
OSSC eNewsletter - August 2023

1 message

Donn M Silberman(OpticsAge@gmail.com) <mailer@mail2.clubexpress.com>

Sat, Aug 26, 2023 at 4:30 PM

Reply-To: OpticsAge@gmail.com

To: OpticsAge@gmail.com

[View in your browser](#)

**Newsletter Volume 28, Number 1 August 2023****Best to view this newsletter on your PC or on your smartphone in landscape view.****In This Issue:**

1. From the President
2. Next OSSC Meeting
3. OSSC Outreach
4. Professional Education
5. From the Editor
6. Member News
7. Recent Special Event - Mt. Wilson Observatory
8. OSSC Board of Directors - 2023-2024
9. Volunteer to help the OSSC
10. Website Sponsors & Corporate Members
11. Student Optica & SPIE Chapters - updated
12. Welcome New OSSC Members

From the President:

Dear OSSC Membership and Friends,

I would first like to thank all of those who have graciously volunteered their time through the years to support our OSSC organization and its mission of outreach and optical fellowship. I would also like welcome back those who continue to volunteer their time and contribute to our shared OSSC vision for the 2023-2024 term.

Last year, OSSC President John Nunn guided the team and established three locations for monthly meetings, and our hope is to maintain our talks in these locations, perhaps moving them around to maintain convenience for our speakers. Our three sections established by the team's effort are in the South Bay, Pasadena City College, and Orange County which had been hosted in Irvine (UCI or MKS).

We had our Summer Board and Programs planning meetings to prepare for the upcoming year in early August, and we are developing a solid schedule of speakers and OSSC activities.

Our mount Wilson Observatory tour on July 8 2023 was a great success. We sold out our 20 slots and from the photographic evidence a great time was had by all. It is my hope we can schedule more of these kinds of activities during the upcoming 2023-2024 term should scheduling and optimal viewing prevail. [Check out photos and other information from the event on the OSSC website here.](#)

We still have some open volunteer positions that could use your vision and support for this upcoming year. We have long had a newsletter called IMAGES, that has been slowly migrating to our on-line forum. I think there is still value in maintaining and indeed expanding this new letter, to help set the pace of OSSC involvement in our optical community and coordinate OSSC activities.

We have established working and viable hybrid talk process, and we have been successful at propagating word of our talks not only throughout California but also around the world. We will need to find additional ways to encourage our online only participants to join our organization; members are currently given access to our recorded talk library and in some cases access to presentations provided by our speakers, and it is clear we will need to have better advertising to get our online-observers to become active members.

Our last talk was presented by the VP of OPTICA Jim Kafka on high intensity lasers. We thank Jim for excellent and engaging talk.

I would also like to offer a challenge to our growing OSSC community. I would like each of us to envision our future as an organization, perhaps be developing an updated vision statement for OSSC's upcoming term. What can we do to encourage the formation of student chapters, or participation in out-reach for this upcoming year? If you have some fun and engaging ideas feel free to drop me a email at presidente@OSSC.org. Would offering table for OSSC/OPTIC student chapters work to build stronger student participation?

Donn Silberman has long led the charge on OSSC optical outreach, expanding our focus from classical optics to quantum optics. I am hoping we can do more this upcoming year to encourage growth in the non-classical optics world perhaps have a non-classical optics trade show, poster session, or job fair in the growing area of interest to our optical industry and its users.

I look forward to an exciting new term. Thanks in advanced for taking the time to read this, and contribute our shared vision.

Kevin Romero President 2023-24, Optical Society of Southern California

Next OSSC Meeting



Wednesday Sept. 13, 2023
OSSC Combined In-Person and Online
Event

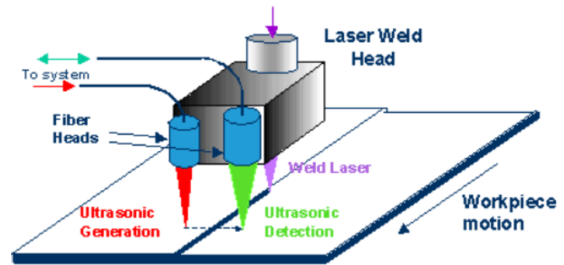
**"Laser ultrasonics for aerospace and
nuclear applications."**

Dr. Bradley Bobbs, Senior Scientist,

Laser Ultrasonic Products Group at Intelligent
Optical Systems

[Register Here](#)

[Download Flyer](#)



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

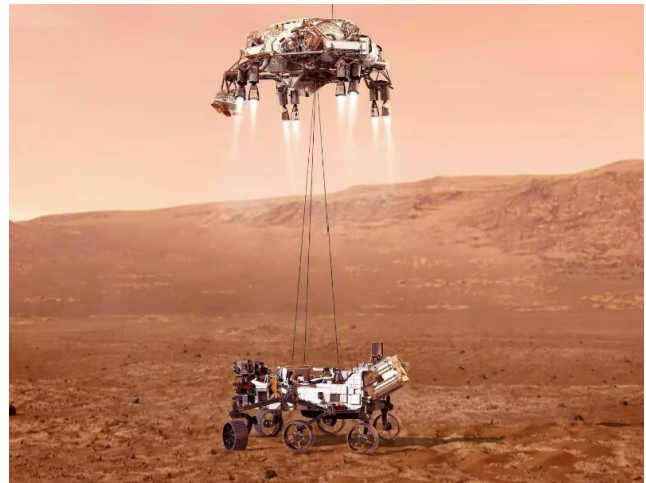
Holiday Inn Los Angeles Gateway -
Torrance
19800 S. Vermont Ave
Torrance, CA 90502

Outreach



**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



**VOLUNTEER at the 10th Mars Rover &
Society Expo**

Saturday, September 30, 2023, 10:00 AM until 5:00
PM

LOCATION:

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 partnering with AmeriCOM to survey local Southern California companies to discover 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.

If you or someone you know would like to take a 6 question survey, please click on the link.

[Optics Manufacturing Survey](#)

Loyola Marymount University

Bruce Featherston Life Sciences Building
Mars Rover & Professional Society Expo
1945 Ignatian Cir
Los Angeles, CA 90045

[Sign up & more Info here.](#)

Empowering Futures -Annual Benefit 2023

Supporting:



OSSC OUTREACH PARTNER VITAL LINK

invites you to support our programs

Saturday, September 30, 2023

VIP Reception 5:00PM

Cocktail Reception, Auction, Dinner and Changemaker Awards

6:00PM to 10:00PM

Edwards Lifesciences in Irvine, CA

Join Vital Link and University Lab Partners as we celebrate

and support STEM education in Orange County.

We will recognize outstanding businesses, educators, and individuals

supporting the growth and advancement of student opportunities.

Together, we can continue to foster a culture of innovation and empower

the next generation of innovators in Orange County.

[More Information](#)



Vital Link - List of Upcoming Events

Career Exploration Days (including **Optics**)
Technology Advisory Board Meetings

To Volunteer & get more info -

Contact: Dennis@vitallink.org

Let him know you are from the OSSC

Professional Education

UCI Division of Continuing Education



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

The following courses are part of **Certificate Programs** in:

Optical Engineering and **Optical Instrument Design**

Fall 2023 courses begin in Late September:

Introduction to Lens Design
Vibration Control for Optomechanical Systems

The above courses are part of **Certificate Programs** in:

Optical Engineering and **Optical Instrument Design**

New: Alternative Digital Credential:

**Pasadena City College
Laser Technology Program**



Laser Tech Training Program

The first PCC LaserTech student cohort begins this Fall 2021 semester! 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 professionals. In addition to laboratory skills, students are offered one-on-one support and career advice, including résumé and LinkedIn profile building.

Additional Information

[Prof. Brian Monacelli, Ph. D.](#)

Read a related article in **SPIE's** new Photonics Focus magazine titled....

[Where is the New Collar Workforce?](#)

[Optics companies large and small face a hiring](#)

- **Telecentric Lens: Machine Vision System Design**

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



Past UCI Optical Engineering Webinars

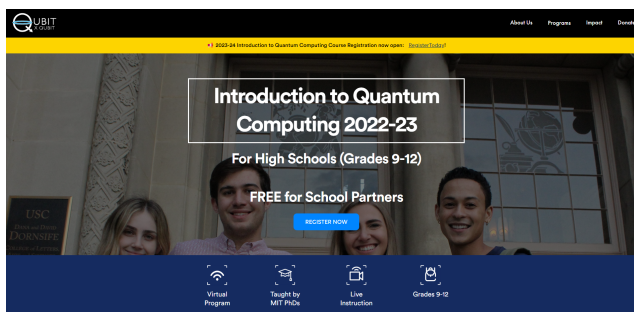
Go to the links above to learn more about the courses and programs.

15% discount for OSSC Members on courses Required for a Certificate.

Email: EngineeringSciences@ce.uci.edu with confirmed **OSSC** Membership to receive discount code.

Part-Time Instructor: Optical Engineering and Optical Instrument Design

shortage
for skilled technicians



Qubit x Qubit offers many programs including partnerships that schools can participate in and courses for individual students.

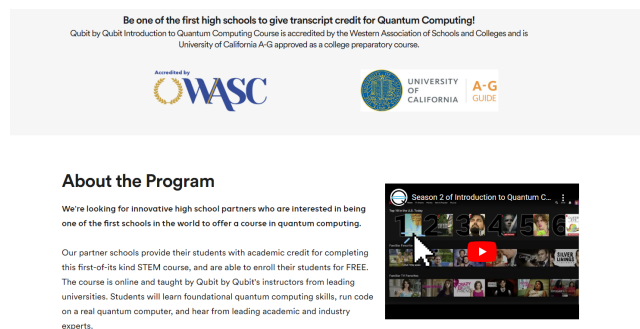
School Partnerships Individual Students

OSSC Fellow Donn Silberman has taken the individual course and can assist any Southern California school both in-person and remotely to help bring this technology alive for students, teachers and anyone interested.

From the Editor:

Hello OSSC members and fellow readers,

Just a short note to say that it is good to be starting new OSSC term and now we will start with our first meeting in September.



Bring this course to your school for free



Thanks go out to all the OSSC members that have submitted articles for this newsletter. Without submitted articles, there can be no newsletter !!

Just like our motto: "There is no vision without optics !!" from Martin Hagenbuechle OSSC Fellow & Past President

These business cards area available to hand out to prospective OSSC Corporate & Individual Members.

Also, the OSSC Board is considering making OSSC merchandise available like polo shirts, coffee mugs etc.

Please let your voice be heard, how would you like to show your support for the OSSC?



Hope to see you at an OSSC event soon.

Sincerely,

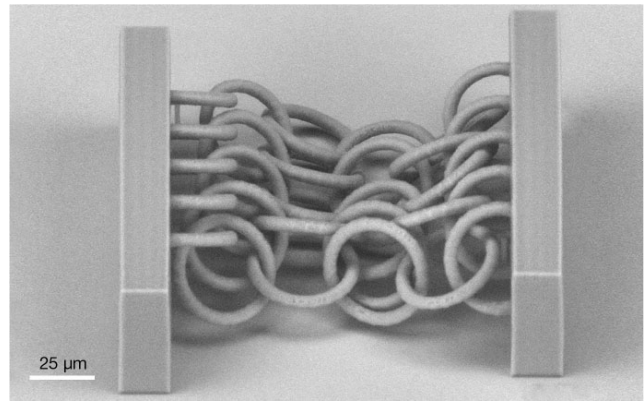
Donn M. Silberman

OSSC Past President & Fellow

Current OSSC Newsletter Editor

Member News





PHOTONICS AT WORK

Advanced motion control scales submicron additive manufacturing By Bryan Germann - OSSC Website Sponsor Aerotech

Additive manufacturing, also known as 3D printing, has revolutionized the manufacturing industry by enabling the creation of complex and customized parts with unprecedented precision and flexibility. Among the various additive manufacturing techniques, two-photon polymerization (2PP) has emerged as a powerful tool for creating high-resolution structures at the nanoscale. The impressive resolution of this technique presents unique scalability challenges due to the submicron laser spot sizes required to enable minimum voxel size (routinely $<150 \text{ nm}^3$). Scalability is challenged further by the limited field of view (FOV) of the laser scanner.

Advanced motion control technology is helping to improve the quality, throughput, and practicality of additive manufacturing techniques such as two-photon polymerization.

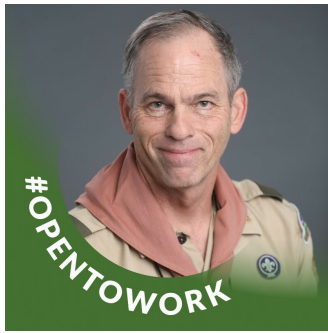
Read the entire article



A Circular Rainbow

OSSC Fellow and Past President Susan Rico submitted the photo with the following description:

I took the photo in August 2019 in New Canaan, CT. My camera was pointed at my shadow on the sidewalk, with the sun directly behind my head/camera. It appears that there is something unique about the concrete in this particular sidewalk that is causing the halo effect. Murty and I theorized that there must be some regular structure in the concrete, perhaps small, transparent spheres of silica.



Tom Scheffelin - OSSC Member

Scouts BSA and SPIE Volunteer; Training for Optics/Photonics Career

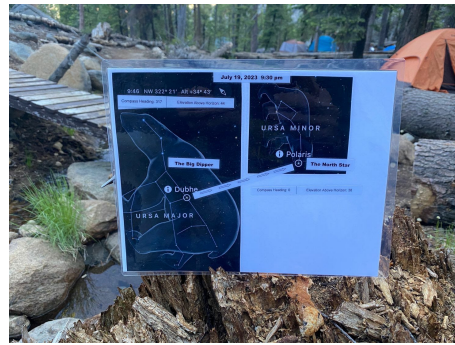
Astronomy Merit Badge Success!

I spent last week (in mid-July) with our Boy Scout troop at summer camp (Camp Winton). The elevation was 5,876 feet and extremely far away from light sources. The nights were cloudless, there was no Moon, and we had 360-degree visibility.

The scouts that took the Astronomy merit badge were invited to look at the night sky on Wednesday night, from 9:45 pm to 10:15 pm. Other scouts and interested adults (like me) were also invited.

The sky was so dark and clear I could see the Milky Way (it actually looked 'milky') and I could see the reflections of stars on the lake -- something I have only seen once, and that was 45 years ago in central Colorado. My iPhone 11 camera captured the stars in the sky and one reflected star.

[More Photos](#)

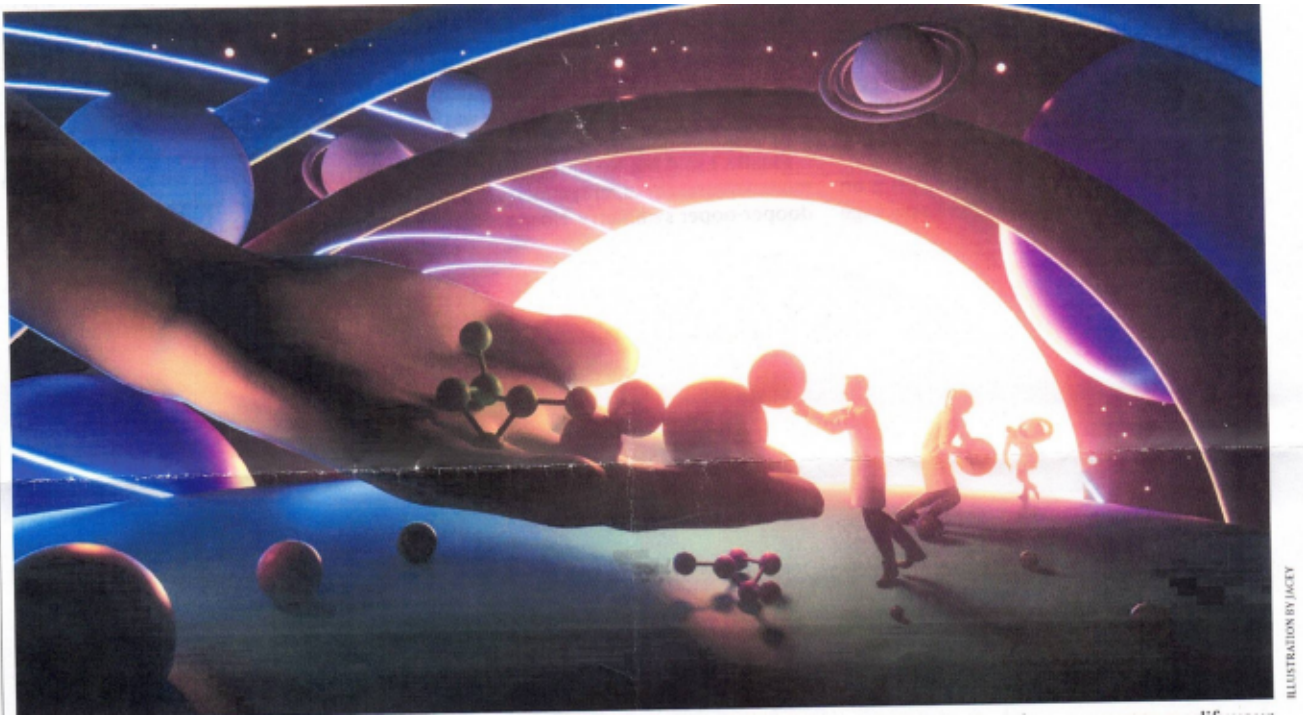


Earlier I had given the Astronomy merit badge counselor customized Star Charts and screenshots of stars and constellations (using the Sky Guide app). Scouts that used the charts knew exactly where to look for each star and constellation. I made them for each week of camp, at the same time (9:30 pm), on the Wednesday of each week. Each week the stars "moved" a little.

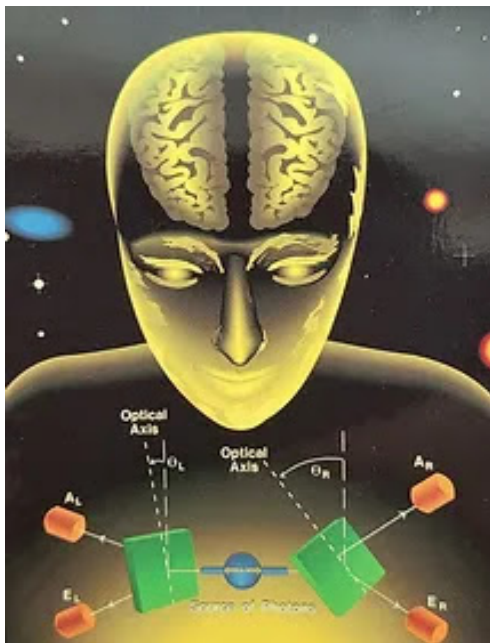
Two types of charts were made.

The first chart was a table which contained a list of the stars and constellations visible in the sky, with their respective compass headings and angles above the horizon, with data for all four weeks of summer camp. One can determine trends in the locations of stars as the summer progresses (for instance, the star Regulus in the constellation Leo goes closer to the horizon each week and will be below the horizon in mid-August). Scouts that used a compass knew where to look. I provided the counselor with 10 "red-light mode" headlights and 5 compasses.

[Read more](#)



Check out this short science fiction story by OSSC Treasurer Prof. Alex Small.
Don't feed the physicists.



The Quantum Universe - Atoms, Humans & Light

Donn M. Silberman, Fellow of
the **OSSC & SPIE**

The quantum universe is the place we all find ourselves living and experiencing life. This is 'true' whether any given individual life form acknowledges it or not. This 'truth' is based on a consensus of many people that have studied, experimented, and published their findings across many years, locations, ideologies, religions, cultures, and any other set of diverse categories we might consider. Our current modern civilization exists because a subset of people have embraced the quantum theories and implemented them into our societies worldwide in the form of technologies including computers, communications, transportation, logistics, healthcare, financial transactions and many more processes that make up our human centric world.

[Read More](#)

Recent Special OSSC Event



Mt. Wilson Observatory

Night Viewing Trip Saturday July 8th

Historic Mount Wilson Observatory is an astronomical research facility located in the San Gabriel Mountains of Southern California. Located on the summit of Mount Wilson above Pasadena at an altitude of 5715 feet (1742 meters), the Observatory is visible from much of the Los Angeles area. Attendees will get to use the historic 100-inch telescope.

After event info and photos

Many Thanks to OSSC Past Presidents [Scott Rowe](#) for coordinating this event and [David Hasenauer](#) for serving as our Host and Guide.

Board of Directors

President

[Kevin Romero](#)

Vice President

[Jack Latchinian](#)

Secretary

[Donn Silberman](#)

Treasurer

[Martin Hagenbuechle](#)

Past President

[John Nunn](#)

Membership Chair	Russell Rauch
Programs Chair	Nicholas J Croglia Jr
Arrangements Chair	Geoffrey Bethel
Councilor	McGwire Herbert
Councilor	Martin Hagenbuechle
Councilor	Harvey Spencer

OSSC Leaders

Communications Chair	OPEN
Corporate Memberships	OPEN
Fellows Chair	Harvey Spencer
Website Chair	Robert Cartland

Jobs Board Coordinator	Nicholas J Croglia Jr
Mt. Wilson Coordinator	T. Scott Rowe
Outreach Chair	Donn Silberman

Secretary's Assistant	OPEN
Outreach Assistant	OPEN

Video Committee	OPEN
Zoom Committee	OPEN



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)

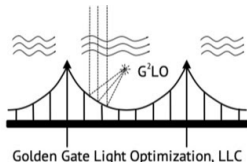
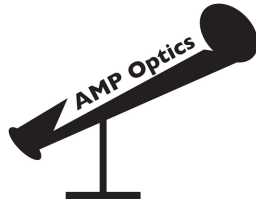
Video Committee (Manages and edits OSSC video recorded presentations and makes them available through the OSSC website)

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



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 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

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

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 v

- [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)

WELCOME NEW MEMBERS

Ablimit Ablez
Mary L Bessell
Lawrence W Bradford
Reynaldo Cabrera
Justin R Chrien
Alexi De Avila Cadena
Ty Guernsey
Cody R Johnson
Jim Kafka
Hannah M Macklin
Filipe M Marques
David Rigolo
Behshad Roshanzadeh
Bikramjit Singh
Kendall Smith
David Steinberg
Erik Villanueva
Anna Wang
Takamitsu Watanabe
Bahram . Zandi

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.

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