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Editorial

# *Advanced Optical Technologies*: A New Journal for Optical Engineering and Manufacturing

Since the dawn of modern science, there have been few scientific domains that have pushed both technological and social progress as much as optics. The magic formula behind this is a successful symbiosis of fundamental science, application and rapid evolution. Owing to the nanometric nature of light, the constant need to evolve new technologies, materials, measuring methods and manufacturing processes is indispensable to the field of optics.

To build an editorial home for this symbiosis, we are launching a premium platform for industrial and application-oriented academic research in the field of applied optics. Although the initiative for this project was originally German, the target groups are optical communities throughout the world.

*Advanced Optical Technologies (AOT)* is a new journal with an innovative concept addressing the market need for a high-quality academic journal with a strong industry bias. *AOT* is devoted to both classical and modern optics research. *AOT* offers an attractive pricing model for individuals, companies, institutions and societies. It will also boast innovative editorial tools for publication access and manuscript handling.

As well as publishing academic reviews, articles and letters on select topics relevant to contemporary optical research, *AOT* introduces a new tutorial format and is committed to rapid publication of short industry communications. With these features, *AOT* will transform the journal landscape.

The inclusion of the innovative *Tutorials* feature will encourage dialog with optics students and experts from related scientific fields and will give the journal an important didactic function. Furthermore, the *Short Communications from Industry* section will feature special reports on current industrial developments such as standards or regulations.

*AOT* will publish its first issue in 2012. Initial plans are for six issues in 2012. Within the near future the journal will be ramped up to 12 issues per year.

*AOT* embraces the fields of optical science and optical engineering. In particular, the journal will cover the following topics: optical design, lithography, optomechanical engineering, illumination and lighting technology, precision fabrication, image sensor devices, optical materials (polymer-based, inorganic, crystalline/amorphous), optical instruments in the life sciences (biology, medicine, laboratories), optical metrology, optics in aerospace/defence, simulation, interdisciplinary, optics for astronomy, standards, consumer optics and optical coatings.

Exceptional quality is guaranteed with a double peer-review process and an online manuscript management system assisting speedy publication times. The *Advanced Optical Technologies* editorial board is intrinsically international to ensure *AOT* represents the global optics community. *AOT* will apply for an ISI impact factor and for several other indices.

With this first issue we hope to give your advanced optical technology topics a new editorial home to help support the symbiosis between fundamental science and industrial application of advanced optics.

**Michael Pfeffer**
*Editor-in-Chief*

Michael Pfeffer graduated in 1998 at the Institute of Applied Optics at EPFL (Switzerland), obtaining his PhD for a thesis in the field of optical nanotechnology. In 2002, after several years working in the Swiss optics industry, he was appointed Full Professor of Optics and Engineering in the Department of Physical Engineering of the Hochschule Ravensburg-Weingarten, University of Applied Sciences. Dr. Pfeffer teaches and researches in the field of optics, physical instrument design and nanotechnology. He currently acts as Vice Rector for Research and International Relations.

In 2005, the General Assembly of the German Society of Applied Optics (DGaO) elected him to the Executive Board and Conference Chair for the DGaO Annual Meeting, 2006. Three years later, in 2008 and in 2010, he was elected as President of the DGaO.

Dr. Pfeffer is a member of the Scientific Advisory Board of the European Optical Society (EOS), the Deutsches Optisches Kommittee (DOK), the German Physical Society (DPG), the German Society of Engineers (VDI) and the Standards Committee Precision Engineering and Optics of the German Standardization Institute (DIN).