

# **The San Diego Chemist**

American Chemical Society Volume 30, Number 10

San Diego Section October 2018

### A SEMI-SYNTHETIC ORGANISM THAT STORES AND RETRIEVES INCREASED GENETIC INFORMATION

#### 2018 Distinguished Scientist Award Banquet

Floyd Romesberg, PhD
Department of Chemistry
The Scripps Research Institute, La Jolla, CA

#### About the Lecture

Since the last common ancestor of all life on earth, the biological diversity has been encoded in a four letter, two base pair genetic alphabet. Expansion of the genetic alphabet to include a fifth and sixth letter than for a third, unnatural base pair not only has immediate utility for a number of applications, such as site-specific oligonucleotide labeling, but also serves as the foundation for an organism with an expanded genetic code. Toward this goal, we have examined a large number of different unnatural nucleotides bearing mainly hydrophobic nucleobase analogs that pair based on packing and hydrophobic interactions rather than H-bonding. Optimization based on extensive structure-activity relationship studies and two screens resulted in the identification of a class of unnatural base pairs that are well recognized by DNA and RNA polymerases. More recently, we have engineered E. coli to import the requisite unnatural triphosphates and shown that DNA containing the unnatural base pair is efficiently replicated, transcribed,



and translated within the cell, resulting in the first semi-synthetic organism that stores and retrieves increased information.

#### **About the Speaker**

Floyd E. Romesberg received a B.S. and M.S in chemistry from The Ohio State University, and a Ph.D. in physical organic chemistry from Cornell University. He was an NIH postdoctoral fellow at UC Berkeley with Peter Schultz, and in 1998 joined the faculty at The Scripps Research Institute, where he is currently Professor of Chemistry.

Romesberg's research laboratory applies organic chemistry, microbiology, non-linear optical spectroscopy, and genetics, to study different aspects of evolution. Of particular significance is his work to expand the genetic alphabet and code through the development of a third DNA base pair that relies on hydrophobicity as opposed to hydrogen bonding for selective pairing.

Romesberg has been recognized by several awards including the Camille Dreyfus Teacher Scholar Award, the NSF CAREER Award, the Discover Magazine Technology Innovation Award, the ACS Nobel Laureate Signature Award, and the Royal Society of Chemistry's 2018 Bioorganic Chemistry Award. His research has been funded by NIH, NSF, Office of Naval Research, and Defense Advanced Research Projects Agency. Romesberg is also a scientific founder of several biotech companies, including Achaogen, Inc., RQx Inc., and Synthorx, Inc.

- Tony Bottone Award for Outstanding Service
   Julann Miller, Alternate Councilor, ACS San Diego Section
- Outstanding Committee Chair Award
   Thomas Beattie, Chair, Distinguished Scientist Awards Nomination Committee, ACS San Diego Section
- Outstanding Chemistry Educator Award
   Mary Ann Rall, Science Teacher, Torrey Pines High School

DATE: Thursday, October 18, 2018

TIME: 6:00 PM No host bar 6:30 PM Dinner

7:30 PM Award lecture

PLACE: The Ida and Cecil Green Faculty Club - UCSD, 9500 Gilman Drive, La Jolla

For directions please see: <a href="http://facclub.ucsd.edu/">http://facclub.ucsd.edu/</a>

PRICE: \$30.00 per dinner, \$15.00 with student I.D.

Reservations required

RSVP: Wednesday, October 10, 2018

https://sandiegoacsfromesberg2018.eventbrite.com/

#### **CHAIR NOTES**

Dear ACS Members,

Fall has arrived in San Diego - Cool evenings and preparing for the busy Holiday season. Your SDACS continues its efforts to provide chemistry-centric programs and outreach activities in the local community. September included two great events:

On Thursday, September 6<sup>th</sup>, our Section co-hosted an evening minisymposium with SABPA including 2 great speakers, **Dr. Jinglan Zhou** and **Professor John L. Wood**. The event was well attended and we are fortunate to have wonderful venues like Lilly Biotechnology Center to host these intergroup events. Big thanks to **Jim Shih** for hosting and **David Wallace** for being the ACS representative at the Symposium.

On Wednesday, September 19<sup>th</sup>, the ACS San Diego Section hosted the 4th Annual Analytical Symposium. This one-day symposium featured six engaging speakers covering topics ranging from chemical sensors, LC-MS and capillary electrophoresis. Huge thanks goes out to **Julann Miller** for helping to organize this event, Knobbe Martens for hosting the educational event, and the many corporate sponsors for making this event possible.

Turning to October and November, there are three events I wish to put on your radar:

Thursday, October 18th – We will host our annual Distinguished Scientist Award Dinner at the UCSD Faculty Club. This year's awardee, **Dr. Floyd Romesberg** of The Scripps Research Institute, will give an overview of his work. We will also honor some of our ACS Local Section volunteers: **Julann Miller** has earned the Tony Bottone Award for Outstanding Service, **Thomas Beattie** the Outstanding Committee Chair Award, and **Mary Ann Rall** the Outstanding Chemistry Educator Award. Join us at the UCSD Faculty Club! Register at <a href="https://sandiegoacsfromesberg2018.eventbrite.com/">https://sandiegoacsfromesberg2018.eventbrite.com/</a>

October  $27^{\text{th}}$  – As part of National Chemistry Week, we will join forces with San Diego Miramar College for our annual ChemExpo. This year's theme is "Chemistry Is Out of This World"

In order to make this a huge success for the hundreds of kids that will attend, volunteers are greatly needed and greatly appreciated. To find out how, contact **Paul Bruinsma** (paulb@sandiegoacs.org).

In November we are organizing a fun Section activity at the White Labs - we expect a fun and educational talk on the chemistry of brewing - more details to follow soon. Keep an eye on our website for updates.

As always, you are welcome to join us at our next Executive Committee Meeting on Thursday, October  $4^{\rm th}$ . Get involved and make your membership in the San Diego Local Section of the ACS a rewarding experience!

Jennifer Barber-Singh, Ph.D.

2018 Chair

San Diego Section of the American Chemical Society

E-mail: jbsingh@sandiegoacs.org
Web: www.sandiegoacs.org

#### **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 2018 Chair, **Jennifer Barber-Singh**, at <a href="mailto:jbsingh@sandiegoacs.org">jbsingh@sandiegoacs.org</a>. Once approved, Jennifer will see that your announcement is published on our website (<a href="www.sandiegoacs.org">www.sandiegoacs.org</a>) and, if received by the 20<sup>th</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 <a href="www.sandiegoacs.org">www.sandiegoacs.org</a> a separate notification is sent to the **2,500 members** of the ACS-San Diego Section, each potential customers for your products and services! **Quick turnaround:** Ad copy submitted by the 20<sup>th</sup> of each month will be published by the end of that month.

For more information, please contact:

Renate Valois at renate@sandiegoacs.org

**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 <a href="http://www.sandiegoacs.org/newsletter/">http://www.sandiegoacs.org/newsletter/</a>.

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 23rd 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
<i>\$ 75</i>	\$ 68	<i>\$ 58</i>
\$ 80	<i>\$ 74</i>	<i>\$ 67</i>
\$200	\$184	\$163
\$400	\$360	\$310
<i>\$655</i>	\$590	\$510
	\$ 75 \$ 80 \$200 \$400	\$ 75

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

Renate Valois at renate@sandiegoacs.org.

#### 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:

- 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 ikp135@att.net.
- 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.
- To post topics for discussion, or informational items to the listserver members, send the message to sandiego-chemist-l@ucsd.edu.
- 5. If the moderator approves the post, it will be sent to the members.

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

Executive Committee Meeting Date 2018 6:00 - 8:00 pm

Thursday October 4
Thursday November 1

Meetings will be held at:

9381 Judicial Drive, Suite 160 San Diego, CA 92121







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!

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 Ashkan Tafti at atafti@sandiegoacs.org

#### **BE A CHEMISTRY AMBASSADOR!**

**Volunteer Opportunities:** Activities and ideas for getting involved in outreach. Explore to find activities that fit your interests and schedule! For more details, please see: <a href="https://www.acs.org/content/acs/en/volunteer/chemambassadors.html">https://www.acs.org/content/acs/en/volunteer/chemambassadors.html</a>

#### **VOLUNTEER WITH KIDS & CHEMISTRY**

For more details, please see: http://www.acs.org/content/acs/en/education/outreach/kidschemistry.html

#### ANNUAL SAN DIEGO ACS LOCAL SECTION ELECTIONS 2018

Nominations for Section offices are now in order. Per our Bylaws, the current Chair-Elect will assume the Chair, but other positions are open for election, including

#### Chair-Elect • Secretary • Treasurer • 3 Councilors • 1 Member-at-Large

Councilors, Alternate Councilors, and Members-at-Large serve for three years, and all incumbents may succeed themselves. We encourage the active participation of our members! If you have an interest in becoming involved in the ACS-San Diego Section and want to make a self-nomination as a candidate for an elected position, please contact:

Jennifer Barber-Singh at <a href="mailto:ibsingh@sandiegoacs.org">ibsingh@sandiegoacs.org</a>

Send your bios to Renate Valois at <a href="mailto:renate@sandiegoacs.org">renate@sandiegoacs.org</a>

NOTE: VOTING WILL AGAIN BE DONE ELECTRONICALLY

Voting will be done electronically using your email address on record for the ACS. If you wish to receive a paper ballot instead, please call or e-mail Jackie Trischman, Election Coordinator, **858-414-3323** or <a href="mailto:trischma@csusm.edu">trischma@csusm.edu</a> by Friday Nov. 2 and leave your name and mailing address. You will be mailed a paper ballot.

If you do not request a paper ballot, you will receive instructions on how to vote via email. Please be sure your email address on file with the ACS is current! To update your email address with the ACS, use <a href="https://www.chemistry.org">www.chemistry.org</a>

#### **ACS-Hach Programs**

#### **ACS-Hach Professional Development Grant**

Funds professional development experiences for secondary chemistry teachers. Award Amount: Up to \$1,500

Application Period: October 15th - January 4th annually

#### 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. Award Amount: \$10,000 for full-time study

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. Award Amount: Up to \$6,000 for full-time study and up to \$3,000 for part-time study

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. Award Amount: Up to \$6,000 for full-time study and up to \$3,000 for part-time study

Application Period: February 1st - April 1st

#### About ACS-Hach Programs

The ACS-Hach Programs provide financial support for future and current high school chemistry teachers. Learn more.

Contact us: Email: hach@acs.org -- Phone: (800) 227-5558 ext. 8178







# ChemExpo2018

San Diego's Celebration of National Chemistry Week

## Saturday, October 27, 2018 • 11am-3pm

National Chemistry Week ( www.acs.org/ncw) encourages ACS members and science enthusiasts to build awareness of chemistry at the local level. ACS Local Sections, businesses, schools, and individuals are invited to organize or participate in events in their communities with a common goal: to promote the value of chemistry in everyday life.

#### The main event: 11 am to 3 pm

Students are asked to arrive before 2 pm especially if they are filling in extra credit sheets. Extra credit is at the discretion of your chemistry or science teacher.

#### **Location Information:**

Campus Map: http://sdmiramar.edu/map

**Driving/Walking Instructions:** The College is at 10440 Black Mountain Road between Mira Mesa Blvd and Carroll Canyon Road.

- From I-15N, go west on Carroll Canyon Road for about ¼ mile
- · Go north on Black Mountain Rd for about a mile
- Turn right into the campus parking lot (look for the solar panel structures)
- · Park in lot 2. Parking is free during the weekend
- From the parking lot, walk east on "West Compass Walk" to "Compass Point" near the Science Building

- Local company and organization booths illustrate how chemistry is applied at work and in everyday life
- University students hold stage demonstrations
- Hands On DemoTables with Miramar College Chemistry Department

We need local organizations and volunteers.

Please sign up for an exhibit at our event.

Please contact: Paul Bruinsma at paulb@sandiegoacs.org

The Girl Scouts of America hosts a parallel event. Scouts can earn a chemistry merit badge. The ChemExpo is also an opportunity for chemists, including General Chemistry students, to connect to the chemical community.

### SAN DIEGO MIRAMAR COLLEGE • 10440 Black Mountain Road • San Diego, CA 92126



# EXECUTIVE BOARD CANDIDATES FOR 2019 ACS SAN DIEGO SECTION CANDIDATE BACKGROUNDS

#### CHAIR-ELECT

Open

#### **SECRETARY**

#### **WILLIAM TOLLEY**

Bill earned a B.S. and M.S. in Metallurgical Engineering from the University of Utah and a Ph.D. in Inorganic Chemistry from the Brigham Young University. His research focused on the interactions of inorganic compounds with supercritical fluids. This work led to a patent describing novel processing to purify metals using vapor-phase chemistry. He worked for seven years as Production Manager, and then promoted to Director of Quality Assurance at Quantum Group Inc. in San Diego.

In 2008, Bill joined Seacoast Science, Inc., located in Carlsbad, CA, where he currently is Principal Scientist and Production Manager. He led development of the Mini-GC, which was successfully launched in August 2009. His responsibilities include sensor design and testing, and proposal development. In 2007, he chaired the subgroup to write new alarm certification protocols under UL 2035 - Single Station Gas Detectors. Bill is a member of the American Chemical Society, where he is a member of the San Diego Section executive committee and in his fifteenth year as Secretary to the Section. He is a lifetime member of Sigma Xi (The Scientific Research Society). He has authored or coauthored 26 U.S. patents and over 75 journal articles and presentations in chemical sensing, process control and materials production.

#### **TREASURER**

#### **GRAEME FREESTONE**

Graeme received his undergraduate degree in chemistry from The University of Manchester in 2001 and earned a DPhil in 2005 from The University of Oxford for his work investigating the Birch reduction in the labs of Professor Timothy Donohoe. He then moved to San Diego to undertake a three-year postdoctoral position at The Scripps Research Institute with Professor KC Nicolaou, where his work focused on the total synthesis of complex natural products.

Since leaving academia Graeme has worked as a medicinal chemist in the areas of liver and metabolic diseases and cognitive disorders at Metabasis Therapeutics, Helicon Therapeutics, Dart Neuroscience and Ionis Pharmaceuticals (his present position).

He is active in both the San Diego chemical community and the ACS San Diego Local Section serving as Member-at-Large (2011-2014), Chair of the Younger Chemists Committee (2014), Chair of the San Diego Section (2016) and Treasurer (2017).

#### COUNCILOR

#### TOM BEATTIE

Tom has served continually as a Councilor in the San Diego ACS Section for the last 15 years and prior (2001-3) was an Alternate Councilor. In 1999, a year for which the section received the ACS National Outstanding Large Section Award, he was Section Chair.

Currently he also is Chair of the ACS National Senior Chemists Committee (SCC, 2015-8), was Vice Chair (2014-5), and was a member since its formation in 2013. Previously he was a member of the National Senior Chemists Task Force (2009-12) and chair of the ACS National Silver Circle (seniors) Working Group (2005-9), progenitors of SCC. From 2004 to 2012 he was a member of the National Local Section Activities Committee and served as chair of its Local Section Assistance and Development Subcommittee.

In the San Diego ACS Section he chairs the annual Distinguished Scientist Award Selection Committee (21 years) and was the creator in 1999 and organizer of the annual San Diego Medchem Symposium (17 years). In 2008 he initiated and continues to manage the section's quarterly seniors/retirees/consultants/part-timers breakfasts.

Since 2001 he has managed the section's educational programs in the elementary schools. Since 2005 the programs have focused on science shows for 4<sup>th</sup>/5<sup>th</sup> graders in which >82,000 school children have viewed >450 Mad Science shows. In 2012 this program received a San Diego Science Alliance award.

Tom was the Program Chair of the San Diego ACS Section-sponsored 1995 ACS Western Regional Meeting (WRM), which still holds the record as the largest ACS regional meeting ever. For the 2007 WRM he was Technical Program Advisor and a session chair.

He received the section's Outstanding Service Award in 1996, 2004 and 2013, the 2015 Outreach Volunteer of the Year, and the 2011 E. Ann Nalley ACS Western Region Service Award. In 2011 he was named an ACS Fellow. Apart from ACS, Tom spent a 27-year career at the Merck Research Labs in Rahway, NJ as a medicinal chemist in early stage drug discovery. After retiring from Merck in 1993, he came to San Diego and worked at Amylin Pharmaceuticals and IRORI/ChemRx/Discovery Partners. Since 2001 he has been doing biopharmaceutical consulting for many organizations within and outside of San Diego, has taught at UCSD, Mesa College and U. Kansas, and served

on several advisory boards. He has a B.S. (U. Pennsylvania), Ph.D. (U. Wisconsin) and was a postdoctoral fellow at M.I.T.

#### COUNCILOR

#### **DESIREE GRUBISHA**

Desiree is currently an adjunct faculty member in the Department of Chemistry and Biochemistry at California State University, San Marcos. She has worked in Lab QA in Commercial Quality Control at AstraZeneca/Amylin Pharmaceuticals supporting diabetes medicines in the worldwide market. Prior to this, she worked at Amylin Pharmaceuticals in Analytical R&D supporting clinical trial programs for diabetes and severe lipodystrophy. Desiree has been an active volunteer with the San Diego ACS Section since 2004. She has been involved with ChemExpo, YCC and WCC activities, planning committee for the 41<sup>st</sup> Western Regional Meeting in 2007, and has served on the Public Relations committee. She is currently serving the San Diego Section in the Communications Committee and as a Councilor. Desiree earned a PhD in inorganic chemistry from the University of Wisconsin, Milwaukee, and did postdoctoral research toward novel detection platforms for molecular diagnostics in the Microanalytical Instrumentation Center at Iowa State University.

#### COUNCILOR

#### **DAVID WALLACE**

David is an experienced medicinal chemist and registered patent agent with over 23 years experience in the pharmaceutical industry. He is founder and president of Wallace Scientific Consulting. WSC provides services to early and clinical stage biotech companies, providing prior art/FTO searches and patent application drafting as well as synthetic and medicinal chemistry expertise in the area of small molecule drug discovery. Current and past companies include Samumed, CyanoTech, AnhWalker Therapeutics, Kemin Pharma, EyeCyte, Rempex Pharmaceuticals, Allylix and Mirable. David was also a Scientific Advisory board member and co-founder of Amalyte, Inc., a Bay area biotech company focusing on the treatment of immune and inflammatory diseases. Amalyte was acquired by Kemin Pharma in 2009. He was previously Principal Scientist at Senomyx, Inc., where he served as chemistry group leader of a team focused on the discovery of agonists to G-protein coupled taste receptors. Prior to Senomyx, David held senior scientific and leadership positions at Chugai Pharma, USA, where he contributed to several multidisciplinary research programs directed toward discovery of novel therapies for cancer, cardiovascular, inflammatory, and metabolic diseases. He is an inventor or co-inventor on numerous issued or pending patents. David holds a Ph.D. in Organic Chemistry from the University of California, Davis. He has been a member of the ACS for 30 years and is currently a councilor of the San Diego Section and member of the ACS National Committee on Economic and Professional Affairs (CEPA).

MEMBER-AT-LARGE
Open

Vote

by

November 25th

#### **CHEMPLOYMENT 794**

#### **POSITION TITLE**

Associate Scientist / Scientist, Organic Chemistry and Cheminformatics

#### JOB DESCRIPTION

Monitor, discuss and provide synthetic chemistry guidance for projects with BioBlocks' collaborators.

With training, develop software and informatics to support BioBlocks' lead discovery platform Leap-to-Lead™.

Curate Bioblocks' corporate and platform SQL databases.

Prepare technical reports for BioBlocks' collaborators.

Make creative contributions to intellectual property and contribute to patent authorship as required.

#### **QUALIFICATIONS DESIRED**

#### Education

MS with 3+ years of industry experience or PhD with 1-2+ years of industry experience.

#### Experience

Expertise in synthetic organic chemistry is required.

Experience with processing virtual compound sets is a plus.

Advanced knowledge of Microsoft Excel or any cheminformatics tool is a plus.

Strong oral and written communication skills, ability to contribute in interdisciplinary settings.

#### **DESCRIPTION OF COMPANY**

BioBlocks, Inc. is a company specialized in collaborative medicinal chemistry and the development of innovative tools to support the drug discovery community. In collaborations with our partners we advance early lead compounds to preclinical candidates. Central to our success in these lead optimization projects are our outstanding medicinal chemistry team, advanced cheminformatics tools and innovative chemistry. Our office is located in the Mira Mesa area of San Diego. More information is available on our website: <a href="https://www.bioblocks.com">www.bioblocks.com</a>.

#### **APPLICATION INSTRUCTIONS**

Please direct a cover letter and résumé to: <a href="mailto:info@bioblocks.com">info@bioblocks.com</a> or apply through our website. BioBlocks is an equal opportunity employer.

#### **CHEMPLOYMENT 795**

#### Position Title

Senior Research Associate/Research Associate II

#### Job Description

Genomatica is seeking a **(Senior) Research Associate** with experience in analytical chemistry to work as a member of the Analytical Sciences team. The Analytical team is responsible for quantitative and qualitative analysis of fermentation and other types of samples using a variety of chromatographic, mass spectrometric, and spectroscopic techniques, including HPLC-UV-RID, Ion Chromatography, GS/GCMS, LCMS and FTIR, ultimately helping develop cost-advantaged production of chemicals using microorganisms. The successful candidate will utilize her/his knowledge of a wide variety of analytical chemistry techniques to support and help advance Genomatica strain engineering and process technology platforms.

#### Responsibilities:

- Perform quantitative analyses to support strain engineering and fermentation process development focusing on HPLC and IC instrumentation
- Sample preparation, data generation, data interpretation and reporting utilizing in-house built LIMS
- Instrument maintenance and troubleshooting
- Method development and validation

#### **QUALIFICATIONS DESIRED**

#### Education

- BS or MS in Chemistry, Biochemistry or related field with 3+ years industry experience
- Solid understanding of chemistry, basic biochemistry and fundamentals of sample preparation, chromatography and detection principles. Proven records of analytical method development.
- Proficiency with Agilent LC and Thermo (Dionex) IC instrumentation including hardware and method troubleshooting.
- Hands-on experience with Chromeleon is highly desirable
- Experience with GC-MS/FID is a plus
- Must be highly organized, collaborative, self-motivated, and team-oriented
- Ability to successfully perform in a fast-paced, high-intensity R&D work environment
- Ability to keep accurate records of experiments and data
- Excellent computer skills, able to manage, organize, and critically evaluate large data sets
- Capable of presenting findings at regular team meetings
- Excellent oral and written communication

#### Work Environment/ Physical Demands

This position involves working primarily in a laboratory setting. As such this position requires the ability to stand or sit at the bench, the use of standard laboratory equipment as well as computers and office equipment. The position requires communication with other individuals through a variety of methods.

#### Description of Company

Genomatica Opens a New Window. is a widely-recognized technology leader for the chemical industry. It delivers new manufacturing processes that enable its partners to produce the world's most widely-used chemicals from alternative feedstocks, with better economics and greater sustainability than petroleum-based processes.

Genomatica, Inc., 4757 Nexus Center Drive San Diego, CA 92121

Phone Number, Fax Number | 858-824-1771 -- E-mail Address | info@genomatica.com

Genomatica is an equal opportunity employer.

Application Instructions Apply online at www.genomatica.com/careers

#### SUMMARY OF THE SAN DIEGO SECTION **EXECUTIVE COMMITTEE MEETING MINUTES SEPTEMBER 13, 2018**

SABPA / ACS Symposium - ~130 attendees, good speakers, special thanks to Lilly and Jim Shih as host

<u>Listsery</u> – Section's current policy prohibits distributing event notifications from for-profit organizations at no cost, with decision as to appropriate content left to discretion of Section Chair

Action: Table discussion regarding policy, and to direct Communications Committee to clarify policy

ChemExpo - No one has volunteered to coordinate NCW poetry contest for the Section

Treasurer's Report –Recent income: \$2,500 in sponsorships for the West Coast Analytical Symposium, \$500 in sponsorships for SABPA / ACS Symposium, \$80 for Newsletter ads; expenses: food for meetings; comments: Vanguard Fund growing, Section currently has \$11K surplus

Newsletter - Suggestion to snail-mail one issue at beginning of year

Website - Currently blank sections, Jen to query other local sections regarding how they maintain Websites

Nominations - No candidates for chair-elect

San Diego Science Festival EXPO Day 2019 - Section registered to host a booth

National Meeting - San Diego received a ChemLuminary Award for Outstanding Large Section; Council surveyed its members regarding women who have experienced sexual harassment - 75+% of women councilors have experienced harassment in ACS or workplace, 52% of male councilors have experienced harassment; 15,400 attendees at the Boston meeting (3K students); National Meeting to be in San Diego next August

Western Regional Nanomeeting - Oct 27 in Pasadena / Cal Tech (conflicts with ChemExpo)

Awards Banquet / Distinguished Scientist - Thurs. Oct 18; meeting announcement is in the Newsletter, working on list of potential invited quests; keeping same registration cost as last year; JOURNY's advisor nominated for Educator Award

Mad Science – Have ~12 programs scheduled in coming months

Next meeting: Oct. 4

#### ACS Fall National Election Opens October 1 - Watch Your E-mail

Balloting for President-Elect 2019, two Directors-at-Large, and Directors for Districts I and V opens October 1, 2018. Balloting will be conducted online, with the option to receive a paper ballot upon request. During the week of September 4, Survey & Ballot Systems, the ACS election vendor, will send all members eligible to vote (as of August 15) and with an e-mail address a notice with the option to request a paper ballot. Those members who do not have an e-mail address on file will be sent a paper ballot via the U.S. Postal Service on October 1, with the option to vote electronically. For more information, visit www.acs.org/elections or send an e-mail to nomelect@acs.org.

#### Save On Shipping with FedEx®



Whether you ship packages every day or only occasionally, the ACS Member Shipping Program helps you save on shipping for every FedEx shipment you send and receive. Managed by PartnerShip, this free program gives U.S.-based ACS members significant savings on their

shipping needs, From small packages up to large freight. There are no minimum usage requirements or obligations, just great savings included with your ACS membership!

#### Office Depot Has Everything You Need for Home, School, or Work

ACS Members based in the U.S. can save 10% off the everyday web price on more than 30,000 office supplies available through the ACS Office Depot Partner Program. From pens to printing, for home, school, work, and anything in between, you'll find everything you need at Office Depot to keep yourself well supplied and running efficiently. Register at www.1800member.com/od-acs, or call 1-800-636-2377.

Once you're registered, you can shop in store or online. Sign up today and start saving!



### October 7-10<sup>th</sup>, 2018 Marriott Coronado Resort & Spa San Diego, CA

Premier fragment based drug discovery conference run by scientists for scientists

#### **PLENARY LECTURES:**

Stephen K. Burley, Rutgers and RSCB;

Miles Congreve, Heptares; Ben Cravatt, Scripps Research Institute;

Chris Murray, Astex Therapeutics

#### SCIENTIFIC PROGRAM:

Fragment to drug success stories and advances in existing and emerging technologies.

Talks by scientists from: AbbVie, Astex, BMS, Boston University, eFFECTOR, Exscientia, Genentech, Imperial College London, Monash University, Novartis, Roche, Scripps, Takeda and Zobio

Registration includes exciting scientific program, poolside welcome reception, dinner cruise on Spirit of California, breakfast, lunch and coffee, and networking opportunities <a href="http://www.ysbl.york.ac.uk/fbld/2018/">http://www.ysbl.york.ac.uk/fbld/2018/</a>

#### MOLE Day, October 23rd

Don't forget to celebrate Mole Day on October 23 from 6:02 a.m. to 6:02 p.m. Would Avogadro be amused by the following? Maybe not... however I hope you are.

#### A Dictionary of Mole Day Terms & Jokes

(Jokes: Contributed from various sources; Dictionary by Celeste T.)

Everything you ever wanted to know about moles but were afraid to ask (and much you didn't want to know)

demoleition - The destruction which moles bring about in your yard.

dismole - being gloomy on Mole Day

imoleble - anything that does not have to do with a mole

mol - the symbol for mole

mole-mole - a mole double agent

molearchy - government in which moles are in complete control; under this government Mole Day is celebrated three times a year and chemistry is the only scientific subject taught in school

molebile - a mole which hangs from the ceiling; also a term describing anything which can move rapidly inderground

molect - the obsessive collection of Mole Day stuff including T-shirts, lawn decorations, pins, and endless other things

molectomy - the study of a mole's insides

molehill - a large hill made of dirt in your backyard, formed from moles borrowing underground; also a term used to describe anything that's pesky

moleism - the continual reverence of moles

molelaberate - working together on a project which includes moles

moleodic - a word describing the Mole Day songs which are played over the loudspeaker

moleskito - a tiny molelike creature with wings which drinks the blood of anyone who doesn't remember when Mole Day is

remoletly - obscurely having to do with a mole

remolte control - a devise used by moles to watch all their favorite television shows, such as Bill Nye the Science Guy and the

Discovery Channel, particularly used by lazy papa moles

sophmole - anyone in the tenth grade who is taking Chemistry already

thermole - an adjective describing a mole of a highly explosive substance



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#### 2018 DRUG DESIGN AND DELIVERY SYMPOSIUM

Oct 18 Central Nervous System Medicinal Chemistry

Nov 29 Special Topic

For information please see: <a href="https://www.acs.org/content/acs/en/acs-webinars/collections/2018-drug-design.html">https://www.acs.org/content/acs/en/acs-webinars/collections/2018-drug-design.html</a>





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#### 2018 ACS REGIONAL MEETINGS

Midwest (MWRM)
Rocky Mountain (RMRM)
NanoWRM
Southeastern (SERMACS)

Southwest (SWRM)

October 21 – 23 October 26 October 27 October 31 - November 3 November 7 – 10 Ames, IA Albuquerque, NM Pasadena, CA Augusta, GA Little Rock, AR

### 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 760-750-4206

#### San Diego Miramar College

Linda Woods lwoods@sdccd.edu (619) 388-7750

#### Point Loma Nazarene University

Sara Choung <u>SaraChoung@PointLoma.edu</u> 619-849-2627

#### San Diego Mesa College

Dwayne Gergens <u>dgergens@sdccd.edu</u> 619-388-2609

#### San Diego Miramar College

Fred Garces fgarces@sdccd.edu 619-388-7493

#### Southwestern College, Chula Vista

David Hecht <u>dhecht@swccd.edu</u> 619-421-6700x5461

#### University of California, San Diego

Stacey Brydges sbrydges@ucsd.edu 858-246-0993 Thomas Bussey tbussey@ucsd.edu 858-822-6665

#### University of San Diego

Tammy Dwyer <a href="mailto:tdwyer@sandiego.edu">tdwyer@sandiego.edu</a> 619-260-4030

#### YOUR AD HERE!



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#### THE SAN DIEGO CHEMIST

For information contact:

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#### **UPCOMING EVENTS**

SENIORS/RETIREES/CONSULTANTS/ETC. BREAKFAST Bristol Farms Café - Costa Verde Shopping Center – Genesee Avenue and Nobel Drive, University City Tuesday, October 2, 2018, at 9:30 AM

\*\*\*\*\*\*

#### PROFESSOR FLOYD ROMESBERG

2018 Distinguished Scientist Award Banquet The Scripps Research Institute, San Diego The Ida and Cecil Green Faculty Club – UCSD, 9500 Gilman Drive, La Jolla Thursday, October 18, 2018

\*\*\*\*\*\*

#### CHEM EXPO

Outerspace - Chemistry Out of This World San Diego Miramar College, 10440 Black Mountain Road, San Diego 10440 Black Mountain Road, San Diego Saturday, October 27, 2018

\*\*\*\*\*\*

#### **HOLIDAY PARTY**

Sufi Mediterranean Cuisine 5915 Balboa Avenue, San Diego, CA 92111 Tuesday, December 4, 2018

\*\*\*\*\*\*

#### SAN DIEGO FESTIVAL OF SCIENCE & ENGINEERING

EXPO DAY at PETCO Park Saturday, March 2, 2019 https://www.lovestemsd.org/

\*\*\*\*\*

### THE 65th ANNUAL GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR Balboa Park Activity Center (2145 Park Blvd.)

For information please see <a href="http://www.gsdsef.org/">http://www.gsdsef.org/</a> March 12 - 17, 2019

\*\*\*\*\*

257th ACS NATIONAL MEETING & EXPOSITION Orlando, Florida March 31-April 4, 2019

\*\*\*\*\*\*

EARTH DAY - EARTHFAIR 2015 Balboa Park, San Diego, CA http://www.earthdayweb.org/

Sunday, April 28, 2019

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

Paul Aston
Daniel Coller
Dawn Eastmond
Robert Lafe
Zhibin Liang
Erica Majumder
Emily McLaurin
Diego Morones
Tenio Popmintchev

Raveendran Pottathil Sarah Stephens Julia Taylor Jordan Tinney Lynnie Trzoss Aditya Unni Stephen Verespy Dongmin Xu Yong Yan

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