

Preface

Preparing a preface to this special issue of *Lasers in Engineering* has been a pleasure and a privilege, even though the papers within represent the last of this type to appear in the journal. From now on, papers dealing with scientific aspects, fundamental theory and mathematical and analytical analysis methods surrounding lasers, laser beams and laser beam interactions and applications will appear in the *International Journal of Laser Science: Fundamental Theory and Analytical Methods*. This move was necessary for two reasons. First, your contributions to *Lasers in Engineering* mean that it experienced a huge increase in quality and growth in popularity over recent years, with the number of submissions more than doubling. Increasing the number of volumes *per year* helped increase throughput of papers and reduce the all-important time to publication. Even so, the popularity and quality of *Lasers in Engineering* is still growing so this measure provides no long-term solution. Second, there is no specific outlet to collate and disseminate new knowledge specifically around the science and fundamental theory relative to lasers, subject areas that represent a considerable portion of the papers submitted to *Lasers in Engineering*. Clearly there is a need for a journal devoted to these kinds of papers and with the introduction of the *International Journal of Laser Science: Fundamental Theory and Analytical Methods* we have a complementary journal set that makes it easier for workers to search, review, reference and publish.

I am minded of Bernard of Chartres words when I consider the new journal. He compared 12th century scholars to the ancient scholars of Greece and Rome, likening them as dwarfs perched on the shoulders of giants; explaining his point further by saying, “We see more and farther than our predecessors, not because we have keener vision or greater height, but because we are lifted up and borne aloft on their gigantic stature.” The 12th century scholars referred to by Bernard of Chartres could not have conferred directly with ancient Greek and Roman scholars; their new knowledge came from the writings of the ancient scholars that they placed in the Annals and such other

recording devices. The equivalent recording devices for our time are the learned journals, whether in print or electronic form. So, as it always has been, in mathematics, science and engineering, we see far and wide as a result of the endeavours of our peers in the shape of their published work, with the peer reviewed journals serving as the “shoulders of giants”.

The pleasure and the privilege mentioned above come from the fact that a new and timely journal has been launched to provide, for the first time, a dedicated platform to collate and propagate new knowledge, to academia and industry alike, related to the science and fundamental theory relative to lasers – providing the “giant’s shoulders”, just as *Lasers in Engineering* has been doing for almost three decades. A new journal to cover these specific topics is extremely important because they are more relevant than ever, and so it is a necessity to foster collaboration and extend interest in these areas to ensure that they advance at the required pace – by allowing people to “see farther”.

The first issue of the *International Journal of Laser Science: Fundamental Theory and Analytical Methods* is complete and ready for publication in early 2018. It is comprised of papers such as those presented herein and with such quality and relevance it will not be long before this journal is established and makes its mark in terms of positive high scoring metrics. So, in this spirit of allowing us in our time, and those in the time beyond ours to see farther, the editors of the *International Journal of Laser Science: Fundamental Theory and Analytical Methods* look forward to your splendid contributions.

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