

TEST - OSSC eNewsletter - Q2 2024

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Tue, Apr 30, 2024 at 8:59 PM

Reply-To: Donn M Silberman <OpticsAge@gmail.com> To: opticsage@gmail.com



Newsletter Volume 28, Number 3 Q2 2024

Best to view this newsletter on your PC or on your smartphone in landscape view.



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From the President & Editor:

Hello OSSC Members & Friends,

As we draw near the end of this academic year, we have much to be grateful for, some concerns to address and a bright future to secure. In the grateful column, we have had many wonderful speakers and outreach events this past year. These include the following:

	Dr. Bradley Bobbs, Senior Scientist,		
Sept.	Laser Ultrasonic Products Group at	Laser ultrasonics for aerospace and nuclear applications	
	Intelligent Optical Systems		
Oct.	Prof Changheui Yang	Computation in microscopy: How computers are changing	
	Caltech	the way we build microscopes	
Nov.	Dr Elliot Botvinick, UC Irvine, Beckman Laser Institute	Bio-Engineering Advanced Medical Solutions (BEAMS) Laboratory at UCI – An Overview & Update	
Jan.	Dr Mehdi Asghari	Seeing the world in four dimensions	
	CEO SILC, Monrovia, CA		
	Dr. Jeff Puschell,		
Feb.	Chief Engineer, EO/IR Payloads	Hyperspectral coastal water imaging from space	
	Northrop Grumman Space Park		
March	Dr. Elaine Jin, Principal Hardware Engineer - Camera Systems	Overview of Automotive Cameras	
	Rivian		
April	Eric Fest, Ph.D., Meta Platforms	Optical Design of Waveguides for Augmented Reality Headsets	
May	Howard Lee, Ph.D., UC Irvine, Physics & Astronomy Dept.	"Meta"-Optical Fibers: Integration of Metaphotonics with Fiber Optics	
June	Daewook Kim, Ph.D., Univ of Arizona, College of Optical Sciences, & Astronomy Dept.	Scalable Extreme Optics Fabrication and Testing	

As you can see, we have had a good mix of speakers from industry and academia, which we will look to continue in the coming year under our new soon to be elected officers. We would like to call attention to our OSSC Corporate Members and Website Sponsors, as this month we will have some of them display information about their company's products and services at our Corporate Member Appreciation event on May 15th at UC Irvine's Division of Continuing Education (DCE) building.

Our Education and Outreach programs continue to grow as shown in the articles and information below about Career Fairs at Laguna Beach High School and Lathrop Intermediate School. And we continue to support the

proposed new Precision Optics Manufacturing program at Santa Ana College hopefully being added to the Southern California programs at UC Irvine and Pasadena City College.

In our Members News section, we have a couple of stories about the solar eclipse that happened on April 8th. One from OSSC Member Dave Stoltzman who was just south of Dallas Texas and took some amazing photos; and another from Donn Silberman who was invited to Alcon Labs (via a recommendation from Jack Latchinian) to share his expertise with a new telescope at their Solar Eclipse celebration.

Also under Member News, we have an article from Russell Rauch about our special visit during our March meeting at the Urban Workshop of the Thorlabs Mobile Photonics Lab that has traveling around the country with more than several stops in California. And OSSC Corporate Members Photon Valley & Novanta have contributed some information about their companies for your information.

We do have some information on the sadder side of life. Our OSSC Treasurer Alex Small is currently recovering from surgery and rehabilitation treatments. And our OSSC Fellow Dr. Murty has passed away after living a life worth sharing and remembering.

And towards the end of this newsletter, Scott Rowe shares some very interesting documents he found as part of the OSSC History Project about the early OSSC relationship with the Walt Disney Company from 1956. We hope you enjoy this newsletter and our regular meetings and presentations; which video recordings are available to OSSC members on our website.

Sincerely,

Kevin Romero, OSSC President

Donn Silberman, OSSC Secretary & Newsletter Editor

May OSSC Meeting



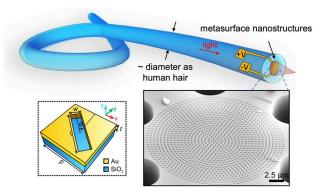
Corporate Member Appreciation Event

OSSC Officer Nominations Open for 2024 - 2025.

contact a current OSSC Board member for details

OSSC Combined In-Person & Webinar "Meta"-Optical Fibers: Integration of Metaphotonics with Fiber Optics

Howard (Ho Wai) Lee, Ph.D., Associate Professor, UC Irvine, Department of Physics and Astronomy



Wednesday May 15, 2024 In-Person Reception 6:00 pm Dinner 7:00 pm

(No fee to attend presentation only in-person or on-

line)

Online Login: 7:15 pm PDT OSSC Business: 7:30 pm Presentation: 8:00 pm

Download Flyer

REGISTRATION REQUIRED

Register Here

Elections of OSSC Board of Directors



The current Board of Directors appointed a nominating committee that has recommended a slate of candidates shown below.

Nominations are open for any OSSC member to nominate OSSC members to become candidates for any OSSC elected position.

Please contact a current Board Member if you would like to be nominated for an elected position or if you would like to nominate another OSSC member.

Nominated Members for:

President: Nicholas Croglio Vice President: Lisa Belodoff Secretary: Donn Silberman Treasurer: Alex Small (will not be available to serve) <u>Councilors: (Three - 3)</u>

Current Nominees for Councilor positions are:

Martin Hagenbuechle
Harvey Spencer
McGwire Herbert
Jack Latchinian
Andromeda Aries
Mark Helmlinger
Steven Dang

June OSSC Meeting



OSSC ANNUAL BUSINESS MEETING ELECTION CLOSES, RESULTS ANNOUNCED

OSSC Combined In-Person & Webinar "Scalable Extreme Optics Fabrication and Testing"

Dr. Daewook Kim, Associate Professor, Optical Sciences & Astronomy,

James C. Wyant College of Optics, University of Arizona



Wednesday June 5, 2024 In-Person Reception 6:00 pm; Dinner 6:45 pm

(No fee to attend presentation only in-person or on-

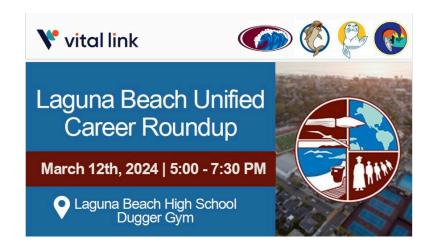
line)

Online Login: 7:15 pm PDT OSSC Business: 7:15 pm Presentation: 8:00 pm

Download Flyer

Raffi's Catering and Banquet Pasadena, CA

Education & Outreach





If you would like to volunteer for future events, contact Donn Silberman.

Upcoming events hosted by:



This event was last month. Thanks to Vital Link, our Education & Outreach partner for inviting us to participate in this (and many other events.).



On April 27th, Steven Dang and Donn Silberman attended the Santa Ana Unified School District Intermediate Robotics Invitational & STEAM Career



Several Robotics competitors enjoy learning about optics and lasers at our OSSC / OISC exhibit. More Photos here

Showcase organized by Vital Link and hosted at Lathrop Intermediate School.



American Center for Optics Manufacturing - AmeriCOM - The Backbone of America's Precision Optics Industry. Workforce Development, Supply Chain Stability, Manufacturing Innovation.

AmeriCOM has been designated by the U.S. Department of Defense to make investments that will achieve the mission goal of developing optic manufacturing technologies, testing equipment, and the specialized materials required to support scalable manufacturing. We will look to our nation's optics industry to help drive and execute a research and development agenda with the goal of achieving sustainable manufacturing operations. In parallel, we will increase the pipeline of skilled optics technicians using a collaborative ecosystem model that fosters collaboration between educational institutions, optics manufacturing companies, and a range of nonprofit and community-based organizations.

The OSSC & OISC are **establishing an** Advisory Board of Southern California

companies to document their interest in supporting an effort to help establish a Precision Optics Manufacturing Technician Training center at a local Community College or other similar training center. We are currently in discussions with Santa Ana College and looking forward to following up after Photonics Werst. If you would like to be on the Advisory Board, please contact Donn Silberman.



Summer 2024 registration now open. Courses begin in Late June. Advanced Lens Design Optical Instrument Design The above courses are part of Certificate Programs in: Optical Engineering and Optical Instrument



Manufacturing Technology

Santa Ana College's Manufacturing Technology Department (SAC-MT) has really stepped up working on establishing a new Precision Optics Manufacturing Technology Education program. AmeriCOM, with help from some OSSC members, are working with SAC-MT and others at SAC to pursue funding and administration support to get a 'Green Light' to begin the process required to make this happen. During the week of March 11th (that included the OSSC meeting) Donn Silberman, Rosalie Clemens and Lisa Belodoff visited a number of local optics manufacturers to learn more about what they would like to have a local college teach students so they can become future employees. A lot needs to happen before we start teaching, but we are on a good path.

Contact Donn Silberman if you would like to be involved in any way.

Here is a Photo Gallery from SAC-MT if you would like to see what their facilities look like now.

Pasadena City College Laser Technology Program



Laser Tech Training Program

PCC LaserTech courses began in late February 2024 Students completing the program in Laser Technology will learn the scientific principles of optics, fiber-optics, and lasers. Laser and Photonics Technology instructors lead hands-on, laboratory-driven classes, utilizing state-of-the-art industrial equipment, based on the industry-guided photonics curricula written by industry

Design

New: Alternative Digital Credential:

Telecentric Lens: Machine Vision System Design

Applicable course: Advanced Lens Design (completed after 6/23/22*)



Past UCI Optical Engineering Webinars

UCI Optical Engineering 10 yrs - Photonics Spectra from Sept 2019 Photonics Spectra Magazine

Go to the links above to learn more about the courses and programs. 15% discount for OSSC Members on courses Required for a Certificate. Email: EngineeringSciences@ce.uci.edu with confirmed OSSC Membership to receive discount code. Contact Donn Silberman to receive the discount code!

Part-Time Instructor: Optical Engineering and Optical

Instrument Design

Member News

professionals. In addition to laboratory skills, students are offered one-on-one support and career advice, including résumé and LinkedIn profile building.

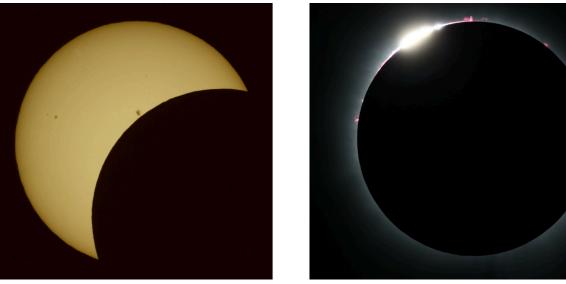
Registration for Fall 2024 will be open during the summer. Download the 2024-2025 Academic Calendar

LASR 230 INTRODUCTION TO OPTICAL DEVICES LASR 260 METROLOGY OF OPTICAL SYSTEMS

Additional Information

Laser Technology - Natural Sciences -Pasadena City College

Prof. Brian Monacelli, Ph. D.



OSSC Member Dave Stoltzmann and his family submitted the following:

On Monday we were in TX for the eclipse, and while lots of TX was clouded out, the heavy clouds where we were just south of Dallas broke right before the eclipse started about 12:22PM. Incredibly there were no winds, no rain, no bugs, and almost perfect sky conditions for us. We took along an 8" Celestron, a 5"Celestron, a 100mm spotting scope with a 5MP camera coupled afocally to the zoom eyepiece, a Solar Telescope (Hydrogen Alpha red emission line only), and four laptops. My son ran the laptops and took almost 1600 photos, while I adjusted the scopes during the three-hour duration.

See their complete Eclipse story and more photos

April 8 <u>2024</u> - Solar Eclipse at Alcon Labs Irvine CA



OSSC Member Donn Silberman and his wife Ana Maria brought their new telescope to Alcon Labs in Irvine CA for their special Solar Eclipse event that was held at the same time as Alcon's event at their world headquarters in Texas. The weather was perfect here in Orange County and all the Alcon staff came out to enjoy an hour or so of the main event.

The new Celestron 8" telescope was equipped with appropriate solar filters, a video CCD camera and screen and a WiFi feed that sent the images to many that downloaded the app!! There was also a nice 'flip mirror' and eyepiece so that visitors could view the eclipse directly through the telescope, as the image was much better than on the monitor. Donn also mounted a small <u>Galileoscope</u> to the Celestron so that the complete image of the Sun and Moon could be viewed.

Donn will be using this new telescope to augment his educational outreach programs in Orange County.

More photos here



Visit to Thorlabs Mobil Photonics Lab

By Russell Rauch, OSSC Membership Chair, 2023-2024

The Thorlabs Mobil Photonics Lab is a traveling mobile exhibit, designed develop interest in photonics for students in grades 4-12. This exhibit travelled all over the country from East to West and is further touring as it returns for its final journey.

I caught up with this exhibit at the March 10, 2024, meeting of OSSC, since it was parked right in from of the meeting venue (Urban Workshop in Costa Mesa).

Dr Mark White of Thorlabs showed me the various demonstrations that were laid out on a large optical table in the exhibit trailer.

Two of the exhibits especially caught my eye. The first was a demonstration of optical waveguiding by letting water flow out of a plastic tank and illuminating the stream with light incident at the exit hole of the water flowing out of the tank. You see waveguiding of the light in the curved water stream outflow. And the second was a demonstration an OCT instrument. You could hold your finger against entrance window of the system and see a display of the surface layers of skin of the finger.

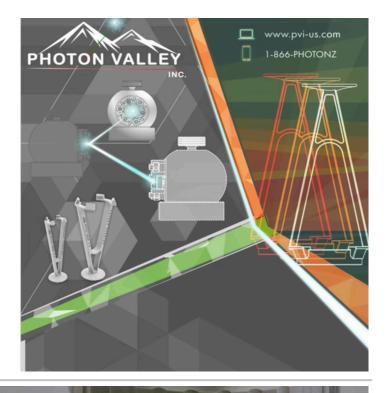
Click on the links below to see more photos and information. Thorlabs Mobile Photonics Lab OSSC March meeting photos C

OSSC Photo Albums

No photon left behind.

Photon Valley provides unique and innovative products to delight our customers with an exceptionally enhanced experience manipulating light, maneuvering optics, and using laser equipment.

We aim to disrupt the industry by aligning our customers' expectations with best-in-class products to assure *no photon is left behind*.





Novanta White Papers Are Available

By Victor Kardos, MS, Applications Engineer Manager, Precision Medicine and Manufacturing Photonics

Novanta is a supplier to medical and industrial OEMs (original equipment manufacturers), with proprietary expertise in photonics, motion, automation, minimally invasive surgery and precision medicine technologies.

Our photonics solutions combine expertise in laser sources, beam delivery and laser controller solutions for a variety of applications in precision medicine and manufacturing spaces.

click here For Novanta white papers.



At this time we want to send our wishes for a speedy recovery to our own OSSC Treasurer, Past President & Fellow, Dr. Alex Small, who is currently undergoing treament after a surgery he needed recently. If you would like to learn more about Alex's situation, please speak to one of our Board Members. Alex is in a local Pomona care unit for rehabilitation.



In Memoriam: Murty V. Mantravadi, 1929 - 2024

Apr 24, 2024

Our wonderful friend and mentor, affectionally known as Dr. Murty, passed away on April 24th. He had an extraordinary life that many of us knew so well.

Our friends at Optica have prepared a notice on their website **here**, from which much was borrowed from our website at: Murty Mantravadi

SPIE will also post a notice about Dr. Murty soon too, as he was a Fellow of both SPIE and Optica.

He was the OSSC's first recipient of our Lifetime Achievement Award presented by then OSSC President Jack Latchinian. We will have a short Tribute to Dr. Murty at an upcoming meeting soon.

OSSC History Project

From Tom Godfrey's OSSC History files.....

"An OSSC Field Trip to the Walt Disney Studios in Burbank, March 7th, 1956"

See below for a scan of the correspondence between the OSSC and Walt Disney Studios regarding an OSSC meeting they hosted on March 7th, 1956. Apparently, OSSC member Eustace Lysette facilitated this meeting at the studios in Burbank and presented a talk on the optics used in cartoon production, and the challenges WDS was having in the imaging of the cells drawn by the artists. This was an extremely popular meeting, with over 220 in attendance (this was also "Ladies Night", an apparently annual function the OSSC hosted 🙄).

OSSC President M.E. Stickney sent a letter of appreciation to WDS, addressed to Walt Disney, along with a corporate membership. Disney VP W.M. Anderson wrote back thanking the OSSC for the membership, and designating Mr. Lysette as the Disney contact to the OSSC. Interesting stuff, Disney had just finished "Lady and the Tramp" in 1955 and was working on Sleeping Beauty when this meeting happened! Oh, and Disneyland was less than a year old when this meeting happened, so a busy time at the Studio.

OPTICAL SOCIETY OF SOUTHERN CALIFORNIA

OPTICAL SOCIETY OF AMERICA - SOUTHERN CALIFORNIA BRANCH

Hay 4, 1956

Mr. Walt Disney Walt Disney Productions 2400 W. Alameda Burbank, California

Dear Mr. Dieney:

This is to express the appreciation of the Optical Society of Southern Galifornia for the very excellent meeting which was held at your Studios on March 7. The paper which Mr. Lysette presented on the problems of cartoon production was very lucid and well presented. The opportunity to view the equipment which you use in making cartoons was appreciated by all. The members were universally impressed with the excellent design and high order of ingenuity exhibited in this equipment. It is apparent why the Disney Studios have achieved and held their position of pre-eminence in their field.

Our Board of Directors has voted unanimously to extend a corporation membership for the year 1956-57 to the Disney Studios as a token of our appreciation for the meeting held at your Studios. We would be very pleased if you would accept this membership and designate that person in your organization who should receive meeting notices and otherwise exercise the prerogatives of the Disney Studios as a member of the Society.

Sincerely,

mal

N. S. Stickney, President c/o Beckman Instruments, Inc. 2500 Fullerton Road Fullerton, California

MES:cla

co: Mr. Bustace Lysette

Donn Silberman and Scott Rowe had the opportunity to review the papers and collections of Tom Godfrey, OSSC's past long term historian. Karen, Tom's widow, was kind to open her home and garage for this "pick". We knew that if we missed this moment, we could have lost a large portion of the written history of our Society.

Fortunately, much of the material remains for us to scan, keyword, and organize as part of our archive in the cloud.

Steven Dang, Soojin Cha, Andromeda Aries, Donn Silberman and Bob Cartland, have been helping on this project. If you would like to help out, please contact Scott Rowe.



WALT DISNEY PRODUCTIONS

2400 WEST ALAMEDA AVE. . BURBANK, CALIFORNIA . CABLE ADDRESS: DISNEY

May 16, 1956

Mr. M. E. Stickney, President c/o Beckman Instruments, Inc. 2500 Fullerton Road Fullerton, California

Dear Mr. Stickney:

Your letter of May 4 addressed to Walt Disney has been referred to me. We are very happy to hear that you enjoyed the meeting which was held here March 7 and that your Board of Directors has voted to extend to us membership in the Optical Society of Southern California.

In view of Mr. Lycett's position with our company and his interest in optical problems we wish to designate him as the representative of our organization to receive meeting notices, etc. as may pertain to the Disney Studios.

We hope that by becoming a member we can make an honest contribution to the aims of the Optical Society and undoubtedly will receive a real benefit from the mutual association.

Sincerely yours,	
AAA DO	
1 1 Midubon	
W. H. Anderson	

Vice President in Charge of Studio Operations

WHA: 1v

More work is still to be done on this OSSC History Project.

Board of Directors

Kevin Romero

Vice President	Jack Latchinian
Secretary	Donn Silberman
Treasurer	Martin Hagenbuechle
Past President	John Nunn
Membership Chair	Russell Rauch
Programs Chair	Nicholas J Croglio Jr
Arrangements Chair	Steven Dang
Councilor	McGwire Herbert
Councilor	Martin Hagenbuechle
Councilor	Harvey Spencer
	OSSC Leaders
Social Media Chair	Steven Dang
Corporate Memberships	Mark Gallagher, Ph.D.
Fellows Chair	Harvey Spencer
Website Chair	Robert Cartland
Jobs Board Coordinator	Nicholas J Croglio Jr
Mt. Wilson Coordinator	T. Scott Rowe
Outreach Chair	Donn Silberman
Secretary's Assistant	OPEN
Outreach Assistant	OPEN
Video Committee	OPEN
ZoomCommittee	OPEN

Volunteer VOLUNTEER Community CONNECT COMMUNITY Connect Community **Connect** Serve Held FRVF GROWTH SERVE Help Growth Community Serve Growt HELP Community Serve HELP HELP COMMUNITY Connect VOLUNTEER VOLUNTEER VOLUNTEER Connect Growth Growth

The OSSC is a volunteer run organization and always seeks members to volunteer and help on our committees. They include:

Programs & Arrangements Committee (Finds and secures guest speakers and arranges venues for our meetings and special events)

Awards & Gifts Committee (Identifies awards for members and guests and selects gifts and merchandise for sale)

Communications Committee (Manages social media accounts)

Fellows Committee (Nominates OSSC members to be elevated to Fellow status)

Membership Committee (Manages and assists individual and corporate members and website sponsors with their membership benefits, renewal and engagement)

Newsletter Committee (Solicit input and articles for the OSSC *Images* newsletter, edits and distributes the newsletter)

Nominating Committee (Appointed by the OSSC President to prepare a first draft slate of candidates during the Spring for OSSC elections)

Outreach Committee (Discovers education & outreach opportunities for OSSC members, promotes and helps organize the volunteers)

Video Committee (Manages and edits OSSC video recorded presentations and makes them available through the OSSC website)

Website Committee (Manages both the technical back end and the content of the OSSC website - powered by Club Express)

Each committee has a Chair who leads the work and reports to the OSSC Board of Directors during their monthly Board Meetings (on Zoom)

If you would like to volunteer to help run the OSSC, please contact one of the Board members directly.



Website Sponsors are *Corporate Members* that make an additional donation to support the OSSC.ORG website. They enjoy all the benefits of *Corporate Membership* AND have their company logo and link prominently displayed along the left side of our website. Website Sponsorship dues are \$200 per year. New Members may select the Website Sponsor option when applying for membership using the link below. Current Members may select the Website Sponsor option when renewing their membership AST Advanced Spectral Technology

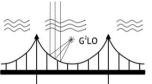




the fiber meeting

C©HERENT





Golden Gate Light Optimization, LLC















Raytheon Space and Airborne Systems





Edmund

Guernsey Coating Laboratories

JENOPTIK MORE LIGHT





🕖 OptoSigma®







THORLABS

during the April to June renewal period or at other times by contacting the Membership Chair. All Website Sponsors may contact the Website

Team to add or update their company link or logo or to resolve other website issues.

For general membership questions, please contact the Membership Chair.

Become a Corporate Member or Website Sponsor!



Corporate Members



OSSC Corporate Members display their products at the December 2012 Corporate Member Appreciation Meeting.

Corporate Members benefit the **Optical Society of Southern California** through their generous donations of time, talent and financial resources.

Corporate Membership dues are \$100 per year. Due to COVID - not all Corporate Members listed here are current on their dues.

We will be sending out reminders in April and hope all our past Corporate Members will renew their membership before the end of April.

Corporate Membership dues paid in April will carry over until June 2024.

4D Technology Advanced Spectral Technology Aerotech Alluxa AMP Optics Äpre Instruments AVS Southern California Chapter Bell Collaborative Cambridge Technology Campbell Engineering Coastal Connections Collins Optronics Diamond USA Diverse Optics Golden Gate Hadland Imaging Infinite Optics Inrad Optics Isuzu Glass Laser Components Mahr Metrology Mark Optics Micro Laser Systems Mindrum Precision MKS Instruments Novanta Photonics Newport Thin Film Laboratory Ohara Corporation Optikos **Optiforms** OptoSigma Physik Instrumente **Precision Glass & Optics Precision Optical Quartus Engineering Raytheon Space and Airborne** Systems **Reynard Corporation Spectrum Scientific** Supply Chain Optics **Synopsys** Thorlabs **Trioptics UC Irvine Optics Programs** Zemax

This list of OSA Student Chapters in California is current as of June 1, 2023.

The OSSC Board would like one volunteer to reach out one of these OSA / SPIE Student Chapters and become a contact that one college or university student chapter and optics community. Please contact Donn Silberman if you would like to volume the student chapter and optics community.

- Cal Poly Pomona Optics & Photonics Club (website not active club is reforming now.)
- Stanford University, Stanford Optical Society
- University of California, Berkeley, "PhotoBears" (Joint OSA, SPIE & IEEE Student Chapter)
- University of California, Irvine, Photonics@UCS (Joint OSA & SPIE Student Chapter)
- University of California, Los Angeles (Quantum Computing Student Association)
- University of California, Riverside, Photonics Society (Joint SPIE & OSA Student Chapter)
- University of California, San Diego, Light Quantum at UCSD
- University of California, Santa Barbara, Photonics Society, (OSA, SPIE & IEEE Student Chapter)

- San Francisco State University, OSA Student Chapter (not active)
- University of California, Davis, Optics Club (not active)
- California Institute of Technology OSA Student Chapter (not active)
- University of California, Merced (not active)

Would you like to help the OSSC update this section of our website at Friends - Optical Society of Southern California (oss Contact an OSSC Officer to volunteer.

WELCOME NEW MEMBERS Oleksiy Anopchenko Lisa Belodoff **Kimberly Blancarte** John Brewer Quynh T Dang Jackie Dao Paul C Davis Phong N Dinh Derek Dunn-Rankin Eric C Fest Rafael Flores-Segura Richard p Gibbs Samuel A Gomez Elijah Gonzalez Elaine Jin Brian Krantz Rui Liu YRYX Y LUNA Mahdad Mansouree Alexis Maqueda Justin Martinez-Diaz **David Miller** Jase Nosal Akshay Patke Kasia Placha Nino Polizzi Hugo Rincon Leilanie Rufino Colbey Ryan Llurvia Sanchex Doug Sear Mahsa Torfeh Steve Trindade Jason Zeis

OSSC welcomes **Individual** and **Corporate** Members who joined (or rejoined) in the last 60 days.

> We value your membership and appreciate your support!



You have received this message from the mailing list of Optical Society of Southern California. If you would prefer not to receive these emails in the future, go to the opt-out page and modify your privacy settings. You can also request to be removed from our database completely.