

## Editorial

After completing a decade of including special issues in *Lasers in Engineering's* offering, it seems fitting to review and comment on the value that these have added to knowledge and cooperation in the global laser engineering community.

This current special issue is the 9<sup>th</sup> of its kind in which a total of 89 papers from 22 countries in Asia, Australasia, Europe and North America have been published. These 89 papers, appearing in the nine special issues, have been written by laser and associated equipment manufacturers, and academic, industrial, medical and military end users. There are another two special issues currently planned.

As one would expect from *Lasers in Engineering*, these nine special issues have been typified by papers with both breadth and depth. Special issues have been published that were devoted to laser physics and material interactions; covered hardware, new laser sources, novel beam manipulation techniques; component performance enhancement; and applied laser research and laser processing topics.

Ground-breaking fundamentals related to lasers have been brought to community. These include new physics around laser ablation, attodynamics and analysis with ultra-short laser pulses. New methods for experimental, numerical, analytical, optimization and soft-computing analysis have been presented for the first time. The latest knowledge in established processes has been advanced through papers detailing laser cutting, laser drilling, laser melting, laser alloying, laser welding, laser cladding, laser forming, laser net-shape engineering, laser additive manufacturing (LAM) and laser material deposition (LMD). New techniques and the underpinning science have been showcased, including laser bonding, laser surface melting and pulsed laser deposition (PLD), laser welding quality monitoring approaches, new laser cutting and welding equipment for nuclear decommissioning, machining of advanced materials (some laser-enabled) and difficult to machine materials, product machining, laser grain writing for product security and tagging, femtosecond laser processing, laser micromachining, micropeening and textur-

ing, and microturning and microwelding. Novel and timely applications for lasers in new sectors have been presented, including lasers in energy generation, laser surface engineering and laser shock peening (LSP), and analysis and imaging for process control.

The data would support the intention of the special issues published in *Lasers in Engineering* to promote laser engineering and make way to increase inclusion within the global laser engineering community. The special issues have been sure to include papers from emerging users and researchers in Algeria, Iraq, Malaysia, New Zealand, Nigeria, Pakistan, South Africa and Thailand. Data on the gender of the special issue authors shows that 29% of the authors on the 89 papers published were female. This represents an increase in female authorship over the last ten year's general publication statistics for females in natural and physical science, and engineering journals of typically around 11%. Providing a platform for publication to postgraduate students and early career researchers has been achieved with the special issues, where 38% of the published papers were from these groups. This represents an increase in postgraduate student and early career researcher authorship over the over the last ten year's general publication statistics for these groups in natural and physical science, and engineering journals tracks at around 22%. Finally, the 11% of papers published in the special issues from non-academic authors represents an unprecedented opportunity to these people as less than 2% of published papers over the last ten years in general natural and physical science, and engineering journals are from non-academics.

I believe that what has gone above demonstrates conclusively that *Lasers in Engineering* is doing something progressive that is right for the age we are in with its special issue programme, and it will, quite rightly, continue along this pathway. As such, I welcome suggestions from all those striving in the area of laser engineering for more special issue ideas for future issues of *Lasers in Engineering*.

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