



Advancing the Science  
and Technology of Light

## About The Optical Society (OSA)

Uniting more than 106,000 professionals from 134 countries, the Optical Society (OSA) brings together the global optics community through its programs and initiatives. Since 1916 OSA has worked to advance the common interests of the field, providing educational resources to the scientists, engineers and business leaders who work in the field by promoting the science of light and the advanced technologies made possible by optics and photonics. OSA publications, events, technical groups and programs foster optics knowledge and scientific collaboration among all those with an interest in optics and photonics. For more information, visit [www.osa.org](http://www.osa.org).

## OSA Membership

**Individual Membership** – OSA brings together the worldwide community of optics and photonics scientists, engineers, educators, students and business professionals. Membership provides a career-long affiliation that delivers the highest quality information, resources and networking opportunities. 15,000 members benefit from free publications, substantial meeting registration and subscription discounts, members-only networking and online services, awards and distinctions, career services and much more. [www.osa.org/membership](http://www.osa.org/membership)

**Corporate Membership** – Corporate Membership benefits support a company's work in human resources, executive management, marketing and sales. Industry leaders connect with a global community of engineers, scientists, executives and entrepreneurs from large, established manufacturing companies to small supercharged start-ups, plus venture capital firms, consulting companies, colleges, universities and photonics clusters. [www.osa.org/membership/corporate](http://www.osa.org/membership/corporate)

**Local Sections** – Located throughout the world, OSA Local Sections engage in a large variety of activities, from hosting local meetings focused on technical topics and business networking, to reaching out to help young students learn about science and the world of optics. OSA's national organization supports sections through activity grants, awards, publications, guest lecturer programs, leadership training, year-round networking opportunities and more. [www.osa.org/membership/localsections](http://www.osa.org/membership/localsections)

**Student Chapters** – Activity and travel grants, guest lecturer programs, leadership training and year-round networking opportunities are just some of the ways OSA Student Chapters support college and university students with an interest in optics and photonics. There are approximately 170 OSA Student Chapters located in more than 30 countries. [www.osa.org/membership/student-services](http://www.osa.org/membership/student-services)

**Technical Membership Groups** – OSA members are encouraged to join up to five OSA technical groups. Affiliating with these groups provides updates on publications, meetings and activities in scientific areas of interest. [www.osa.org/membership/techgroups](http://www.osa.org/membership/techgroups)

## Meetings and Conferences

OSA meetings and exhibits bring together optics and photonics scientists, engineers, educators, students, technicians and business leaders, providing a forum for the exchange of the latest information in the field. Each year, OSA hosts:

### Three large conferences with trade shows:

**Frontiers in Optics** is OSA's Annual Meeting highlighting the latest research in optics and photonics. [www.frontiersinoptics.org](http://www.frontiersinoptics.org)

OSA co-sponsors the **Optical Fiber Communication Conference and Exposition** and the **National Fiber Optic Engineers Conference (OFC/NFOEC)**, the premier international event for both the science and business of optical communications, with a comprehensive technical program and the largest all-optical business exhibition. [www.ofcnfoec.org](http://www.ofcnfoec.org)

OSA co-sponsors the **Conference on Lasers and Electro Optics** and the **Quantum Electronics and Laser Science Conference (CLEO/QELS)** and **PhotonXpo** – the exhibit at CLEO. These co-located events provide the most comprehensive coverage of cutting-edge basic and applied developments in lasers, silicon photonics, meta-materials, ultra-fast optics, nano-photonics, nonlinear materials and devices, quantum optics and more. [www.cleoconference.org](http://www.cleoconference.org)

**Optics & Photonics Congresses** – clusters of new and established topical meetings that bring together scientific communities within optics. [www.osa.org/congresses](http://www.osa.org/congresses)

**OSA Topical Meetings** – unique, intimate meetings focusing on the most advanced developments in key optics and photonics science and engineering fields. [www.osa.org/meetings/topicalmeetings](http://www.osa.org/meetings/topicalmeetings)

**Executive Forum** – an annual event, providing optical fiber communications industry executives with networking opportunities, and insights and analysis from the field's leading business and financial experts on tomorrow's trends and opportunities. [www.osa.org/executiveforum](http://www.osa.org/executiveforum)

## Publications

**Optics & Photonics News (OPN)** is the field's leading monthly magazine, containing in-depth coverage of recent developments in the field of optics and offering busy professionals the tools they need to succeed in the optics industry, as well as informative pieces on a variety of topics such as science and society, education, technology and business. Through popular columns such as "Global Optics," "Optics Innovations," and "Light Touch," OPN strives to make the various facets of this diverse field accessible to researchers, engineers, businesspeople and students. [www.osa-opn.org](http://www.osa-opn.org)

**Optics InfoBase** is OSA's online searchable database of current and past volumes of all its journals that includes more than 170,000 articles dating back to 1917. It also includes proceedings from 260 OSA conferences, some dating back to 1979. [www.opticsinfobase.org](http://www.opticsinfobase.org)

### Journals

OSA journals are peer-reviewed and among the most highly cited in the field of optics. Covering the full range of advances in such fields as fiber optics, lasers, nano-optics and biophotonics, OSA's signature publications and five co-published journals (plus *Applied Spectroscopy*) include the following.

**Applied Optics (AO)** offers applications-centered research in optics segmented into four topical divisions: Optical Technology; Information Processing; Lasers, Photonics, and Environmental Optics; and Biomedical Optics. 2008 ISI impact factor: 1.763, with the #17 ranking out of 64 journals in optics. <http://ao.osa.org>

**The Journal of the Optical Society of America A (JOSA A)** includes original peer-reviewed papers on developments in all fields of classical optics, image science and vision, such as topics in atmospheric optics, image processing, scattering and coherence theory, machine vision, statistical optics, diffraction and gratings, color, clinical vision and visual optics. 2008 ISI impact factor: 1.87, with the #15 ranking out of 64 journals in optics. <http://josaa.osa.org>

**The Journal of the Optical Society of America B** (JOSA B) is a general optics research journal that complements JOSA A. It emphasizes research on the fundamentals of the interaction of radiation with matter, such as quantum optics, nonlinear optics and laser physics. 2008 ISI impact factor: 2.181, with the #10 ranking out of 64 journals in optics. <http://josab.osa.org>

**Optics Express** (OpEx) is an all-electronic open access journal that covers all areas of optical science and technology. With rapid time-to-publication, cutting-edge research articles are made available daily. Periodic focus issues highlight important topics; recent issues include optics in energy, optical coherence tomography, and astrophotonics. Multimedia capabilities, such as OSA's breakthrough Interactive Science Publishing, further enhance these important findings. 2008 ISI impact factor: 3.88, with the #3 ranking out of 64 journals in optics. [www.OpticsExpress.org](http://www.OpticsExpress.org)

**Optics Letters** (OL) provides rapid dissemination of new results in all areas of optics with short, original, peer-reviewed communications. OL covers the latest research in optical science, including atmospheric optics, quantum electronics, Fourier optics, integrated optics and fiber optics. 2008 ISI impact factor: 3.772, with the #4 ranking out of 64 journals in optics. <http://ol.osa.org>

**Virtual Journal for Biomedical Optics** (VJBO) features selected articles in the biomedical field recently published in OSA's peer-reviewed journals and *Applied Spectroscopy*. For this journal, biomedical optics includes research involving the interface between light and medicine, or biology. <http://vjbo.osa.org>

**Advances in Optics and Photonics** (AOP) is an online review journal that delivers lengthy review articles and multimedia tutorials appropriate to a broad range of audiences including students, researchers, faculty, business professionals and engineers. Interactive equations and discussion threads enhance this authoritative content, which covers advances in optics and photonics from fundamental studies to engineering applications, including materials, devices, and systems. <http://aop.osa.org>

## Co-Published Journals

**Chinese Optics Letters** (COL), one of the leading Chinese optics journals, promotes the generation, application and archiving of knowledge in optics and disseminates it worldwide. Its subject coverage includes fiber optics and optical communications; lasers and laser optics; nonlinear optics; image processing; instrumentation, measurement and metrology; integrated optics; materials; quantum optics; ultrafast optics and more. <http://col.osa.org>

**Journal of Display Technology** (JDT) covers the theory, design, fabrication, manufacturing, and application of information displays and aspects of display technology that emphasize the progress in device engineering, device design, materials, electronics, physics and reliability aspects of displays and the application of displays. <http://jdt.osa.org>

**Journal of Lightwave Technology** (JLT) contains theoretical and experimental papers on such topics as fiber and cable technologies; active and passive guided-wave components such as light sources, detectors, repeaters, switches and fiber sensors; integrated optics and optoelectronics, systems and subsystems; networks; and switching. New applications and unique field trials are also included. 2008 ISI impact factor: 2.736, with the #9 ranking out of 64 journals in optics. <http://jlt.osa.org>

**Journal of Optical Communications and Networking** (JOCN), formerly *Journal of Optical Networking*, is an online-only, peer-reviewed journal covering all aspects of optical networking including network architectures, performance, protocols and algorithms, as well as networking aspects of devices and components, the physical layer and cross-layer interactions. 2008 ISI impact factor: .941, with the #34 ranking out of 64 journals in optics for the *Journal of Optical Networking* (now named JOCN). <http://jocn.osa.org>

**Journal of Optical Technology** (JOT) is an English-language translation of *Opticheskiy Zhurnal*. This monthly publication includes design details of a diversity of optical instruments, along with a strong section on computational optics useful to engineers, mathematicians and physicists, as well as optical scientists. Issues of the translation volume appear at the same time as the Russian language edition. 2008 ISI impact factor: .341, with the #58 ranking out of 64 journals in optics. <http://jot.osa.org>

## Also Offered

**Applied Spectroscopy** (AS) is an internationally recognized peer-reviewed journal covering applications in analytical chemistry, materials science, biotechnology and chemical characterization. <http://as.osa.org>

## Youth Programs, Education and Professional Development

For those interested in learning about optics, OSA offers educational and youth programs. Professional development initiatives are designed for those already in the profession through resources, networking, career support and grant or award opportunities.

**Hands-On Optics (HOO)** – an education program that brings together optics experts, teachers and parents to enlighten students about science, technology and the field of optics. [www.hands-on-optics.org](http://www.hands-on-optics.org)

**Optics for Kids** – an interactive education Web site devoted to young students, parents and educators with resources that include: experiments and tutorials, an optics timeline, career profiles, an optical illusions section and much more. [www.opticsforkids.org](http://www.opticsforkids.org)

**Classroom Materials** – including *Optical Phenomena Poster Series*; a Girl Scouts' resource guide, *Lighten Up! Discovering the Science of Light*; *Terrific Telescopes* and *Optics Discovery* kits; *Optics: Light at Work* DVD; and *Laser Technology: Changing Daily Life, Forging New Opportunities* video. [www.osa.org/educationresources/youtheducation/classroommaterials](http://www.osa.org/educationresources/youtheducation/classroommaterials)

**Discoveries and Breakthroughs Inside Science (DBIS)** – “Optics in the News” television news segments on the latest advances in optics and photonics are broadcasted by local TV stations nationwide. DBIS is designed to raise awareness of the role basic science plays in breakthrough technological advances that impact everyday life. [www.osa.org/news/DBIS](http://www.osa.org/news/DBIS)

**Optics Education Directory** – an international directory of degree programs in optics. [www.opticseducation.org](http://www.opticseducation.org)

**Grants, Awards and Fellowships** – a range of recognition programs covering a variety of scientific and engineering specialties. [www.osa.org/aboutosa/awards](http://www.osa.org/aboutosa/awards)

**Career Services** – an online job board, WORKinOPTICS.com, to connect employers, job seekers and consultants in the field of optics and photonics plus Job Fairs at major OSA meetings. [www.WORKinOPTICS.com](http://www.WORKinOPTICS.com)

**Minorities and Women in OSA (MWOSA)** – a resource group dedicated to providing underrepresented communities within optics and photonics focused educational and networking opportunities, career support and grant information. [www.osa.org/membership/underrepresented/mwosa](http://www.osa.org/membership/underrepresented/mwosa)

## OSA Public Affairs Activities

OSA's Public Affairs program educates members and government personnel on science-related public policy issues and the benefits and applications of optics and photonics. Activities include providing information on government funding opportunities, government outreach, the role of optics in energy policy and U.S. educational policy. OSA Public Affairs also jointly supports two Congressional Science & Engineering Fellows with SPIE and MRS (Materials Research Society) who serve to educate the membership on the mechanisms of the U.S. Congress, while providing a technical resource to members of Congress. [www.osa.org/publicpolicy](http://www.osa.org/publicpolicy)

## International Services

Forty percent of OSA members are from outside the U.S., representing 80 countries with more than 170 student chapters in 30 countries. OSA is committed to fostering the global optics and photonics

community, particularly in countries with developing optics communities, through services such as OSA membership dues and journal discounts for developing nations; dues discount agreements for members of the Australian Optical Society, Chinese Optical Society and Mexican Optical Society; a traveling lecturer program; sponsoring two international conferences – CLEO/Europe and CLEO/Pacific Rim – and allocating funds to support international meetings in developing nations. OSA is actively working to encourage involvement of international scientists in OSA leadership committees and councils and encourages all members to submit new ideas on how the society can best serve its international membership. [www.osa.org/aboutosa/internationalservices](http://www.osa.org/aboutosa/internationalservices)

## **OSA Governance**

OSA member volunteers play a critical role in setting the profession's standard of excellence through the member benefits, programming, publications and products offered by OSA. Hundreds of OSA members dedicate themselves to the strategic planning of OSA products and services through volunteer service as members on committees, boards, councils or through a variety of other activities. Serving as an OSA volunteer offers rewarding professional development and networking opportunities.

[www.osa.org/aboutosa/leadership](http://www.osa.org/aboutosa/leadership)

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