

It goes without saying that 2020 has been a difficult year for everyone, and has impacted many people professionally and personally in many different ways. Fortunately, all at the CIU and their families have managed to keep safe and well, and we hope that all of our partners in industry and their families have kept healthy or recovered and continue to stay well. Many though will have been affected by the pandemic and we would like to extend our sympathies and best wishes to any that have been affected, either directly or indirectly.

CIU members have always been part of a group of people who have been at the forefront of industrial innovation, generating jobs and wealth and many other societal benefits, from improving safety to improving health. They have always had a key role to play in providing socio-economic benefits, and now more than ever are needed as part of a UK and global recovery. We want CIU members to remember that here at the CIU, we are there to help provide technical support and advice where possible – and can always be contacted no matter what the status is with the pandemic. We also understand that it has been a difficult time for many organisations, where the focus has had to be on keeping business going rather than innovation – when those companies are ready to reboot R&D, the CIU will be here to help.

CIU On-line Open Day 16th December 2020

Following our last CIU Open Day which we combined with a wider University meeting focused on sensors, it became clear that there is a huge interest in sensors and lots of opportunity for collaborations. Obviously this year, we will not be able to organise a large face-to-face event, but there have been lots of developments that we think you'll be interested in, that we'd like to tell you about. We will be holding an online Open Day on 16th December 2020 from 2pm – 4pm, including general Q&A sessions, followed by the option for CIU members to have private online one to one sessions with CIU staff, on specific topics that members would like to discuss arising from the presentations. This will run until 6pm.

On the CIU side, current staff and students and former CIU staff (we'll come to that on page 3) will be making presentations and will be available to answer questions. We look forward to "seeing" you there.

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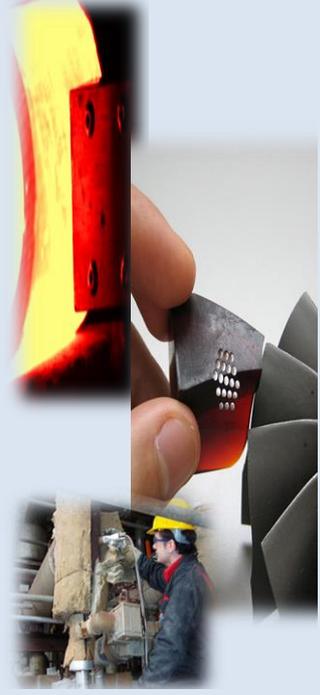
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Starters and
Leavers



CIU On-line Open Day Programme

Wednesday 16th December

14:00 Welcome and Overview

14:10 Research presentations

15:30 Break

15:40 CIU members only : Brief reports of new IP developments & horizon scanning

16:00 General Q&A, followed by 1-2-1 meetings

Research Presentations: There will be a number of 15 minute long research presentations from 2.10pm, covering areas such as flexural ultrasonic transducers, ultrasonic weld inspection using the next generation of electromagnetic acoustic transducers, inspection of pressurised metal storage containers, ultrasonic inspection of aerospace composite materials and small crack detection on aerospace alloys (electromagnetic not ultrasonic).

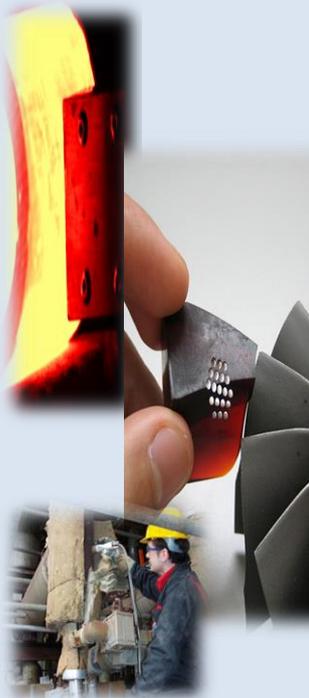
New IP developments: We will provide CIU members with some updates on new developments in IP and instrumentation, covering areas such as miniature clamp-on ultrasonic flow measurement and flow measurement of small, thin walled pipes, compact and low cost anemometry and supporting electronics, battery powered EMAT guided wave systems and active damping of ultrasonic transducers. CIU members will receive two invitations – one to each online session.

Publications from the CIU - <http://wrap.warwick.ac.uk/>

You can keep up to date with some of the work of the CIU and its researchers by looking at the list of publications on Warwick's archive for research papers, Warwick Wrap. Select the name of one of the CIU academics under the author search facility on the webpage and you will be taken to a list of publications, many of which can be downloaded directly from the website. Due to copyright issues, not all papers may be downloaded from Warwick WRAP, and so if there is a particular paper that you'd like to get hold of then please contact one of the CIU team.

New Starter

PhD Student: Mr Luke Smith. Luke joins us for a PhD this year, working on clamp-on ultrasonic transit time flow measurements, with a particular focus on researching techniques and hardware suitable for IoT type applications and clamp-on flow measurement is small diameter pipes. Luke previously did his final year undergraduate project in ultrasonics, and developed a low cost ultrasonic anemometer.



And leavers.....

We have to say goodbye to Maxine Haddleton at the end of this year, who has done an amazing job in helping to support the CIU, setting up and running the University Industry Days and also working with other researchers to help them both generate real world impact and capture the information and evidence about the benefits they have provided. Maxine has been a key element in developing the CIU and its success – we are hugely grateful for her help, her insights and her can-do attitude, and know that she will also be missed by CIU members. We wish her all the best for the future.



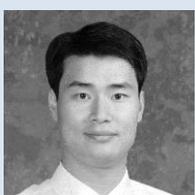
Maxine Haddleton

One of the toughest parts of working in academia is that we help and encourage our colleagues to try and take their careers further, and when that works well, the result is usually that they leave. It is just part of how Universities are structured, but when things work exceptionally well, those leaving take up posts where they continue to work with us in ultrasonic R&D, and get their own research programmes running. During lockdown, we had to say goodbye to two of our very experienced postdoc researchers, Dr Andrew Feeney and Dr Lei Kang, both of whom have done exceptionally well in landing permanent academic posts in the current climate.

Most CIU members will have had some degree of interaction with Andrew and Lei, and will be more than aware of their outstanding scientific capabilities and approach. Andrew, who was originally from Scotland has secured a lecture post at the University of Glasgow, where he will continue to work in ultrasonic research and will continue to work on flexural ultrasonic transducers as part of a wider programme.

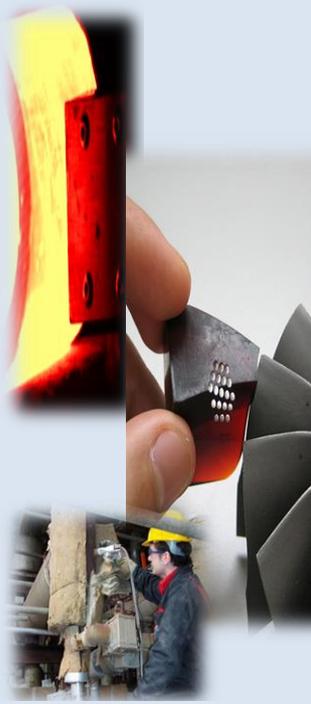


Dr Andrew Feeney



Dr Lei Kang

Lei also secured a permanent academic post as a lecturer at the University of Portsmouth, where he also will continue to work in ultrasonics and electronic and electrical research. Both Andrew and Lei will maintain close links with the CIU as Visiting Academics, and will continue to come to Warwick to access our experimental facilities and continue our research collaboration.



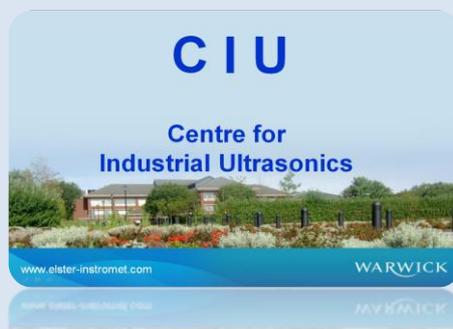
Keeping in touch – keeping on moving forward

During lockdown, many people have changed the way that they work and where they work. Like many others, at the CIU, we found ourselves having to work from home, and have only been able to regain access to our labs since July, and then with certain restrictions in place.

If any of your contact details have changed then please let us know – this applies to CIU members and anyone who wants to be kept informed of developments and opportunities in the area that the CIU operates in. And whilst we hope that you wish to be kept informed of our activities, don't forget that you can ask for your contact details to be removed from our database at any time if you wish to stop receiving any emails or information from us.

What we have been up to during lockdown.....

The nature of what we do at the CIU means that we are unable to fully function as normal whilst we were unable to access our labs, but we were able to undertake a significant amount of R&D support for CIU members. Since March the CIU has published eight new research journal papers, completed four new patent applications and has supported over half a dozen companies with their innovation needs, including some experimental work that we have been able to do from home in some cases. Some examples of this work and other examples of the impacts of our work with our partners will be submitted to the forthcoming Research Excellence Framework exercise that all UK universities are subject to. We'd like to thank all of our partners who allowed us to share some of the stories of how working with the CIU benefitted them.



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