# OSA Election for 2017 Offices

The OSA election for the 2017 Vice President and three new Directors at Large opens 27 July 2016. Please read the candidates' statements and cast your ballot. Instructions for electronic voting or a paper ballot will be sent to all eligible voters in late July. If you do not receive voting materials, email **voting@osa.org** or call +1.202.416.1913.

Polls will remain open until 23 September. Results will be announced at OSA's annual business meeting on Wednesday, 19 October, in Rochester, N.Y., USA. They will also be available on OSA's website in late October. For biographical information about the candidates, visit **www.osa.org/osa_election**.

Thanks to the members of the Nominating Committee who prepared the 2016 slate.

Donna Strickland, *Univ. of Waterloo, Canada, Chair*

Philip Russell, *Max-Planck-Inst. Physik des Lichts, Germany*

Philip Bucksbaum, *Stanford Univ., USA*

Satoshi Kawata, *Osaka Univ., Japan*

Neal Bergano, *TE Subcom, USA*

Christoph Harder, *Harder and Partner, Switzerland*

Bahaa Saleh, *Univ. of Central Florida, CREOL, USA*

## Candidates for Vice President

**Ursula Gibson**

*Norwegian University of Science and Technology*

**Susana Marcos**

*Instituto de Optica, Consejo Superior de Investigaciones Científicas, Spain*

## Candidates for Director at Large

**Mark Brongersma**

*Stanford University, USA*

**Tim Carrig**

*Lockheed Martin, USA*

**Pierre Chavel**

*Centre National de la Recherche Scientifique and Institut d'Optique, France*

**Carlos Henrique de Brito Cruz**

*University of Campinas, Brazil*

**Martijn de Sterke**

*University of Sydney, Australia*

# Candidate Statements for Vice President

## Ursula Gibson

*Norwegian University of Science and Technology*

The Optical Society, in partnership with the OSA Foundation, provides support to the optical community at every level, from student outreach to local chapters, international conferences and advocacy for science and technology initiatives.

The organization welcomed me during the early stages of my career, connected me with professionals from around the world, and opened my eyes to the diversity of topics under its umbrella. Much has changed in the intervening years, engendering new challenges and opportunities.

Digital information storage and transmission, enabled by optical technologies, has altered the worlds of education, communication and publication—pillars upon which our society is built. OSA established one of the first all-digital journals, and due to careful stewardship and high standards, *Optics Express* maintains a prestigious place in a rapidly expanding world of online publications. Looking forward, there are new opportunities for OSA to show its leadership:

- **Education**. In addition to supporting hands-on learning through optics experimental kits, OSA is well-placed to host online content for teachers and faculty interested in using class time for activities other than lecturing. In conjunction with the Foundation, OSA can coordinate the assembly of an optics curriculum at all levels—online materials, freely available over the internet, to let both independent learners and those in activity-based classrooms watch, listen and learn about optics.
- **Digital meetings**. Significant advances in bandwidth, software and internet availability suggest that the traditional conference format may yield to a hybrid or fully digital model in the near future. OSA has the opportunity to test out some of these new paradigms with smaller conferences, and explore the possibility of having parallel regional physical sites for larger ones. There are many challenges, but the opportunity to include greater participation among those unable to travel makes these challenges worth overcoming.

While digital technology, including ubiquitous Twitter, Facebook and other online feeds, can assist personal interactions that play an important role in science, it cannot supplant them. OSA, through workshops and topical conferences, will continue to form a nexus for these activities. At larger conferences, connections across different areas of optics can be supported—for example:

- **Networking**. Particularly for those early in their careers, finding collaborators with complementary rather than parallel skill sets can be challenging. OSA has the reach to bring together diverse groups, in workshops based on overarching scientific or technological goals, to nurture these sorts of interactions.
- **Mentoring**. OSA can continue and expand its role in connecting members with different kinds and amounts of experience, both at physical and digital assemblies.

These are a few ideas that may prove useful going forward, and there are many more that the membership will bring to the Board. I look forward to great progress in the coming years.

## Susana Marcos

*Instituto de Optica, Consejo Superior de Investigaciones Científicas, Spain*

I consider The Optical Society as my professional home—a successful organization of which I feel proud of being a Fellow member and for which I am happy to volunteer. In fact, a key to OSA's success is the willingness of members at all levels to participate and serve the society, and to feel part of an extraordinary motor of a continuously expanding field such as optics and photonics. For these reasons, I am honored to stand as a candidate for Vice President, after serving OSA as a Director at Large and in various other roles.

OSA has an excellent track record of being the reference society of optics worldwide, through its highly reputed peer-reviewed journals, technical conferences and prestigious awards. Through the sustained impact of its long-standing publications, such as the *Journal of the Optical Society of America*—soon to turn 100 years old—and the tremendous success of open-access journals such as *Optics Express*, *Biomedical Optics Express* and *Optical Materials Express*, OSA should continue to uphold its high ethical standard in publications, one of the gems of the society.

OSA should also play a role in public outreach, and create an impact in society and politics concerning the value of the science and technology of optics and photonics in the economic growth and well-being of people. Outstanding OSA programs in that regard include the OSA Congressional Fellowships, the Ambassador Programs, awareness articles in *Optics & Photonics News*, and the National Photonics Initiative. The involvement of industry and of social and political agents is crucial in achieving those goals, and OSA can certainly serve as an extraordinary vehicle to promote translation and entrepreneurship in the optics and photonics field.

As a supervisor of a Student Chapter at my own institute, and through various interactions with Student Chapters worldwide, I am thrilled by the enthusiasm, extraordinary sense of belonging to the society, and capacity for organization and dissemination of the OSA student members. These activities amplify the enormous commitment of OSA to education and to spreading science among the youngest. The OSA Foundation's educational kits, Girl Scout programs, and other efforts are fantastic tools for motivation at a young age—and very possibly triggers for future careers in optics.

Finally, OSA has truly become an international society. As the fraction of international OSA members outside the USA increases, it is necessary to effectively increase connections with other national and supra-national optical societies worldwide. As a European member of the society, with a large network of academic collaborators and colleagues in the United States, Latin America, Australia and Asia, and as the head of a largely multicultural laboratory, I strongly believe that the international exchanges can only help to build up a stronger community and create a larger impact for our scientific findings and technological advances.

I envision OSA as an international and multidisciplinary, inclusive society, supportive of minorities, women, young scientists, experienced researchers and entrepreneurs—building on the solid ground of over a century of leadership in optics, with a shining future ahead.

# Candidate Statements for Director at Large

## Mark Brongersma

*Stanford University, USA*

Congratulations! This year, OSA is celebrating its 100th anniversary. Over the last century we have witnessed incredible advances in optics and photonics. The results of these impressive scientific advances can be seen all around us and new areas for discovery keep opening up. The society itself has also evolved to become the premier professional organization that brings together scientists, engineers, and entrepreneurs of all ages and all places around the globe to openly discuss current advances and future challenges for the field.

At Stanford, we have a very active and broad photonics and optics effort and I have very much enjoyed seeing the many positive impacts of OSA on virtually every aspect of these programs. We have a very active OSA Student Chapter, and it is exciting to listen to the many new ideas for the future coming from the next generation of talent. I definitely would like to be an extra voice for them.

I am active in the fields of nanophotonics and plasmonics, relatively new branches of our field. I also cofounded a company that aims at large-area nanopatterning of optical nanostructures. As a result, I have witnessed firsthand the effectiveness and influence of OSA on an increasingly diverse community. I am eager to help OSA identify and reach out to budding areas of science and technology, to further grow and strengthen our vibrant community.

The entrepreneurial atmosphere at Stanford allows insight into the initial spark of ideas which leads to many start-up companies. This, along with being centered in the heart of Silicon Valley—one of the world's premier start-up locations—puts me in a unique and valuable position to identify these opportunities. Links between these prospects and OSA can be developed even further, in part by fortifying the support of the local sections and Student Chapters.

I have personally gained much from being part of OSA and an active member of the photonics community. The broad scope of activities offered by OSA has allowed me to meet many of my friends and collaborators. I am eager to work with the members of OSA to think about new ways to broaden these opportunities for interaction and learning for everyone interested in the fascinating world of light.

## Tim Carrig

*Lockheed Martin, USA*

I have been a member of The Optical Society since 1987 when I first attended an OSA event—the annual meeting in Rochester, N.Y. As a graduate student, I found that experience akin to visiting a toy store, and it motivated me to learn as much as I could about our field. Since then, I have greatly benefited from being an OSA member in many obvious and typical ways, including attending and presenting at conferences, publishing in journals, and interacting with colleagues.

These positive experiences encouraged me to participate more deeply in OSA activities by becoming a volunteer. In each instance I have found these engagements to be rewarding, and each opportunity has provided additional incentive to contribute. However, in all cases, whether it be conference or journal related, it always boils down to the simple truth that people in our field do amazing and interesting things and are willing to share their knowledge. I've never left an OSA meeting without a new list of ideas to pursue!

I'm excited and honored to be considered for a position on the OSA Board of Directors. During my career, I have had the good fortune to work at a university, in government laboratories, and for both small and large businesses. I believe these experiences enable me to see our field from several perspectives and will help me to represent the greater membership. I have also had the privilege to participate in conference planning, to review and edit journal submissions, to serve on several OSA committees, and to contribute as both a meeting and student award sponsor. These activities have educated me regarding how OSA operates and will help me to more effectively serve on the Board.

Our 100th anniversary provides a great opportunity to review what the society has accomplished and to set strategic priorities for the next century. Change is ubiquitous, and the society will need to continually evolve to keep pace with new information-sharing technologies. This is critical if OSA is to remain the world's go-to source for optics and photonics knowledge, and to serve its membership's career and professional needs.

I believe the Board must ensure that OSA maintains the field's most relevant meetings and journals. Historically, these have always been strong academically and on the forefront of science and technology. Going forward, we must ensure that these offerings are also relevant to business and industry as breakthroughs and innovations must often struggle across a funding chasm before becoming solutions and products.

OSA must foster a welcoming and inviting presence in an increasingly diverse optics community. This includes making our journals and meetings accessible and affordable to those across the globe, supporting student and local chapters, supporting career events for our members, and actively collaborating with other groups such as the IEEE Photonics Society and APS.

Lastly, OSA must continue to play a leading role in encouraging and fostering STEM education. These activities need to continue to be focused not just on students, but also on civic and national political leaders.

## Pierre Chavel

*Centre National de la Recherche Scientifique and Institut d' Optique, France*

I am confident that our learned societies are the best institutions to support and promote our scientific and technical community. OSA has been remarkably successful in establishing highly reputable journals and other publications, as well as scientific events catering to the community with reliable information and networking opportunities. Its scope adequately covers the diversity of optics and photonics, and its geographical coverage encompasses all continents. Student Chapters and other initiatives to effectively involve young scientists in the life of our society have been successful.

I am willing to serve on the Board and contribute to addressing current challenges and opportunities facing the scientific and organizational aspects of our society. Those include, for example, on the scientific side, the role of optics in emerging quantum technologies, nanophotonics, biophotonics, and engineering aspects of optical information (new fabrication technologies,

a closer link between image acquisition and the associated signal processing functions). On the organizational side, the challenges and opportunities encompass collaboration among learned societies worldwide, support of optics for peace and development, and a better control of the flow of high-quality information in scientific publications, in a context where access to scientific information is changing fast.

**Carlos Henrique de Brito Cruz**

*University of Campinas, Brazil*

I joined OSA in 1980, while a graduate student, because I wanted to receive *Optics Letters* regularly and faster than it was received by the university library in Brazil. Since then the society has been contributing to my scientific career through its publications, meetings, and conferences. In 1996 I contributed to the society as a member of the then-interim International Advisory Committee, under Tingye Li.

This year we commemorate OSA's 100th anniversary. The society has been an essential point of reference for thousands of scientists worldwide. Its publications and events stimulate and facilitate the communication and discussion of frontier scientific results. More recently OSA adopted effective strategies to inspire younger generations of scientists. To the benefit of all members the society has implemented a series of actions to expand its global reach, so much so that since 2008 the society has been known as OSA - The Optical Society.

Drawing from my professional experience in research as well as in developing and implementing research policy, I am eager to contribute to the society in the following themes:

- **Global reach**. Science, technology, and education, which are the purposes of OSA, are activities that increasingly depend on international interactions and collaborations. Global reach is fundamental to all these objectives, and the society has been working hard to this end, with remarkable results. There are more than 300 Student Chapters and several local sections in several countries. OSA journals publish an increasing number of articles from authors outside the United States and the participation in OSA- organized conferences and meetings is more international each year. Connecting Student Chapters through communication, exchange, and joint meetings is an instrument we should explore to create lifelong research connections that will foster the careers of the younger members and help us build a closely knitted global society.
- **Publications**. The environment for the publication of scientific journals in the world today is rapidly changing, and this brings challenges and opportunities for OSA. Open access is gaining momentum as governments and/or funding agencies establish mandates and as the total cost of subscriptions for university and research-institution libraries tends to increase. As a professional society, OSA has to its advantage the capability of mobilizing its members as reviewers, while maintaining high academic standards and fast turnaround time for manuscripts.
- **Meetings**. OSA organizes terrific scientific meetings that are of great value to the membership and to the research community at large. OSA's initiative to organize meetings outside of the United States has been very well received by international members. This initiative can be further enhanced by working in collaboration with local associations and funders, both in reaching out to a broader local community and in sharing the costs.

**Martijn de Sterke**

*University of Sydney, Australia*

The activities for which OSA is best known are its publications and conferences, which are the gold standard in optics and photonics, and it is crucial for OSA and for the health of our field generally that this remain so. Through these and other activities, I consider OSA to be the de facto global organization for the advocacy and promotion of research in optics and photonics.

OSA has made tremendous progress in becoming an inclusive, international organization—witness the fact that both 2017 candidates for Vice President and three out of five candidates for Director at Large do not reside in the United States. Nonetheless, with almost half of the papers published in OSA journals now coming from Asia and the Pacific Rim, this is not the time to be complacent on this.

As such, if elected to the Board of Directors, my priorities would be:

- **Publications**. OSA's publications are threatened from multiple sides. High-impact journals of other publishers aim to skim off the research with the highest perceived impact, while many new journals, mostly open access, are starting up. In this environment, the average quality of submissions is decreasing, and many reviewers are overworked. To maintain quality, OSA already prescreens submissions before they go to referees. These procedures need to be strengthened and augmented and to be made uniform across the different journals, to ensure that OSA remains the premier publisher of high-quality papers in our area.
- **Conferences**. OSA's conferences are strong and are diverse in size, topic area and location. Nonetheless, the difficulty experienced by many researchers, including students, to attend and present at conferences is an impediment to improving the quality of their research and, hence, the quality of journal submissions. OSA can take a leading role in making it easier to organize conferences away from traditional locations. Such conferences may also have somewhat relaxed English language requirements. The IONS/KOALA meetings are an excellent vehicle for this—students can present their work in a relatively unthreatening environment, become familiar with local optics and photonics activities, and meet leading national and international researchers.
- **Advocacy**. Many countries do not have enough optics researchers to mount a credible representation—especially countries or regions which are small or limited in resources. OSA, possibly alongside the OSA Foundation, can help represent local optics communities in these countries or regions and help devise campaigns for resources. An example of this is the very successful European initiative in which students receive instruction at several different universities. Universities elsewhere with small programs in optics and photonics may benefit from such cooperative approaches.
- **Diversity**. OSA needs to strive for even more diversity in the volunteers on its committees, including conference committees and journal editors, for example by strengthening its Young Professionals initiative.