

Annual Report of the OEOSC

The Year 2019 in Review

Introduction

The Optics and Electro-Optics Standards Council (OEOSC) is a private, non-profit organization that administers and coordinates the development and maintenance of standards in the field of optics. It is accredited by the American National Standards Institute (ANSI) as the Secretariat for the Accredited Standards Committee for Optics (ASC OP), which is source of American domestic standards – known as American National Standards – in general optics. The OEOSC also serves as the ANSI-accredited Administrator for the American Technical Advisory Group (TAG) to the International Standard Organization's Technical Committee 172 (ISO TC172), Optics and Photonics and its subcommittees. The OEOSC works closely with The Vision Council regarding the TAG's involvement in ophthalmic optics.

In 2019, about 120 individuals, representing about 85 companies and professional societies, contributed thousands of volunteer hours to support American domestic standardization and American representation at the ISO under the administrative guidance of the OEOSC. They drafted, reviewed, and voted on documents with a commitment to openness, balance, and consensus as required by ANSI to create meaningful voluntary standards.

The OEOSC accomplishes its administrative tasks with three part-time staffers. Its sources of revenue are participation fees collected from members of the standards committees, short-courses presented at conferences and at companies, the sale of American National Standards that it has developed or adopted from the ISO, and the reimbursement of services in support of the TAG's ophthalmic subcommittee by The Vision Council. Expenses are dues to ANSI, minimal compensation to the staffers, and other miscellaneous items, such as conferencing and website services. The total expenses for 2019 amounted to approximately \$72,000; about 50% was expended on ANSI dues. Revenue was about \$91,000.

Development of Standards

The exclusive purpose of the OEOSC is to administer and promote the development of standards in the fields of general optics, both domestically and at the ISO, and in the field of ophthalmics at the ISO. In 2019, there was activity in most of the ASC OP and TAG subcommittees.

Fundamental Optical Standards

Attention was focused on participation in ISO standards development. American requirements have been successfully added to many parts of the ISO 10110 drawing standards. Most will be adopted as American National Standards during the next year.

Materials and Coatings

The TAG's subcommittee SC3 has participated in several projects. Task Force 6 completed the approval of ANS OP1.007 and has presented it to ISO TC172 SC3 for the basis of an ISO standard.

The American IR refractive index project continues with support from NIST. Measurements of ZnSe were started in the middle of the year.

Telescopic Systems

There is no domestic standards activity in the area of telescopic systems, but the TAG subcommittee SC4 continues to provide American input to the ISO subcommittee. With just 2 active members, it is looking for more involvement from the American sport optics industry.

Microscopes and Endoscopes

The ISO Subcommittee SC5, Microscopes and Endoscopes, is quite busy, and the TAG subcommittee SC5 actively represents American interests. Two significant vocabulary standards in microscopy are in process. An endoscope standard under American project leadership was approved for publication during the year. .

There is interest in starting a domestic standards Task Force to adopt ISO standards in the field of Endoscopy as American National Standards.

Surveying Instruments

There is no domestic optical standards activity in the area of surveying instruments. The NOAA joined the committee. We now have two members actively reading ISO drafts in TAG SC6. American industry's low level of interest in this subcommittee has been a challenge for many years.

Ophthalmic Optics and Instruments

Domestic standards activity in the field of ophthalmics is administered by The Vision Council and the ASC Z80 committee. The OEOSC administers the TAG subcommittee SC7 which represents American interests in ophthalmics at the ISO. TAG subcommittee SC7 is the largest subcommittee in the whole TAG and is extremely active with about 50 individuals on the roster. Working groups within the subcommittee address ophthalmic instruments to measure the quality of vision and the anatomy of the eye, spectacle lenses

and frames, contact lenses, intraocular lenses and surgical procedures, and data interchange.

In 2019, many ISO ophthalmic standards and technical reports were published or advanced with American leadership

Lasers and Electro-optics

The TAG subcommittee SC9, Lasers and Electro-optics, introduced to the ISO the work under development in ASC OP on the development of an ANS for laser damage terminology and measurement. A member of the American TAG was designated project leader for an ISO project that will grow out of the American domestic effort. Members of the ISO subcommittee have become excited about the improvements suggested by the American TAG.

The largest contingent of Americans in recent years attended the meetings of SC9 in Hangzhou, China.

Augmented and Virtual Reality

Work on some aspects of standardization in the field proceeds in IEC and ISO committees dedicated to human factors and displays. The ISO technical committee TC172, the umbrella and parent committee for the Optics and Photonics subcommittees, continues to develop a work program that will take advantage of the optical systems knowledge in SC4 and the knowledge about ophthalmics in SC7. Liaisons with IEC TC124 and IEC TC110 have been established. Avenues of cooperation are being investigated.

Operations and Finances

Zemax joined OEOSC at the level of sponsor. One group in NIST has committed to rejoin in 2020 thanks to the efforts of our members in TF6 and SC3.

Training remains a significant and important source of revenue. Optifab, the biennial conference and trade show sponsored by SPIE and APOMA, generated a lot of interest in courses and helped to end the year with a profit.

Sales of standards in 2019 matched those of 2018. About half the revenue for standards comes through ANSI's website; The other half comes from sales of standards as part of the course offerings.

TC172 meeting in the USA

In November of 2020, the OEOSC will host meetings of six subcommittees in Clearwater Beach, FL. A sponsorship program will help to defray the estimated cost of \$20,000. Several endoscope companies have already pledged support.

Conclusion

The standards committees administered by the OEOSC – the ASC OP and the TAG to ISO TC172 - are challenged in certain areas, but they are basically healthy and busy. The OEOSC was able to replace some membership revenue that was lost in 2018 and increase training revenue over the year.

Respectfully Submitted,
Allen Krisiloff
Executive Director, OEOSC
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