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AILU

THE LASER USER

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FUTURE-PROOFING LASER APPLICATIONS:

TECHNOLOGY IN TUNE WITH NATURE

THE LASER USER

Editor: **Dave MacLellan**
Sub-Editor: **Catherine Rose**

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The Laser User is the house magazine of the Association of Industrial Laser Users. Its primary aim is to disseminate technical information and to present the views of its members. The views and opinions expressed in this magazine belong to the authors and do not necessarily reflect those of AILU.

The Editor reserves the right to edit any submissions for space and other considerations.

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Cover image: Rotary cutting 0.04" stainless steel with a 1.5 kW fibre laser at 125 in/min.

Image courtesy of IPG Photonics

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ASSOCIATION OF INDUSTRIAL LASER USERS

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Past presidents and founder members are also able to attend committee meetings. Anyone wishing to join the AILU Steering Committee please contact the Executive Director.

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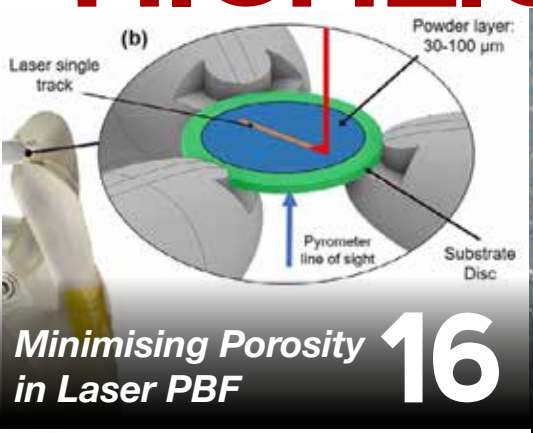

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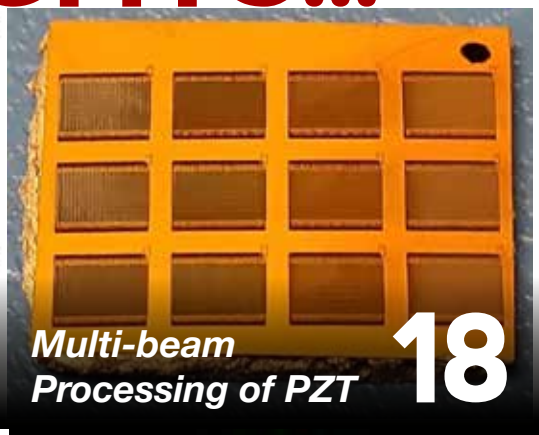

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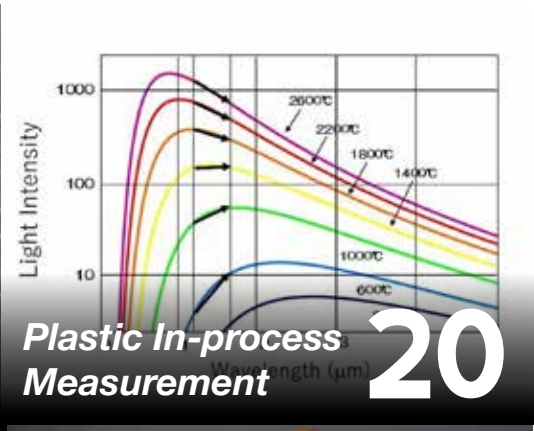

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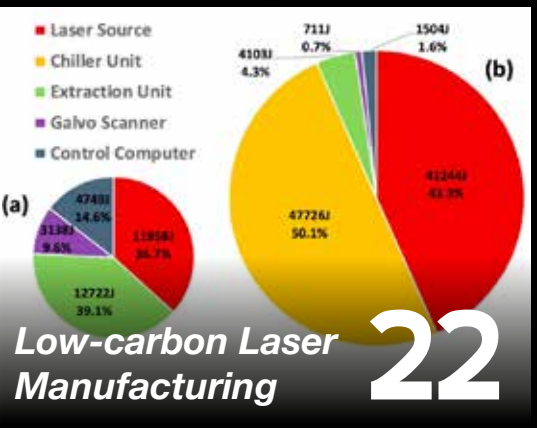

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ASSOCIATION NEWS

FIRST WORD

Events are a major part of AILU's DNA as they are the best way to bring together the industrial and academic arms of our membership. We are right now putting together the programme of AILU events for 2022, as well as confirming the timing and location of ILAS 2023 (Daventry, 22-23 March 2023). Current favourites are surface texturing and additive manufacturing, but there is also a lot of interest in high power welding as well as laser sources and beam delivery. Look out for details, dates and venues as we try to fit in as many live events as we can.

In other news, the new AILU website is in the final stages of testing and modification and we will be going live imminently – we look forward to the new interactivity as it will include modules to book events directly (avoiding using Eventbrite) and it will be also possible to sign up new members too. The new website will be more responsive and rank higher in searches too - watch out for an announcement soon!

Dave MacLellan
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PRESIDENT'S MESSAGE

At the time of writing the great and good from governments around the world have converged upon Glasgow with the aim of 'fixing' the environmental challenges which threaten the future of our species. This is no small task! Developed nations have developed an addiction to the highly calorific and highly carbon emitting fuels and developing nations are developing an addiction of their own.

The solutions will require change at an unprecedented level and will challenge the way we configure industry. As such we must ask ourselves what the role of laser technology will be in driving towards a greener future.

I believe that the role of lasers will be tremendous in manufacturing the technologies which will underpin our race to net zero. E-mobility will continue to rise in prevalence with great opportunities in laser operations associated with welding and cutting to provide the staggering number of batteries that will be required.

Further, the laser has a pivotal role to play in additive manufacturing as we seek to manufacture ever more complex structures. While new part manufacture may currently be a focus for industrial laser users I predict a growing opportunity for the laser in reconditioning and repair of engineering assets. This will be driven in part by a shortage of engineering materials alongside an end to the availability of cheap energy.

Legislation will begin to force manufacturers to adopt new technologies alongside emergent business opportunities. The challenge is not only to survive but also learn to thrive in our very different energy future. A call to arms for the lasers community alongside our world leaders indeed!

Adam Clare
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RIC'S RAMBLINGS

There is a brave new world upon us, and it's… Hybrid.

We are encouraged to buy and drive hybrid cars (at least until we can get over our range anxiety and go full-on electric). Post-covid (probably not allowed to say that yet) we now also have hybrid working (sometimes at home vs sometimes in the office), hybrid events and hybrid meetings - all of which has, in my opinion somewhat complicated the world of work. Actually, I think there are definite advantages to holding a hybrid meeting or event, but there are also some definite downsides.

So what's the good bit? Well if you are organising an event, it is now somewhat easier to get speakers, especially if you are sourcing them from overseas. Rather than all the commotion of travel, they simply have to commit the time to writing the presentation and an hour or so on zoom being projected to a hall full of eager listeners. Also you can in general get bigger audiences for those speakers to present to. Some people who just can't, won't, or are still not allowed to travel to events can dial in and enjoy the day from the comfort of their own desk (does wonders for your delegate numbers).

To my mind though, there is still nothing like being "in the room" with all the peripheral benefits of coffee chats and lunchtime networking. I've talked a bit about this before – but that was mainly focused on "online only" events rather than our new hybrid friend. Difficulties come with that old chestnut – technology – why-oh-why do we still have trouble with internet connections and also with the fact that human nature is such that if you are not physically in the room – it is easier to be ignored or forgotten about – so Q&A sessions can be awkward and stilted.

Hybrid working also has challenges associated with being in the office (often a shared office) but still having to make zoom calls, especially if you have to talk about colleagues who share your office! Not sure if you have ever had to chair a hybrid meeting – I have and it is hard work. Making sure that in fact you don't ignore those lonely folks who dialled in, whilst having a jolly old time with those sitting around the table enjoying the full value of body language and non-verbal clues – that's really hard, and will take some getting used to. My plea to you all – imagine you are that person, sitting on zoom, away from the room, not able to engage like the rest of the team – and remember to include them in the conversation.

Ric Allott
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