

# TACKLING THE SKILLS CHALLENGE

The British Pump Manufacturers Association (BPMA) recently signed a collaborative agreement with Lancaster University. To better understand the importance of this type of collaboration between industry and academia, **flow** spoke to the agreement's co-signatory, *Professor George Aggidis* from the university.

**flow:** What is the scale of the skills challenge facing the engineering sector?

**Professor Aggidis:** Engineering faces some key challenges in skills development that will have long-term implications for productivity within the UK manufacturing industry. Also, the demand for higher level skills is increasing and matching relevant supply to this demand is crucial. By 2022, two million more jobs will require higher level skills. More than one-in-five of all vacancies are 'skills shortage' vacancies, where employers cannot find people with the skills and qualifications required. This means a greater focus is needed to ensure that we develop the higher-level skills required in the labour market to secure future economic stability and prosperity.

**f:** What role does collaboration, such as the recent agreement between your university and the BPMA, have to play in addressing the skills challenge?

**PA:** Collaboration between industry and academia has a significant role to play in supplying highly skilled people to meet demand from businesses both now and in the future.

The UK has a strong track record of higher skills development, but we need to do more. Employers are acutely aware of the skills their businesses need for future growth so it is employer needs that must drive skills development. The best outcomes are produced where employers are actively involved in the design and delivery of programmes. Both universities and employers need to be innovative and engaged in promoting different and non-traditional routes into higher skill roles. We need more well-articulated, vocational and technical pathways for both young people and experienced engineers. These pathways will then open routes to higher-paid careers for a broader group of talented people.

**f:** There is an investment required from all parties – financial, time and other resources – what returns can be expected from that investment?

**PA:** Both industry and academia stand to benefit from long-term cooperation. Companies will gain greater access to cutting-edge research and scientific talent at a time when corporate R&D budgets are increasingly under pressure. Universities will gain access to financial support and partners in research at a time when Government funding is shrinking. Most importantly, society will benefit from a stream of previously unimaginable advances that will vastly improve everyone's life.



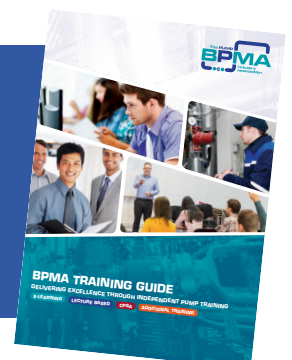
**f:** Finally, aside from a desire to tackle the skills challenge, what is fuelling an increased willingness for this type of collaborative working?

**PA:** In the last decade there has been an explosion in the number of research deals between companies and universities. Companies, which have been reducing their spending on early-stage research for three decades, have been increasingly turning to universities to perform that role, seeking access to the best scientific and engineering minds in specific domains. And faced with reducing Government support of academic research and calls for them to contribute more to their local economies, universities have been more receptive.

Instead of one-off projects, both sides have become much more interested in forging long-term, collaborative relationships like the one between BPMA and Lancaster University. ➔

For details of the full range of training available from the BPMA download the **FREE** training guide at:

[www.bit.ly/BPMAttraining](http://www.bit.ly/BPMAttraining)



## LEARN HOW VARIABLE SPEED DRIVES CAN REDUCE LEAKAGE

**ABB HAS LAUNCHED A LUNCH 'N' LEARN TRAINING** session that shows how water companies can use variable speed drives to make dramatic improvements in leakage rates.

Industry statistics from the UK's Consumer Council for Water state that a staggering 3.1 megalitres of water is lost every day through leakage in England and Wales. That is an enormous amount of water which the UK water sector regulator, Ofwat, has recognised by setting targets to reduce water leakage by at least 15% over five years in its 2019 price review.

Variable speed drives (VSDs) can reduce leakage by controlling water pressure and preventing the rapid pressure transients that occur when pumps are switched on and off. These transients can cause damaging water hammer – a common cause of burst pipework.

“Our training session is a convenient way to ensure that those responsible for specifying, operating or maintaining pumps learn how they can use VSDs to reduce the waste caused by leakage,” says Dan Banks, ABB drives water framework manager.

Topics covered include how VSDs tackle common causes of leakage, the role of inbuilt VSD smart functions and the increasing use of cloud-based monitoring techniques. Attendees will also hear how one ABB customer is set to save £4.5 million on repairs and energy costs by 2021 by using VSDs to maintain correct water pressure.

The 45-minute session is free to attend and can be delivered to individuals or groups at customer premises or an ABB facility.

[www.bit.ly/2UaE3iM](http://www.bit.ly/2UaE3iM)

## COMPANIES NEED TO ACT FAST TO AVOID LOSING APPRENTICESHIP LEVY CONTRIBUTIONS

**LARGE COMPANIES WILL** begin to lose their unused Apprenticeship Levy payments from April this year.

Companies with payrolls over £3 million per annum have been contributing to the Apprenticeship Levy since it launched in April 2017. If they invest these contributions in apprenticeship programmes for staff, as long as they work with approved training providers, they can reclaim contributions.

However, under the scheme's rules, after two years, unclaimed contributions are returned to the Treasury. This means that this coming April, unused contributions will effectively begin being wiped out, and they will continue to do so on an ongoing basis.

A combination of confusion surrounding the way the scheme works, along with concerns that a limit of £15,000 per student is ruling out a large number of highly technical apprenticeships, have contributed to a decline in the take-up of apprenticeships since the launch of the levy. As a result, there are some £3bn in unclaimed contributions, with around £168m expected to be passed to the Treasury in May alone. Of over 50,000 business who meet the contribution threshold and contribute 0.5% of their annual wage bill, it is estimated that around 80% have yet to make use of their contributions.



As strong as our legacy.

Now part of the global NOV family, our industrial brands are leaders in providing the right solution for your process.

Learn more at [nov.com/industrial](http://nov.com/industrial)

Moyo™ | Mono™ | Chemineer™ | Kenics™ | Greerco™ | Prochem™