

Optica Election for 2023 Offices

The Optica election for the 2023 Vice President and two new Directors-at-Large will open on 20 July 2022. Please read the candidates' statements and cast your ballot. Instructions for electronic voting will be sent to all eligible voters. If you do not receive voting materials, email voting@optica.org or call +1.202.416.1913.

Polls will remain open until 16 September 2022. Results will be announced at Optica's Annual Business Meeting on Tuesday, 18 October 2022. They will also be available on the Optica website. For biographical information about the candidates, visit optica.org/2023_election_slate.

Candidates for Vice President



James Kafka
Spectra-Physics/MKS, USA

Optica has been my professional home since I first joined as an undergraduate studying optics at the University of Rochester in 1976. My time at the U of R and my participation with Optica have taught me the importance of communicating with others—both sharing the work that I am passionate about and, more important, having people around me to supply guidance and inspiration to stimulate my growth.

I have been working in industry for 38 years and am now the CTO for Spectra-Physics, and a Fellow of our parent company MKS. This is a position where I get to mix both business and science. Throughout my industrial career I have cherished and carefully maintained my contacts with academia. It has been through my participation with Optica that I have been able to straddle those two worlds. My industrial colleagues are constantly inquiring about publi-

cations and conferences, while my academic colleagues inquire about the viewpoint of industry. I relish my position as a liaison between the two groups and promise to use this unique position to add value to the leadership of Optica.

I had the privilege to serve on the Optica board for three years and have been a member of the Finance and Public Policy committees. This was a valuable training experience in which I learned about Optica's finances and the importance of communicating the relevance and impact of our work to funding agencies and the general public. I have also been fortunate enough to be a Distinguished Traveling Lecturer for the APS Division of Laser Science for most of the past 20 years. In that role I have visited numerous smaller educational institutions and observed firsthand how enthusiasm for optics is spread.

Optics is an enabling technology with impact in every modern discipline. Our responsibility in growing our network is to maximize opportunity for collaboration between each of our communities, including industry, academia and nonprofits throughout the world. We need to continue our success in areas where Optica has always excelled: to educate and excite students about optics and to honor the achievements of our members. I am pleased to have served on conference and award committees, where I have always sought to honor the deserving but underappreciated candidates.

The Optica core values are **innovation, integrity, impact and inclusivity**. Building on my experience in industry,

I will communicate the enabling role that optics and photonics play in modern society. I am committed to engaging our underrepresented communities and encouraging wider participation in society activities and leadership positions.

It would be an honor to apply my unique background and experience to further the vision of Optica.



Claudio Mazzali
Corning Incorporated, USA

I am honored to be nominated by the Optica Board to be one of its candidates for vice president. I have been involved as a member and volunteer since my time as a student of optical physics over 25 years ago. This organization has allowed me to experience the world of optics with my closest colleagues, and at the same time was the bridge that enabled us all to meet and interact with the leaders in our field. It is an organization that helped me navigate

through my early career and later has allowed me to proudly help and mentor the next generation. This combination of belonging and pride creates a virtuous cycle that has fueled the world of optics for more than a century!

To be the leading global forum for light science and technology is more than just a mission statement. It's how this community is recognized, and it is what holds us accountable. From our student chapters to our editorial committees and to the Board—this is how we all do our work. This is how we show up. This is how we create a better version of ourselves through every paper, every conference, every workshop and every collaboration.

We are living in a time when science and technology permeate all aspects of our lives. Nowhere is that more true than in the world of light and its related sciences. From the creation and sharing of knowledge to the way we work, learn, entertain and exchange experiences among ourselves, light has long played a central role. In the same way simple spectacles enabled people to read and stay productive until much older in their lives, or the way optical telescopes and microscopes expanded the boundaries of what we know as human beings, today's optical sciences and technologies are helping us uncover some of the deepest mysteries of nature, create and understand new materials, better diagnose and treat diseases, create autonomous machines and protect the environment. They even replicate the experience of sitting right next to someone who's on the other side of the planet—by leveraging the beauty of an augmented reality enabled by bits and photons, interacting with a fabric of optical materials that connects us all.

This moment cannot be more energizing to this community! This is a time when what we all do in our universities, research institutions, and small and large optical companies can make a big difference. We share ownership and accountability for what we can do with this moment. I could not be more excited for the opportunity to help more directly in bringing both the academic and industrial sides of our community

together to make the science of optics and photonics an even more powerful vector for our future.

And just looking at Optica's i⁴ core values, you can all see a framework ready for us. Together we will build and share knowledge to **innovate**, continue the 100-year tradition of **integrity** and leverage true **inclusion** to maximize the **impact** on our future.

Candidates for Director-at-Large



Julie Sheridan Eng

II-VI Incorporated, USA

I'm honored to be nominated to run for Optica Director-at-Large. I've been in optics my entire career, starting out in the late 1980s as an intern at AT&T Bell Labs when fiber optics was in its infancy. I started attending the Optica-sponsored Optical Fiber Communication (OFC) Conference in the early 1990s, when it was a smaller technical conference with a limited trade show. Through the ensuing 30 years, I can remember the excitement that built up to each OFC as we planned our demonstrations of industry firsts and strived to get them working before our competition, as we worked together with other companies in the optics industry to demonstrate end-to-end links for each new data rate, and as we summarized our technical results and waited to hear if they were good enough to be selected as post-deadline papers.

In reflecting on this, I realize the impact that a global optical society has had on my career and on the various companies I've worked for. It gives us

a global forum to share information, to benchmark our results, to challenge each other to become better, and to move forward as an industry.

Given that background, one of my major goals as an Optica director would be to support the high quality of Optica technical meetings, ensuring those meetings continue to showcase world-class research and technology development, drive engagement in our industry and support peer-to-peer interactions. After two years of the pandemic, some people will be excited to be back in a large public forum, while others may still want to avoid in-person engagement or limit travel. We need to ensure that our conferences, workshops, and other events emerge from the pandemic with the same level of influence on the industry that they had pre-pandemic. This requires that we determine how to hold events that are vibrant and engaging for all attendees—in-person and virtual. In addition, from a technical perspective, there are new emerging areas such as 3D sensing, VR/AR and biosensing, and we should ensure that these new fields find a technical community within Optica.

It's also valuable to continue the diversification of Optica, both in its membership and its global influence. As a director, I would strive to make sure that the membership of Optica mirrors that of the optics community. We need people from diverse backgrounds, from different countries and optics disciplines, and from academia, small companies, large companies and government labs. We need to ensure that we're engaging our members and serving them well.

In addition, we are a society of deep expertise. I would work to promote Optica as an international resource, supporting investment and funding in optics, offering expertise and providing outreach and education about optics careers in conjunction with the Optica Foundation.

I've had a long career in optics, in fiber optics and in 3D sensing, and I would be proud to work to support the optics community and further Optica's goals as a director.



Ulrike Fuchs

asphericon GmbH, Germany

My first contact with Optica—or OSA as it was then known—was as a student almost 20 years ago. At that time, the diversity and high quality of the journals helped me a lot in my scientific work. In fact, my very first publication was in *Optics Express* in 2005, a fact of which I was very proud. Over the years, the conferences gained increasing importance for me as a place for scientific exchange, a source of inspiration and new ideas, and a place to meet and cultivate long-standing valuable academic friendships. With this experience, it was a natural step for me to get more involved with and for Optica.

Due to my own academic background, I can appreciate Optica's great commitment to students and early-career professionals. I am committed to maintaining this tradition. The existing programs, be they on-site events or virtual workshops, offer a wide range of further education and networking opportunities. However, since I have been working in industry for 12 years, I would also like to increasingly address additional target groups. This concerns on one hand the group of postdocs and on the other the corporate members of Optica.

Photonics is a rapidly growing industry that lives and breathes the diversity of ideas and elegant, light-based solutions. It is therefore also important to allow scientists, who have worked in the field of academic research for a longer period, to arrive successfully in industry. This requires not only networking opportunities but also possibilities to develop skills that are specifically

tailored to the requirements of industry. Examples of this are dealing with the different timescales in development projects or the ability to view solutions from the customer's point of view.

This notion goes hand in hand with my intention to expand the offers and opportunities for the corporate members of Optica. Of course, they would benefit directly from the above programs. In addition, networking among the companies is of essential importance, including stronger integration of young start-ups. In this way, it will be possible to bring the manufacturers of all kinds of optics production machines, the optics manufacturers and the end-users closer together. This will allow a more agile response to deal with major challenges, such as those we have just experienced with the COVID-19 pandemic or the emerging shortage of chips, for example.

Optica can supplement this with targeted and credible market analyses. In this way, a trustworthy partnership can develop from which all sides benefit. This closes the circle, because a strong industry with strong representation effectively advertises the attractiveness of a path into photonics.

I am honored to be nominated as a candidate for the Optica Board.



Hong Liu

Google LLC, USA

I am honored to be nominated as a candidate for the Optica Board. Optica has been my professional home since I was a graduate student, when it was still called OSA.

Besides enabling our global data infrastructure system, optics exists

in many products manufactured by Google. Examples include the displays and sensors used in consumer electronics, lidar for automated driving vehicles and data-center optics for cloud infrastructure. As a tech lead working in the field of optical connectivity and networking in Google, I have directly benefited from the publications and conferences offered by Optica.

Optica conferences such as OFC not only are important forums to learn the latest and greatest technologies in optics, but also provide a powerful platform to network brilliant minds in optics and bring customers and vendors together. They have been a critical part of my own career development.

Through active participation in the activities of Optica for more than 20 years, my involvement with Optica has resulted in many of my close professional associations and friendships. If elected, I would like to advocate for the following initiatives:

Increase globalization and inclusivity. Optica adopted its new name as part of its globalization effort.

I will make use of my professional connections, my own multinational background and my influence in the industry to foster tighter collaborations with optical societies in other parts of the world. I will also make efforts to bring together countries with rich R&D experiences, such as the United States and western Europe, with countries with good manufacturing experiences, such as the Republic of Korea, Thailand, China and Taiwan.

Widen community engagement.

Optics plays important roles in telecom, environmental sensing, autonomous driving and other areas. I will promote better awareness of the value of optics among governments, federal funding agencies, and investment communities.

Foster broader collaborations.

Many successes are the result of cross-pollination between aca-

demia and industry across different fields. Optica has traditionally served researchers and scientists in academia well. I believe that my industry experience and connection will be able to bring new values and perspectives. Throughout my career, I have helped many startup companies to grow to multi-billion-dollar businesses. There is no lack of brilliant scientists and new ideas in the area of optics. They can be much more successful if we can connect them with the right use cases and give them the crucial guidance to solve the actual pain points in real applications. Fostering collaborations between academia and the industry, including small and large companies, is something that I have a lot of experience with and will bring significant value to the Optica Board.

Embrace more diversified community. Besides serving as an advocate of diversity, equity and inclusion (DEI) in conferences, I helped drive and closed a US\$2 million sponsorship for Optica Women Scholars in 2021. I myself set a good example to young college students, women and under-represented communities.



Thomas Metzger
TRUMPF Scientific Lasers, Germany

Optica, Advancing Optics and Photonics Worldwide, has always been my favorite publisher and conference host. I met friends, colleagues, mentors and role models during the conferences and found inspiration. All this was the source and fuel of my motivation and career. Without Optica, I certainly wouldn't be where I am today and would lack a multitude of great and inspiring friends from all over the world. I am truly honored and delighted to have been nominated as a candidate for Optica's Board of Directors.

Education, research and international cooperation are great friends and promoters of mutual under-

standing, tolerance and peace. I would like to work with Optica and its staff to continue globalization, inclusivity and diversification of the society. Let's work together on a future in which everyone has the opportunity to enjoy a very good education and to take up the profession of their choice.

Additionally, I am keen to explore the possibilities of reaching out to countries that do not have such a great educational offering as I was able to enjoy. For example, while we all yearn to meet face-to-face at conferences again, the various online formats have proven to be a great way to overcome difficulties such as high travel costs, visas, child care and time restrictions. It would be great to further explore with Optica the potential of the various conference formats.

Working for more than 15 years in a variety of scientific institutes and for more than 10 years in an extremely well-organized high-tech company has taught me to understand both sides—to act as a catalyst and to bring science and industry together. I am very keen to promote opportunities for cooperation between industry and science with Optica and develop further possibilities to enable mentoring programs between young researchers and industry. We should answer questions like: How can we demonstrate to early-stage researchers and Ph.D. students that many companies are also conducting fascinating research? How can contacts with industry be initiated? And how can scientists be persuaded to carry out research work there?

In years past, the field of photonics in research and industry has gained an enormous impact on our life. But the century of light is still young, and the possibilities of photonics are far from being exhausted. Optica has been a great place that brings people together from all over the world and encourages mutual exchange, which is the key for a further successful development of the photonic industry and research. I feel honored and glad to be part of such a great community as Optica offers, where know-how can be exchanged and experiences shared.

Thanks to the members of the Nominating Council who prepared the 2022 slate.

Turan Erdogan, *Plymouth Grating Laboratory, Inc., USA, Chair*

Roel G.F. Baets, *Ghent University, INTEC, Belgium*

Connie J. Chang-Hasnain, *Berxel Photonics, University of California Berkeley, China & USA*

Stephen D. Fantone, *Optikos Corporation, USA*

Ursula Gibson, *Clemson University, USA*

Min Gu, *University of Shanghai Science & Technology, China*

Lenore McMackin, *Red Leader Technologies, USA*