

THE

LASER USER

ISSUE 114
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AILU

Managing Hazardous Fume

High Power Welding of Cu & Al

Remote Laser Welding Fe & Al

Novel Al Matrix Composites

Miniature Optical Delivery Heads



**HIGH POWER
LASER WELDING:
REFLECTIVE MATERIALS FOR
AUTOMOTIVE APPLICATIONS**

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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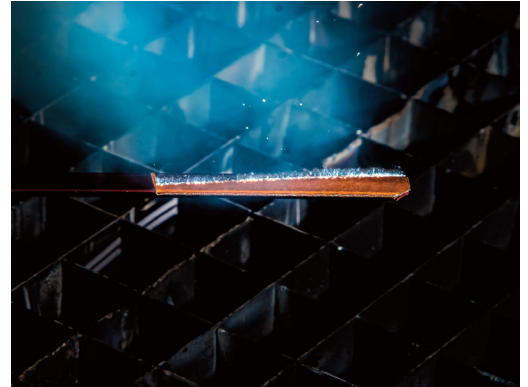
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Cover image: A Luxinar CO₂ laser ablates the enamel coating of a hairpin without any copper loss.

Source: Luxinar Ltd.

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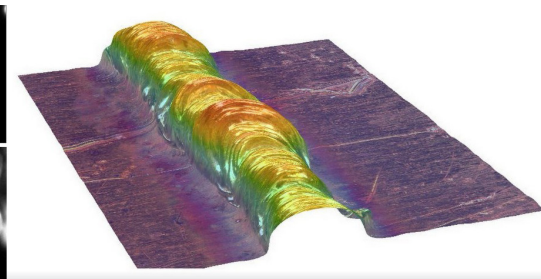
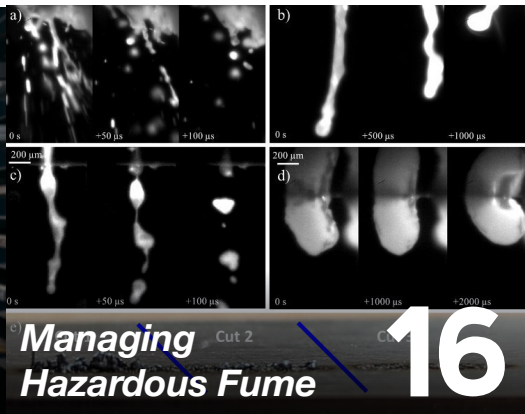
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WELCOME TO NEW AILU MEMBERS

Laser Components
Sam Thienel

Mate Tooling Solutions Ltd
Craig Letty

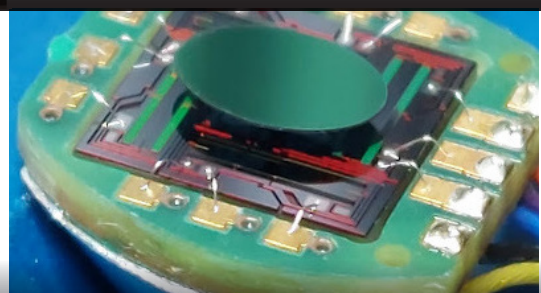
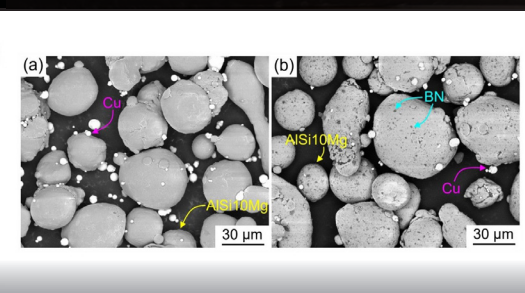
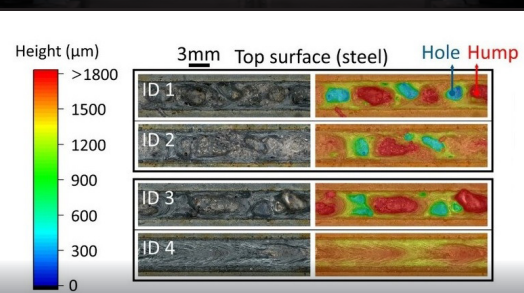
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ASSOCIATION NEWS

FIRST WORD



I am looking forward to ILAS 2025 and the year of AILU's 30th anniversary and seeing so many of you at what looks like being the biggest ILAS ever! If you haven't registered yet, don't delay – we still have spaces for some exhibitors and sponsors too. In between now and ILAS we won't have any in-person workshops, but we are looking

to run some more sponsored webinars. If you would like to run the next webinar with AILU, get in touch with me ASAP.

In the meantime, I have been exploring other international events this year, run by our colleagues in USA (ICALEO this month) and France (PLI in June) which are great opportunities to see how other people run events, who the interesting presenters are, and what topics are prominent this year.

It has been interesting to note that e-mobility has come to the fore and additive manufacturing is taking a back seat as the shift in funding towards sustainability and Net Zero comes into play.

In case you haven't realised, our Early Careers Group (ECG) is a group that is open to both those pursuing an academic career and those working in industry. One of the great things about AILU is that we create multiple opportunities for academia and industry to meet and network together. This is a great way to exchange knowledge and build relationships, especially in the early years of a career. So, if you are someone who is at the start of your industrial career in lasers (whether or not you have studied for a higher degree), you are welcome to join this group.

If you are on the fringes of AILU and would like to be more involved, don't hesitate to reach out to me – there are opportunities to have your voice heard or serve on one of our sub-committees if you are interested!

Dave MacLellan
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PRESIDENT'S MESSAGE



Welcome to the autumn edition of the Laser User. Looking outside it is more like winter if I'm honest - it feels like we have missed autumn this year and indeed, come to think of it, most of summer.

I am writing this on the train back from SPIE Photonex (well trying to, the train is absolutely

packed out) which was held in Manchester this year, the day after the budget. Although Photonex was relatively quiet, the quality of the industry sessions and panels and of the contacts I made was excellent and the old adage of quality over quantity certainly holds true.

I wanted to highlight an activity that the AILU external working group is engaged with around policy and how AILU can best support you. The activity, which is being driven by our very own Richard Carter (one of AILU's two Vice Presidents), is based around research and innovation funding, a hot topic given the budget announcements. A group of keen and knowledgeable volunteers (and me) have been given some homework to prepare for a workshop that will be held on 18th November.

The output of the workshop will be a series of "asks" in terms of the changes we would ask for and why they would be of benefit to you, our members. The ultimate aim is to develop AILU's policy in this area with the outcome of increasing our influence with the key stakeholders and hence derive greater benefit back to our community. I think this is a great example of the additionality that AILU brings.

We are also working on other areas where AILU might or should have policy and these will become apparent over the next weeks and months, stay tuned for further information on this important area.

I wish you all the very best for the remainder of the year and encourage you to register for ILAS 2025 which will see us celebrate our 30th anniversary, it would be fantastic to see you all in Kenilworth in March.

Ric Allott
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