

VIRTUAL PRESENTATION

How Materials Shaped Us

Ainissa Ramirez, PHD



DATE: Tuesday, March 9, 2021

TIME: 7pm

PLACE: Your Computer

RSVP: https://how_materials_shaped_us.eventbrite.com

ABOUT THE SPEAKER:

Ainissa Ramirez, Ph.D., is an award-winning materials scientist and science communicator, who is the author of [*The Alchemy of Us*](#) (MIT Press). A graduate of Brown University, she earned her doctorate in materials science and engineering from Stanford. Dr. Ramirez began her career as a scientist at Bell Labs in Murray Hill, NJ, and was later an associate professor of mechanical engineering at Yale. She has written for *Forbes*, *Time*, *The Atlantic*, and *Science*, and has explained science headlines on CBS, CNN, NPR, and PBS. She speaks widely on the topics of science and technology and gave a TED talk on the importance of science education (www.ainissaramirez.com).

ABOUT THE PRESENTATION:

Often when we talk about compounds and substances, the conversation usually focuses on how chemists and materials scientists synthesized them. In this talk, materials scientist and science writer Ainissa Ramirez will discuss how simple materials and the inventions they enabled shaped society. Based on her new book, [*The Alchemy of Us*](#), she will show how everyday inventions had a hand in shaping language, politics, and even our bodies.

CHAIR NOTES

Dear ACS Members,

Happy New Year Again! – This time for the Lunar New Year (the Year of the Metal Ox) which occurred on Feb. 12th. May the Year of the Metal Ox bring you prosperity and happiness. We had our second Executive Committee Meeting of 2021 virtually on Zoom on Tuesday, February 2nd. We had a great turnout to discuss upcoming events, exciting seminars planned, as well as outreach activities including the first, virtual Greater San Diego Science & Engineering Fair (GSDSEF), Mad Science programs, National Chemistry Olympiad, and some new opportunities. We are actively looking for volunteers to judge the GSDSEF and proctor the exams for the Chemistry Olympiad. If you are interested please contact me at jshih@sandiegoace.org for further details.

On Thursday, February 4th, we were joined by **Dr. Ajay Nirula, MD, PhD**, Vice President of Immunology at Eli Lilly & Co., who presented "SARS-CoV-2 Neutralizing Antibodies for the Treatment of COVID-19". He gave an in-depth look of the development and clinical trial results of the two anti-CoVID-19 monoclonal antibody treatments that have been issued Emergency Use Authorizations by the FDA, and discussed other treatment strategies, including vaccines. We had over 120 online registrations and over 80 attendees.

On Thursday, March 8th at 7PM, we will have **Ainissa Ramirez, PhD**, an award-winning materials scientist and science communicator, to discuss "How Materials Shape Us." In addition to being a TED Talk presenter who has explained science on CNN, NPR, and CBS, she is also the author of "The Alchemy of US". This should be an exciting and interesting talk.

Here are some upcoming, community-wide, large-scale events (held virtually):

- Greater San Diego Science & Engineering Fair via zFairs, March 15 - 18, 2021
<https://www.gsdsef.org/>
- Chemistry Olympiad Digital Local Section Exam (LSE) administered by the ACS on March 27, 2021 (one day only proctored by the Local Section) from 12:00 PM – 1:50 PM PST (3:00 PM – 4:50 PM ET).
- ACS Spring National Meeting & Exposition, April 5 - 16, 2021
<https://www.acs.org/content/acs/en/meetings/acs-meetings.html>

Our next Executive Committee meeting will take place on Thursday, March 4th, at 6 pm on Zoom. I invite all members who wish to become more involved in the Section to join us. Bring your ideas, your suggestions, and your unique talents to help make 2021 a wonderful year. Please contact me at jshih@sandiegoacs.org to receive Zoom log in details.

James J. Shih, 2021 Chair
San Diego Section of the American Chemical Society
E-mail: jshih@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 2021 Chair, **Jim Shih** at jshih@sandiegoacs.org. Once approved, Jim will see that your announcement is published on our website (www.sandiegoacs.org) and, if received by the 20th 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 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 20th 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 <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 23rd of the month** for publication by the end of that month.

Advertisers: Ad prices as of January 1, 2015:
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2" x 3"	\$ 75	\$ 68	\$ 58
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full page	\$655	\$590	\$510

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:

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.
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.
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 2021

6:00 – 8:00 pm

Thursday	March	4
Thursday	April	1
Thursday	May	6
Thursday	June	3
Thursday	July	8
Thursday	August	5
Thursday	September	2
Thursday	October	7
Thursday	November	4

Zoom Meetings until further notice



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 4th and 5th 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 in Balboa Park annually for the past 27 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.

U.S. NATIONAL CHEMISTRY OLYMPIAD: SEEKING VOLUNTEERS

In the light of continued uncertainty caused by the COVID-19 pandemic, our San Diego local section will be hosting the Chemistry Olympiad Digital Local Section Exam (LSE) administered by the ACS on **March 27, 2021** (one-day only proctored by the local section) from **12:00 PM – 1:50 PM PST** (3:00 PM – 4:50 PM ET).

Students will be taking the test with one device, and proctored (via Zoom) by our Local Section with another. We are asking for any volunteers who would like to help proctor the digital local test via Zoom. Proctors will be asked to log in 30 minutes prior to the exam (11:30 am PST) in order to assign breakout rooms accordingly (one proctor per room). The more volunteers we have, the better (low proctor to student ratio which makes proctoring easier).

We will provide more information as we get closer to the test date. Thank you very much for your help and support.

For more information and if you have any questions, please e-mail: jschellinger@sandiego.edu

CALL FOR NOMINATIONS - ACS FELLOWS PROGRAM

Are you aware of an American Chemical Society member who has made significant contributions to **both** the field of chemistry and to the Society? If the answer is affirmative, please nominate the person to become a Fellow of the American Chemical Society. This program was established to recognize the top 1-2% of the top scientists and volunteers in the ACS.

The nomination period for the 2021 Class of ACS Fellows opens on **February 1, 2021** and closes at **11:59 PM 1 April 2021**. Information on preparing a nomination can be accessed at <https://www.acs.org/content/acs/en/funding-and-awards/fellows/nominations.html>.

If the volunteer work done by the nominee was performed on behalf of the San Diego Section, the chair or a designee from the executive committee familiar with the service or scientific work will be happy to write a nominating letter.

Please help the ACS in recognizing those individuals who have made a difference! For assistance in preparing the nomination packet please contact Valerie Kuck at vjkuck@yahoo.com.

CHEMISTRY JUDGES NEEDED

Virtual judging by professional societies at the 67th Annual Greater San Diego Science & Engineering Fair will take place on **Tuesday, March 16th, TBA**. For more information, please contact **Ken Poggenburg** at jkp135@att.net

VOLUNTEERS NEEDED EARTH DAY - EARTHFAIR 2021 <http://www.earthdayweb.org/>

New Date: Sunday, September 19, 2021, Balboa Park • 10am - 5pm

San Diego ACS volunteers will set up a table in the Children's Activity Area. This special area has crafts, games, face painting, storytelling, and hands-on activities for children of all ages. Activities are intended to educate, entertain and inspire youth, in the spirit of Earth Day.

Please contact **James Caldwell**, jcaldwell@sandiegoacs.org, to volunteer **Sunday, September 19, 2021**. We need 3-4 persons for each of the 3-4 hour shifts on **September 19**. Please support us and share your care for our earth, chemistry education, and the San Diego ACS!

LOOKING FOR VOLUNTEERS

The Executive Committee of the [Division of Organic Chemistry](#) of the American Chemical Society and the Department of Chemistry at the University of California, San Diego, invite you to attend the 47th National Organic Chemistry Symposium. **This biennial event will be held from Sunday, June 27, to Thursday, July 1, 2021, at UCSD.**

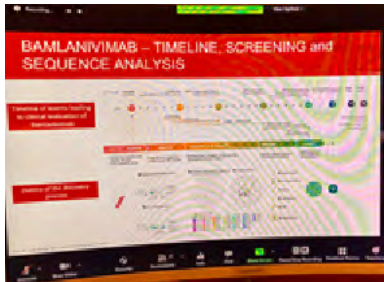


For more information please see <https://nationalorganicsymposium.org/>.
For volunteers please see <https://nationalorganicsymposium.org/organizers/>

Volunteer opportunities include chairing sessions during the plenary talks, judging the poster sessions, and running registration tables and social events.

SARS-COV-2 NEUTRALIZING ANTIBODIES FOR THE TREATMENT OF COVID-19
Ajay Nirula, MD, PhD

On Thursday, February 4th, **Dr. Ajay Nirula, MD, PhD**, Vice President of Immunology at Eli Lilly & Co., presented "SARS-CoV-2 Neutralizing Antibodies for the Treatment of COVID-19" over Zoom. He gave an in-depth look of the development and clinical trial results of the two anti-CoVID-19 monoclonal antibody treatments that have recently been issued Emergency Use Authorizations by the FDA. He gave a behind-the-scenes look at the unprecedented rapid discovery and development of the treatments, and discussed the different clinical trials that are still ongoing, as well as the results of the trials that have been completed and published in peer-reviewed journals. He also discussed other treatment strategies, including vaccines, steroids, and other drugs. There were many questions asked due to the timeliness and intense interest of the presentation. We had over 120 online registrations and over 80 attendees.



SUMMARY OF THE SAN DIEGO ACS SECTION
EXECUTIVE COMMITTEE TELECONFERENCE
FEBRUARY 2, 2021

Treasurer's Report – Proposed 2021 budget discussion: two grants announced but no money received; councilor travel for March National Meeting set to \$0, sponsorships and donations projected at \$1000, event admission – no information to be able to set projection; Section dues kept the same; proposed expenses – Chem Expo \$10K, Distinguished Scientist Award -- \$4K, Law Committee \$1K, Mad Science programs \$8K; MedChem proposed by organizers after discussion among committee members \$1K, SDSU-ACS Seminar \$1K

Motion: Accept budget as proposed recognizing Finance Committee will offer possible modifications – **Approved**

Annual Report – Administrative portion of the report was completed last month, Section self-nominated for ChemLuminary Award

Chemistry Olympiad – Local exam typically draws ~100 HS school students, ~15 usually go on to National exam and several San Diego high schoolers have been selected for the international competition; local exam to be held Mar 27, 11:30 – 2 p.m. via Zoom, which will require more proctors than usual; 106 students registered as of now, volunteers please notify Jim Shih of interest

Finance Committee – Committee recommending liquidating ~\$100 K to preserve value; which would leave ~\$300K in the fund, no known tax consequences for SDACS as a non-profit to sell the shares; note that choice to purchase Vanguard resulted in good dividends

Motion: That the Section sell 1300 shares VWENX ~\$99400 at today's price to support efforts of volunteers – for unspecified uses - **Approved**

Feb. Monthly Seminar – Dr. Ajay Nirula of Lilly, Feb 4, 112 registered

Mar. Seminar – Tues. Mar 9 Ainissa Ramirez (published author) to present "The Alchemy of Us"

Greater San Diego Science and Engineering Fair – Needing judges, link in Newsletter for instructions, judges' names need to be submitted beforehand, targeting 10 volunteers, judges will be able to preview exhibits and can expect to review ~30 student projects – ~4 hour commitment

Future Monthly Seminars – April: Amy Marschilok with topic of batteries, May: Janan Hayes on development of dyes; June: Ryan Shevi – TSRI; suggested topic on chocolates

YCC – The Meet-and-Greet in Dec. proved successful, so planning for similar event at Miramar College as a virtual event for Mar. 5 or 12; Section was awarded the METT grant to sponsor an event, "Three-Minute Thesis"; typically these events target grad students so considering ways to adapt to include undergrads in our program; planning to award prizes

Innovative Project Grants – Several ideas being considered to submit later this year

Next meeting: March. 4

ACS Webinars™

Welcome to ACS Webinars, your source for online live and on-demand content, created by the American Chemical Society. **Please join us weekly, Thursdays at 2pm ET.**

For more information and upcoming Webinars see: <https://www.acs.org/content/acs/en/acs-webinars.html>



Fun Holiday – Pi Day

March 14 is Pi Day. It is a day to celebrate the mathematical constant pi (π) and to eat lots of pie.

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2021 ACS REGIONAL MEETINGS

Northwest Regional Meeting (NORM)	May 9-11	Online
Great Lakes Regional Meeting (GLRM)	June 6-9	Online
Middle Atlantic Regional Meeting (MARM)	June 9-12	Online
Northeast Regional Meeting - NERM 21	October 8-11	Boston, MA
Midwest Regional Meeting (MWRM)	October 21-22	Springfield, MO
Rocky Mountain Regional Meeting (RMRM)	October 21-23	Tucson, AZ
Southwest Regional Meeting (SWRM)	October 31-November 3	Austin, TX
SERMACS 2021 sermacs2021.org/	November 10-13	Birmingham, AL



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is read by nearly 3000 chemists and biochemists in San Diego and Imperial Counties.

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For information contact: **Renate Valois** - renate@sandiegoacs.org

CHEMISTRY JOKES AND RIDDLES

By [Anne Marie Helmenstine, Ph.D.](#)

Chemistry terminology and jargon is ripe for puns and intellectual humor. Below is a collection of [chemistry jokes](#), puns, riddles, and one-liners.

Old Chemist One-Liner

Old chemists never die, they just stop reacting.

Coffee Riddle

What is the chemical formula of coffee? CoFe₂

Banana Riddle

What is the chemical formula for a banana? BaNa₂

Dead Chemists

What should do you do with a dead Chemist? Barium!

Dental Chemistry Riddle

What do you call a tooth in a glass of water? A one [molar solution](#).

Ion Riddle

What did one charged atom say to the other? I've got my ion you.

pH Chemistry Joke

Why do chemists enjoy working with ammonia? Because it's pretty basic stuff.

Spy Chem

What is the name of agent 007's Eskimo cousin? [Polar Bond](#).

Medical Elements Joke

Q: Why do chemists call helium, curium, and barium the medical elements?

A: Because if you can't helium or curium, you barium!

Diamond Riddle

What element is a girl's future best friend? Carbon.

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

Point Loma Nazarene University

Sara Choung
SaraChoung@PointLoma.edu
619-849-2627

San Diego Mesa College

Dwayne Gergens
dgergens@sdccd.edu
619-388-2609

San Diego Miramar College

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

Linda Woods

lwoods@sdccd.edu
(619) 388-7750

Southwestern College, Chula Vista

Juan Gonzalez
jgonzalez3@swccd.edu
619-421-6700x5947

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
tdwyer@sandiego.edu
619-260-4030



YOUR AD HERE

Your ad in the next issue of

THE SAN DIEGO CHEMIST

For information contact:

Renate Valois -

renate@sandiegoacs.org

UPCOMING EVENTS

Virtual Event

AINISSA RAMIREZ, PHD
Materials Scientist and Science Communicator
How Materials Shaped Us
Tuesday, March 9, 2021

Virtual Event

THE 67th ANNUAL GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR
Judging will be virtual
For information please see <http://www.gsdsef.org/>
Tuesday, March 16, 2021

Virtual Event

ACS SPRING 2021
<https://www.acs.org/content/acs/en/meetings/acs-meetings.html>
April 5-16, 2021

262nd ACS NATIONAL MEETING & EXPOSITION
Atlanta, Georgia
August 22-26, 2021

EARTH DAY - EARTHFAIR 2021
Balboa Park, San Diego, CA
<http://www.earthdayweb.org/>
New Date: Sunday, September 19, 2021

THE SAN DIEGO SECTION OF THE AMERICAN CHEMICAL SOCIETY

WELCOMES ITS NEW MEMBERS

Pol Arranz-Gibert
Kazunobu Fukushi
Sizzinette Hernandez
David Huang
Kevin McCowen
Conor O'Herin
Heike Paulsen
Mimi Quan
Nathan Romero
Vincent Tai
Viet Tran
Mayuresh Visswanathan
Brandan Ward
Kejin Zhou

**2021 EXECUTIVE COMMITTEE & COMMITTEE MEMBERS
SAN DIEGO SECTION OF THE AMERICAN CHEMICAL SOCIETY**

EXECUTIVE COMMITTEE

<i>Chair</i>	Jim Shih, Eli Lilly & Co, jshih@sandiegoacs.org	(2021)	626-826-3561
<i>Past Chair</i>	James Caldwell, Accelagen, Inc., jcaldwell@sandiegoacs.org	(2021)	815-262-9697
<i>Chair-Elect</i>	Juan P. Gonzalez-Gonzalez, Southwestern College, jgonzalez3@swccd.edu	(2021)	619-813-8520
<i>Secretary</i>	William Tolley, Seacoast Science, Inc., b_tolley@uno.com	(2021)	858-780-0978
<i>Treasurer</i>	Desiree Grubisha, Heron Therapeutics, desgrubisha@gmail.com	(2021)	858-254-5497

Councilors

Thomas R. Beattie	(2021)	858-293-3012
Hui Cai, WuXi AppTec	(2022)	858-361-8838
Desiree Grubisha, Heron Therapeutics	(2021)	858-254-5497
Valerie Kuck	(2023)	973-744-5510
Jackie Trischman, CSUSM	(2022)	858-414-3323
David Wallace, Wallace Scientific Consulting	(2021)	858-638-1866

Alternate Councilors

Surya K. De, Supra Sciences, Inc.	(2022)	858-337-4961
Julann Miller, Waters Corporation	(2023)	800-252-4752 x6802
Ken Poggenburg	(2022)	760-635-2573
Ben Pratt, Pratt Pharma Consulting LLC	(2022)	858-945-7893
Shannon Woodruff, HP Inc.	(2023)	949-735-9021

Members-at-Large

James O'Brien, TE Connectivity	(2023)	858-336-0654
Bill Szabo	(2022)	858-550-0306
Joann Um, Southwestern College	(2022)	510-823-8637

STANDING & SPECIAL COMMITTEES

Awards Nomination Committee

Valerie Kuck (Co-Chair)	973-744-5510
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ChemExpo

Jackie Trischman, CSUSM	858-414-3323
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Communications Committee

Surya K. De, Supra Sciences, Inc.	858-337-4961
Desiree Grubisha, Heron Therapeutics	858-254-5497
Ken Poggenburg	760-635-2573
Renate Valois (Newsletter Editor)	619-692-0638
David Wallace, Wallace Scientific Consulting	858-638-1866

Distinguished Scientist Awards Nomination Committee

Thomas R. Beattie (Chair)	858-293-3012
Tammy Dwyer USD	619-260-4030
Barbara Sawrey	858-729-0689
David Wallace, Wallace Scientific Consulting	858-204-5412

Education Committee

Joann Um (Chair), Southwestern College	510-823-8637
Valerie Kuck	973-744-5510
Joan Schellinger, USD	619-260-7960

EarthFair

James Caldwell, Accelagen, Inc.	815-262-9697
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Finance Committee

Bill Szabo (Chair)	858-550-0306
Tom Beattie	858-293-3012
James Caldwell, Accelagen, Inc.	815-262-9697

Fundraising Committee

OPEN

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	858-293-3012
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MedChem Symposium

Ben Pratt (Co-Chair), Pratt Pharma Consulting LLC	858-945-7893
Mark Tichenor (Co-Chair), Janssen Pharmaceuticals, Inc.	858-334-8914
David Wallace (Co-Chair), Wallace Scientific Consulting	858-638-1866

Membership Committee

OPEN

Nominations Committee

OPEN

Outreach Committee

Kevin McKowen, Wyatt Technology	(801) 719-0511
Julann Miller, Waters Corporation	800-252-4752 x6802

Picnic Committee

James Caldwell (Chair), Accelagen, Inc.	815-262-9697
Jim Shih, Eli Lilly & Co.	626-826-3561

Professional Development Committee

Valerie Kuck	973-744-5510
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Public Relations Committee

OPEN

Senior Chemists Committee

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

Thomas R. Beattie	858-293-3012
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Women Chemists Committee

Valerie Kuck	973-744-5510
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Younger Chemists Committee

Kristen Counsell, Drawbridge	319-830-3097
Alexander Rovira, Janssen Research and Development	858-784-3013
Brittany P. Witherspoon, Janssen Research and Development	619-373-2436

Voice Mail – San Diego Section

619-687-5570