org](mailto:renate@sandiegoacs.org)

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## HELP GUIDE ACS WITH YOUR VALUABLE INPUT BY JOINING THE ACS INSIGHT LAB

You are cordially invited join the [ACS Insight Lab](#), a forum for you and other ACS members to offer guidance and perspective to help shape the future of ACS and the broader chemistry community. Your feedback and insight will help the ACS improve and develop new programs and services. Your membership in the ACS Insight Lab will give you the ability to share your insights and experiment with new ideas; grant you access to the *Lab Report* newsletter, covering what we've learned from you and how it has been implemented; notify you of exclusive sneak peeks and early-bird offers from the ACS; and make you eligible to win prizes for participating. Sign up today

[www.acsinsightlab.com/ACSMatters](http://www.acsinsightlab.com/ACSMatters)

## SHARE SCIENCE AS A CHEMISTRY AMBASSADOR

You can help kids learn to understand and love science as a Chemistry Ambassador, and ACS is ready to help you do it. Volunteer with youth groups, summer camps, and scouts in your community - the Chemistry Ambassadors program has tips and resources to support your outreach to your neighbors or students in your area. Once you experience the rewards of helping kids learn about chemistry, consider doing it again. The Chemistry Ambassadors program makes it easy to stay involved, whether you have a lot of time, or just a little.

Visit [www.acs.org/chemistryambassadors](http://www.acs.org/chemistryambassadors) to get more details.

## VOLUNTEER WITH KIDS & CHEMISTRY

Kids & Chemistry is a community-based program that brings together scientists and children to do hands-on science activities. Volunteers include ACS members, ACS Student Chapters, and corporate groups. Volunteer efforts can be implemented as a full program administered by an ACS local section or by an individual as a one-time classroom visit. The program can also be incorporated into an existing corporate outreach/education program, or serve as the focal point for a larger mentoring program.

### How it Works

Contact a school: [Establish a relationship with a local school](#)

Choose an activity: [Use ACS-approved lessons or learn how to make your own](#)

Present your lesson: Use [classroom management techniques](#) to maximize the impact of your lesson.

Tell us about it: After you're done, [drop us a line](#). We'd love to hear about your efforts and help in any way possible.

Other Ways You Can Support Science Education

## REGISTER FOR AN ACS PROFESSIONAL EDUCATION COURSE IN 2016

Refresh your skills or branch into new areas with training from ACS Professional Education. Short Courses are presented either seminar-style, anywhere from 1 to 5 days, or online, taught over a period of weeks, or viewed on-demand. Visit [www.ProEd.acs.org/2016-Schedule](http://www.ProEd.acs.org/2016-Schedule) for the full listing of upcoming courses in 2016.

## ACS Public Policy Fellowship Available

As a 2014-2015 ACS Congressional Fellow, Emily Lewis put her research skills to work for the U.S. House Committee on Natural Resources and helped to develop a nebulous idea into a legislative bill. Sound interesting to you? [Read more about Emily's experience](#), or [apply to be an ACS Congressional Fellow](#). The deadline for applications is **January 15, 2016**.

## Attention Companies! Do you hire student workers?

If you have open positions in chemistry and biochemistry that would be of interest to college students, such as summer internship opportunities, here is a list of contacts you'll want to keep handy. The people listed below are the faculty advisors of the ACS Student Affiliate groups for all chemistry programs in San Diego County. These professors can get the word out to all chemistry and biochemistry majors at their schools about jobs, career fairs, open houses, etc.

### California State University, San Marcos

Jacqueline Trischman

[trischma@csusm.edu](mailto:trischma@csusm.edu)

760-750-4206

### Palomar College

Greg Elliott

[gelliott@palomar.edu](mailto:gelliott@palomar.edu)

858-531-1149

### Point Loma Nazarene University

Sara Choung

[SaraChoung@PointLoma.edu](mailto:SaraChoung@PointLoma.edu) 619-849-2627

### San Diego Mesa College

Dwayne Gergens

[dgergens@sdccd.edu](mailto:dgergens@sdccd.edu)

619-388-2609

### San Diego Miramar College

Fred Garces

[fgarces@sdccd.edu](mailto:fgarces@sdccd.edu)

619-388-7493

### San Diego State University (SDSU)

Mikael Bergdahl

[bergdahl@sciences.sdsu.edu](mailto:bergdahl@sciences.sdsu.edu) 619-594-5865

### Southwestern College, Chula Vista

David Hecht

[dhecht@swccd.edu](mailto:dhecht@swccd.edu)

619-421-6700x5461

### University of California, San Diego

Joe Cribari

[jcribari@ucsd.edu](mailto:jcribari@ucsd.edu)

858-822-4055

Gourisankar Ghosh

[gghosh@ucsd.edu](mailto:gghosh@ucsd.edu)

858-822-0469

Judy Kim

[judyk@ucsd.edu](mailto:judyk@ucsd.edu)

858-534-8080

### University of San Diego

Tammy Dwyer

[tdwyer@sandiego.edu](mailto:tdwyer@sandiego.edu)

619-260-4030



## LOOKING FOR A CHEMIST? CHEMPLOYMENT IS THE ANSWER! THE SAN DIEGO CHEMIST

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For information contact:

**Renate Valois - [renate@sandiegoacs.org](mailto:renate@sandiegoacs.org)**



**UPCOMING EVENTS**

**SENIORS/RETIREES/CONSULTANTS/ETC. BREAKFAST**

**Coco's Bakery Restaurant  
4280 Nobel Drive, San Diego, CA 92122  
Thursday, January 7, 2016, at 9:30 AM**

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**MARCO BIAMONTE, PH.D., DRUG DISCOVERY FOR TROPICAL DISEASES**

**STEVEN J. OLDENBURG, PH.D. NANOCOMPOSIX**

**The Scripps Research Institute  
Keck Amphitheater, Beckman Building  
10550 N. Torrey Pines Road, La Jolla  
Tuesday January 26, 2016**

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**SAN DIEGO FESTIVAL OF SCIENCE & ENGINEERING**

**<https://www.lovestemsd.org/>**

**FESTIVAL WEEK: March 5-13, 2016**

**EXPO DAY at PETCO Park: Saturday, March 5, 2016**

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**251<sup>st</sup> ACS SPRING NATIONAL MEETING & EXPOSITION**

**San Diego, California**

**March 13-17, 2016**

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**THE 62<sup>nd</sup> ANNUAL GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR**

**Balboa Park Activity Center (2145 Park Blvd.)**

**For information please see <http://www.gsdsef.org/>**

**March 15 - 20, 2016**

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**EARTH DAY - EARTHFAIR 2016**

**Balboa Park, San Diego, CA**

**<http://www.earthdayweb.org>**

**Sunday, April 17, 2016**

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**SUMMER PICNIC**

**San Dieguito County Park, Solana Beach**

**Sunday, June 26, 2016**

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**252<sup>nd</sup> ACS FALL NATIONAL MEETING & EXPOSITION**

**Philadelphia, Pennsylvania**

**August 21-25, 2016**

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**HOLIDAY PARTY**

**The Butcher Shop**

**5255 Kearny Villa Road, San Diego, CA 92123**

**Thursday, December 1, 2016**

**THE SAN DIEGO SECTION OF THE AMERICAN CHEMICAL SOCIETY  
WELCOMES ITS NEW MEMBERS**

Roger Bakale  
Wendy Hartsock  
Matthew Holcomb  
Sara Howard  
Jessica Kelz  
Valerie Kuck  
Doris Lee  
Sandra Ligsay  
Erick Martinez Loran

Rilind McNamara  
Manesseh Park  
Shannon Pease-Dodson  
Adam Perez  
Parisa Rahmatirad  
Carly Schissel  
Ashley Vallier  
Yasmin Weiss  
Balyn Zaro

**2016 EXECUTIVE COMMITTEE & COMMITTEE MEMBERS  
SAN DIEGO SECTION OF THE AMERICAN CHEMICAL SOCIETY**

**EXECUTIVE COMMITTEE**

<i>Chair</i>	Graeme Freestone, Dart NeuroScience LLC, <a href="mailto:gfreestone@sandiegoacs.org">gfreestone@sandiegoacs.org</a>	(2016)	858-246-8137
<i>Chair-Elect</i>	Jonathan Lockner, Calibr, <a href="mailto:jlockner@sandiegoacs.org">jlockner@sandiegoacs.org</a>	(2016)	858-688-8143
<i>Past-Chair</i>	Ben Pratt, Akarna Therapeutics, <a href="mailto:bpratt@sandiegoacs.org">bpratt@sandiegoacs.org</a>	(2016)	858-945-7893
<i>Secretary</i>	William Tolley, Seacoast Science, Inc., <a href="mailto:w_tolley@juno.com">w_tolley@juno.com</a>	(2016)	858-780-0978
<i>Treasurer</i>	Bill Szabo, <a href="mailto:bszabo@sandiegoacs.org">bszabo@sandiegoacs.org</a>	(2016)	858-550-0306

*Councilors*

Thomas R. Beattie	(2018)	858-587-1210
Hui Cai, WuXi AppTec	(2016)	858-361-8838
Desiree Grubisha, CSUSM	(2018)	858-254-5497
John Palmer, UCSD	(2017)	858-534-5906
Ken Poggenburg	(2016)	760-635-2573
David Wallace, Wallace Scientific Consulting	(2018)	858-638-1866

*Alternate Councilors*

Paul Bruinsma, HP Inc.	(2017)	858-655-8322
Surya K. De, Sanford-Burnham Medical Research Institute	(2016)	858-337-4961
Julann Miller, Waters Corporation	(2017)	800-252-4752 x6802
John Schindler	(2016)	858-353-3943
Jim Shih, Eli Lilly & Co	(2017)	626-826-3561

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*Members-at-Large*

James Caldwell	(2016)	815-262-9697
Ryan Clark, Inception Sciences, Inc.	(2017)	858-774-2095
Mark Rosen, Aetheria Therapeutics	(2017)	858-692-0639
Joann Um, Southwestern College	(2016)	510-823-8637
Mark Wentland	(2016)	518-257-2735

**STANDING & SPECIAL COMMITTEES**

*Award Nomination Committee*

Thomas R. Beattie (Chair)	858-587-1210
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*ChemExpo*

Paul Bruinsma (Chair), HP Inc.	858-655-8322
Julann Miller, Waters Corporation	800-252-4752 x6802

*Communications Committee*

Paul Bruinsma, (Chair), HP Inc.	858-655-8322
Surya K. De, Sanford-Burnham Medical Research Institute	858-337-4961
Desiree Grubisha, CSUSM	858-254-5497
Ken Poggenburg	760-635-2573
David Wallace, Wallace Scientific Consulting	858-638-1866
Renate Valois (Newsletter Editor)	619-692-0638

*Education Committee*

Haim Weizman (Chair), UCSD	858-534-2963
Joann Um (Co-Chair), Southwestern College	510-823-8637

*EarthFair*

Julann Miller, Waters Corporation	800-252-4752 x6802
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*Finance Committee*

Bill Szabo (Chair)	858-550-0306
Tom Beattie	858-587-1210

*Fundraising Committee*

Fang Zhao, WuXi AppTec	858-336-7645
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*Government Affairs Committee*

Hui Cai, WuXi AppTec (Chair)	858-361-8838
Ken Poggenburg	760-635-2573

*Law Committee*

Ryan C. Smith, Duane Morris LLP	619-744-2220
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*Mad Science Program*

Thomas R. Beattie	858-587-1210
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*MedChem Symposium*

Mark Tichenor (Co-Chair), Janssen Pharmaceuticals, Inc.	858-334-8914
David Wallace (Co-Chair), Wallace Scientific Consulting	858-638-1866

*Membership Committee*

Mark Rosen, Aetheria Therapeutics	858-692-0639
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*Nominations Committee*

Jim Shih, Eli Lilly & Co.	626-826-3561
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*Picnic Committee*

Jim Shih, Eli Lilly & Co.	626-826-3561
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*Professional Development Committee*

**OPEN**

*Public Relations Committee*

John Schindler	858-353-3943
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*Retired Chemists Committee*

Ken Poggenburg (Chair)	760-635-2573
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*Seniors Breakfasts*

Thomas R. Beattie	858-587-1210
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*Women Chemists Committee*

**OPEN**

*Younger Chemists Committee*

Jean-François Brazeau (Co-Chair), Celgene	858-882-5263
Corey Anderson, (Co-Chair), Vertex Pharmaceuticals	858-405-4734

*Voice Mail – San Diego Section*

619-687-5570