



AMERICAN
PRECISION OPTICS
MANUFACTURERS
ASSOCIATION

GENERAL MEETING

Wed. Jan 29th 2025



APOMA is the focal point of American precision optics manufacturing collaboration, facilitating the ongoing exchange of ideas and expertise amongst our diverse membership base. By advancing workforce development, defining industry standards, and sharing process improvements and innovations, APOMA bolsters operational excellence throughout all aspects of optics manufacturing. Membership consists of fabricators, coaters, material scientists, engineers, designers, and educators; who share in the unified goal to **make light work** in the United States.





AGENDA

- Introduction
- Board Election
- Membership
- Financial Report
- 2024 Tech Workshop
- Guest Speakers
 - NIF Optics
DR. TAYYAB SURATWALA
 - OEOSC
PATRICK AUGINO
 - Workforce Development
DR. ALEXIS VOGT

BOARD MEMBERS 2024 (beginning)



Lee Steneken
President

ESCO OPTICS



Travis Green
President-Elect

ALPINE RESEARCH OPTICS



Mike Mandina
Past-President

OPTIMAX SYSTEMS



Dave Mohring
Treasurer

OPTIPRO



Zach Hobbs
Secretary

SYDOR OPTICS



Dr. Alexis Vogt
Academic Member

MONROE COMMUNITY
COLLEGE



Michele Stolberg
Admin



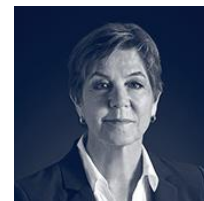
Chris Russell
At-Large Member

UNIVERSAL PHOTONICS



Timothy Kennedy
At-Large Member

EDMUND OPTICS



Mitzi Brennan
At-Large Member

PUREON



THANK YOU TRAVIS



CANDIDATES – 2 AT-LARGE BOARD SEATS



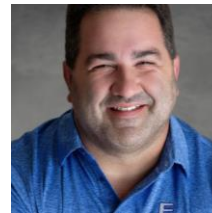
Nicholas Bilis

OHARA



Bill Donovan

THORLABS



John Escolas

ESCOLAS OPTICS CONSULTING



Brian Myer

OPTIMAX



David O'Ryan

ECOCLEAN



David Shelton

AMERICOM



2025 ELECTION
VOTE

BOARD MEMBERS 2025 (current)



Zach Hobbs
President

SYDOR OPTICS



Timothy Kennedy
President-Elect

EDMUND OPTICS



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Past-President

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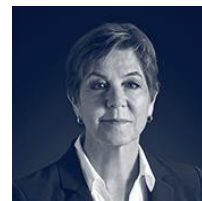


Dr. Alexis Vogt
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MONROE COMMUNITY
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Mitzi Brennan
At-Large Member

PUREON



Dave Shelton
At-Large Member

AMERICOM



Brian Myer
At-Large Member

OPTIMAX





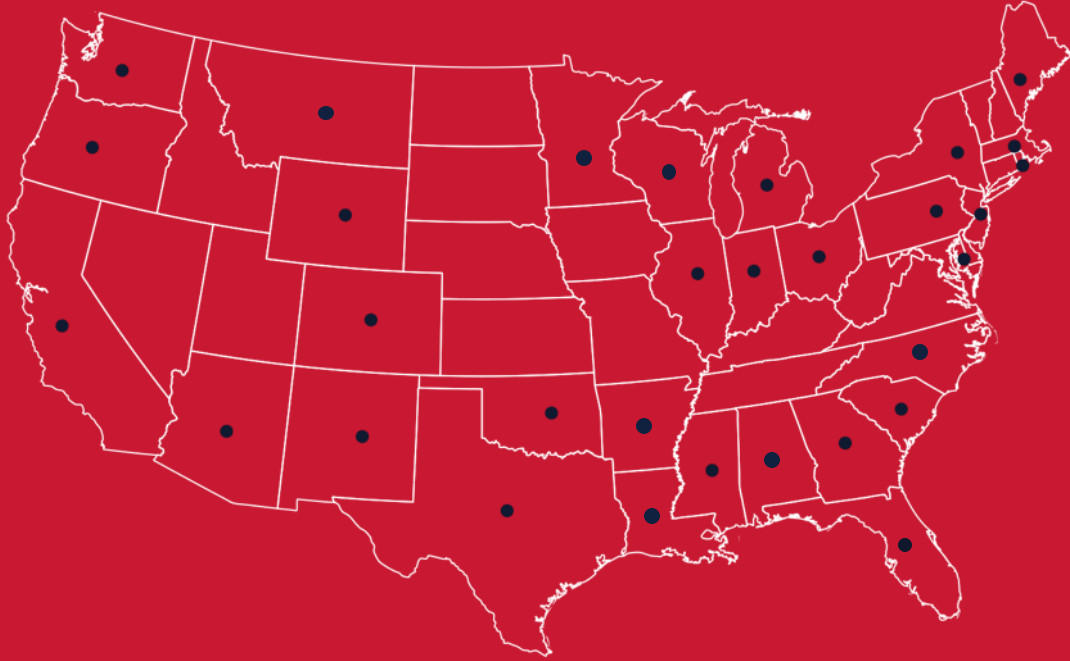
Thank you for your support

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THANK YOU, LEE



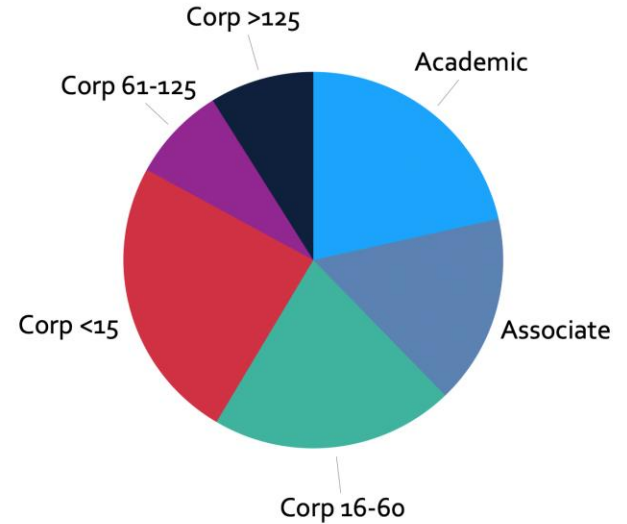
MEMBERSHIP



↑ 13%

135 members

Academic.....	29
Associate.....	22
Corporate <15.....	28
Corporate 16–60.....	33
Corporate 61–125.....	11
Corporate >125.....	12



FINANCE REPORT

*Statement of Activities
For The Year Ended
December 31, 2024*

REVENUES AND OTHER SUPPORT

Membership Dues Received.....	\$ 52,000.00
SPIE Optifab 2023 Sponsorship Proceeds	\$ 10,000.00
Workshop Sponsorships	\$ 25,500.00
Workshop Gross Revenue	\$ 34,425.00
Bank Sweep Interest	\$ 12,747.60

TOTAL REVENUES AND OTHER SUPPORT **\$ 134,399.69**

EXPENSES AND LOSSES

Workshop Expenses..... \$ 54,430.43

Management and General Expenses:

<i>Administration Assistance</i>	\$ 5,970.00
<i>Dues and Licensing</i>	\$ 2,900.00
<i>Tax & Accounting fees</i>	\$ 825.00
<i>Bank Service Charge / Fees</i>	\$ 3,560.00
<i>PW General Mtg. 2024</i>	\$ 0
<i>Intuit Qbook Fee</i>	\$ 330.00
<i>Intuit Tran Fee</i>	\$ 3,643.61
<i>Election Buddy Software</i>	\$ 99.00
<i>Web Site Maintenance</i>	\$ 480.00
<i>Postage & Supplies</i>	\$ 217.00
	\$ 18,024.61

Contributions \$ 5,000.00

TOTAL EXPENSES AND LOSSES **\$ 77,455.04**

CHANGE IN NET ASSETS **\$ 56,944.65**

NET ASSETS, BEGINNING OF THE YEAR **\$ 323,581.26**

NET ASSETS, END OF THE YEAR **\$ 380,525.91**

REVENUES AND OTHER SUPPORT		
Membership Dues		
and Other Sponsorship		
Proceeds		
Workshop Sponsorships		
Workshop Gross Revenue		
TOTAL REVENUES AND OTHER SUPPORT		134,399.69
EXPENSES AND LOSSES		
Workshop Expenses		
		54,430.43
Management and General Expenses:		
Administration Assistance	\$ 5,970.00	
Dues and Licensing	2,900.00	
Tax & Accounting Fees	825.00	
Web Site Maintenance	480.00	
Postage	217.00	
Contributions		5,000.00
Loss on Flashing Scan		6,000.00
TOTAL EXPENSES AND LOSSES		77,455.04
CHANGE IN NET ASSETS		56,944.65
NET ASSETS, BEGINNING OF THE YEAR	\$ 45,794.04	
NET ASSETS, END OF THE YEAR	251,622.12	
	\$ 297,417.06	

BUDGET

2024 Proposed Budget vs. Actual

<u>Item</u>	<u>Proposed</u>	<u>Actual</u>
Postage, Supplies	\$ 300.00	\$ 217.00
Dues & Licensing	\$ 3,500.00	\$ 2,900.00
Tax & Accounting Fees	\$ 950.00	\$ 950.00
Web Site Maintenance	\$ 2,000.00	\$ 480.00
Administrative Assistance	\$ 7,500.00	\$ 5,970.00
Marketing & Advertising	\$ 3,500.00	\$ -
Conventions (OptiFab/PW)	\$ 4,000.00	\$ -
Contributions	\$ 6,000.00	\$ 5,000.00
Intuit Qbooks and Fees	\$ 2,000.00	\$ 3,973.61
Workshop	\$ 4,500.00	\$ (5,494.57)
Total Proposed vs Actual	\$ 34,250.00	\$ 13,996.04



BUDGET

2025 Proposed Budget

<u>Item</u>	<u>Amount</u>
Postage, Supplies	\$ 300.00
Dues & Licensing	\$ 3,500.00
Tax & Accounting Fees	\$ 950.00
Web Site Maintenance	\$ 2,000.00
Marketing & Advertising	\$ 3,500.00
Administrative Service	\$ 8,500.00
Optifab	\$ 2,500.00
PW General Meeting	\$ 2,500.00
Intuit Quick books	\$ 3,500.00
Member OutReach Contract Consultant	\$ 25,000.00
Budgeted Expenses	\$ 59,250.00



APOMA BREAK OUT ROOM

Available to APOMA members & guests only

- Meeting space
- Perfect for members not exhibiting
- WiFi access
- Connect with other APOMA members

LOCATION

Room 60 in South Lower Mezzanine
Tuesday – Thursday

Located off the South hall lobby

2025 GOALS

- Enhance the value proposition for current membership
- Strategic planning for future growth
- Co-organize Optifab 2025 in Rochester with SPIE
- Solicit ideas for 2026 Tech Workshop

WELCOME Yvette Pagano

New independent consultant

Yvette Pagano

585-730-9196

Pagano.Yvette@gmail.com



Focus For New Members

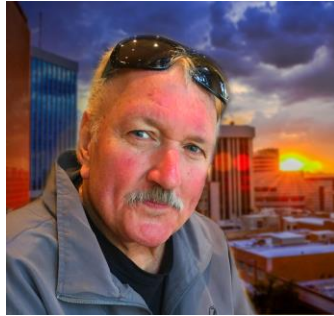
- New Business
- Skilled Workforce
- Networking
- Conferences
- Government Advocacy

STEP ONE- LET'S CHAT

I don't know what I don't know

- My first order of business- member survey
- How is APOMA working for you?
- Goal is to have one on one conversations with you, the APOMA member
- Please set up an appointment or find me afterwards
- Best way to have a great idea is to have lots of ideas
- Survey results and recommendations to be shared with board and shape 1 year and 5-year strategic plans

IN MEMORIAM



Walter Czajkowski

1949 – 2024

He never gave up but his heart finally gave in after a long battle with cancer. Walt positively impacted the field of optics and made lifelong impressions on his coworkers and colleagues, most of whom he considered friends.



BAUSCH + LOMB

GO Edmund
optics | worldwide



Throughout his 45-year optics engineering career, Walt was devoted to the advancement of the optics industry and those who embraced it. He was actively involved in promoting optical standards from early on and served as a manufacturing consultant for the American Precision Optics Manufacturers Association (APOMA) from 1996 until 2016, where he continued to help shape the trajectory of the industry.

He will be missed.



Scholarship forthcoming to commemorate Walt's spirit and dedication to the optics industry

With collaboration from SPIE



TECH WORKSHOP

Oct 2024 | New Orleans

A decorative graphic consisting of numerous thin, parallel lines in a light blue color. These lines are arranged in a series of nested, slightly curved shapes that create a sense of depth and movement, resembling a stylized landscape or a series of steps. The lines are most prominent in the lower half of the image, where they fan out from the left side towards the right.

NEW ORLEANS

TECH WORKSHOP
Oct 2024

Opening reception

18 presentations (2-days)

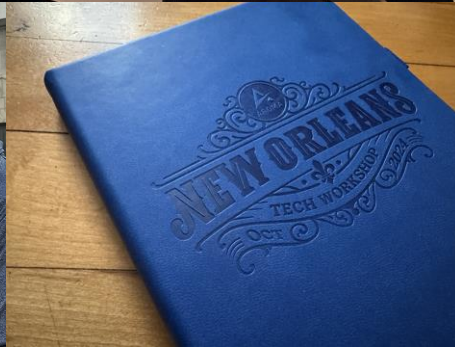
Rooftop cocktail hour

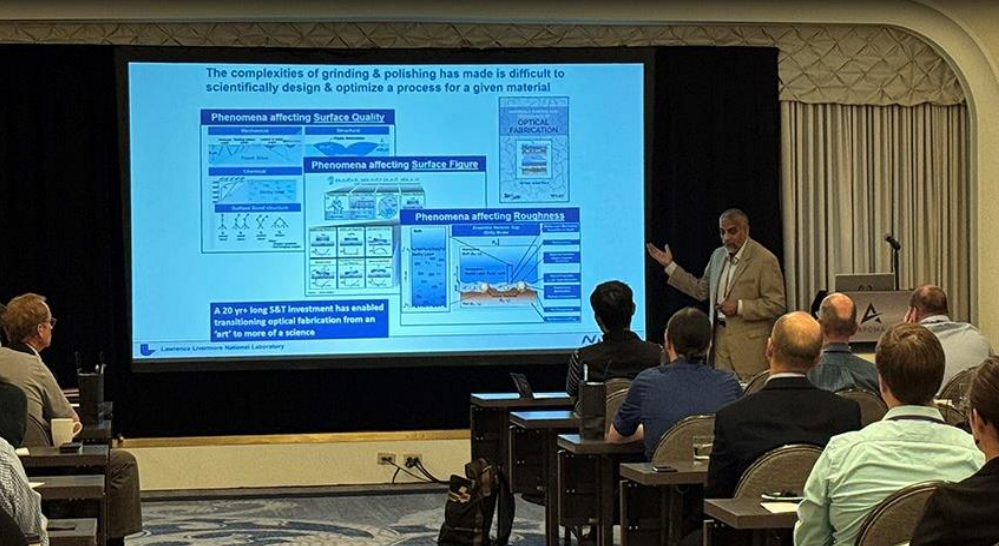
LIGO Tour

88 attendees

36 companies/
organizations

Fabulous NOLA
nightlife and cuisine

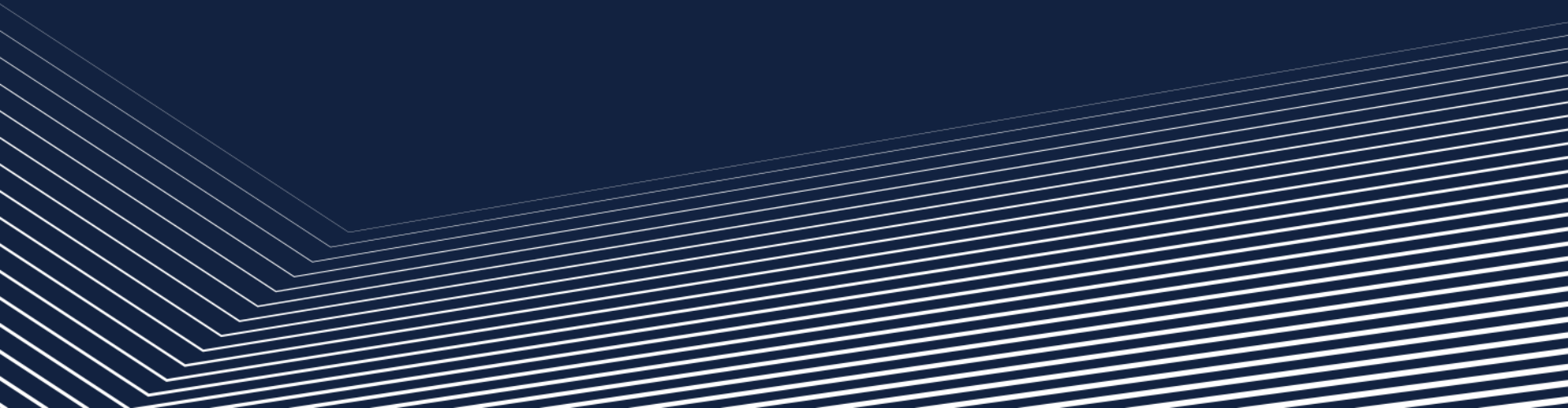






 LIGO

GUEST SPEAKERS



NIF Optics

Dr. Tayyab Suratwala

Program Director for Optics and Materials Science & Technology
(OMST) in the NIF & Photon Science Directorate
Lawrence Livermore National Laboratory

OEOSC

Patrick Augino

Optimax, Executive Director of OEOSC



OEOSC Hosted ISO Meeting in 2024

- **Meeting hosted by NIST Boulder, CO**
 - October 8th, thru October 11th
 - SC1 – Fundamental Standards
 - SC3 – Optical Materials
 - SC5 – Endoscopes and Microscopes
- **Overall 75 attendees**
 - Six International Standards Bodies represented
 - ANSI /OEOSC (US)
 - BIS (India)
 - JISC (Japan)
 - SAC (China)
 - ISO (Germany)



Standards Update

- **SC1 – Fundamental Standards**

- ISO 10110-11 (Default tolerances) – is expected to be published in early 2025
- ISO 10110-6 (Centering in 10110) – is advancing Final Draft (FDIS) may published in 2025
- ISO 10110-5/ISO 14999-4 (surface error & testing) – is progressing to Draft (DIS)
- ISO 9358 (Stray Light): Currently in revision
- ISO 9022 (Environmental Testing) – Currently in revision
 - Many standards in this series
- ISO 10110-1 (General 10110): scheduled to begin revision in 2025
- ISO 10110-9 (Coatings in 10110): revisions being proposed by the US and are expected to start in 2025

- **SC3 – Optical Standards**

- ISO 9211-5, 9211-6, and 9211-8 (standard coatings) – currently in revision

- **SC5 – Endoscopes & Microscopes**

- ISO 8600-1 (Endoscopes General) – To be published in early 2025
- ISO 10934 (Microscopes Vocabulary) - To be published in early 2025
- Many standards in revision in 2025

Call for Experts

- **Special Thanks to our project leaders:**
 - Jennifer Michels (RedHead Optical)
 - Ray Williamson (Ray Williamson Consulting)
 - Dave Aikens (Savvy Optics)
 - Paul Murphy (QED)
 - Zach Strobehn (CMM Optic)
 - Eric Herman (Synopsis)
- **OEOSC is seeking experts to assist with reviewing and providing feedback on upcoming standards revisions**
 - Environmental Standards (ISO 9022 series) – The goal to revise and improve usability and functionality
 - Coatings (ISO 9211 series) – Several standards are already under revision, and input from US users, particularly coating manufacturers, is needed
- **Joining OEOSC www.oeosc.org**
 - Membership benefits include direct input on current and future standards, interactions with experts in your field, flexible time commitments, and discounts on ISO Standards purchases.

Workforce Development

Alexis Vogt, PhD

MONROE COMMUNITY COLLEGE

A decorative graphic at the bottom of the slide consisting of numerous thin, parallel blue lines that curve upwards from left to right, creating a sense of movement and depth.

OPTICS MANUFACTURING TECHNICIAN APPRENTICESHIP

- **Benefits to Employers**

- Highly skilled workforce
- Increased employee retention
- Improved attendance, productivity, and quality

- **Benefits to Apprentices**

- Long-term career opportunities
- Workplace relevant skills
- Industry recognized credentials
- Earn academic credit



ROI **\$1.47** for every \$1 invested from increased productivity, reduced waste, and increased innovation

Every \$1 invested in apprenticeships leads to a public return of approximately **\$28** in benefits

<https://nationalapprenticeship.org/roi>

Current State of MCC Apprenticeship Engagement

- **13** approved company sponsors of registered optics apprenticeships, across **7** states
- **13** active optics apprentices at **6** companies in **4** states
- **19** apprentices (**5 female**) have completed registered optics apprenticeships

MCC is now engaged in registered apprenticeship programs for 3 different optics occupations with a 4th program, for optical coating technicians, in the planning phase.

- Precision Optics Manufacturing Technician (MD, NY)
- Optics Manufacturing Technician (US)
- Precision Imaging/Nanolithography Technician (NY)

APPRENTICESHIP PARTNERS

Structured earn & learn program: on the job training + related technical instruction



Seeking additional optics companies!

STEPS TO DEVELOP AN OMT APPRENTICESHIP

Determine
company's critical
work function



for the on-the-job
learning

Identify related
technical instruction



aligned to the work
functions

Submit
application



Receive
approval



Select & register
apprentices



Start
apprenticeship



To get started contact our apprenticeship coordinators!

Bob Lasch rlasch@monroecc.edu
Marissa Haddock mhaddock@monroecc.edu

\$4.4M



\$5.2M



OPTICS MANUFACTURING TECHNICIAN APPRENTICESHIP

- **Structured “earn and learn” solution**
 - 2,000 hours/year
 - Customizable program to meet your manufacturing process
- **Related technical instruction**
 - Minimum 144 hours/year
- **Apprentices work in various departments learning manufacturing processes**



UPCOMING EVENTS

April 15-17

SPIE. DEFENSE+
COMMERCIAL
SENSING

Gaylord Palms Resort
and Convention Center

Kissimmee, FL

July 17



Victor Hills Golf Course

Rochester, NY

October 21-23

SPIE.OPTIFAB

Rochester Riverside
Convention Center

Rochester, NY

Thank you and enjoy Photonics West

