

WINNER OF THE BEN STURGEON AWARD 2018

The Ben Sturgeon Award for 2018 has been won by Dr James Harding, of [FlexEnable Ltd](#), Cambridge, for his work on flexible organic LCD (OLCD) technology. The award was presented by the Chapter Chairman, Dr Ben Broughton at the evening meeting on Integrated Photonics and Electronics for Displays, held at University College London on Wednesday 28th November 2018.

During the conference, Dr Harding was invited to make a presentation outlining the work which led to the award.

Dr. Harding is a Display Systems manager at FlexEnable, having joined as an Engineer in 2010. At this time FlexEnable had a well-established organic thin-film transistor (OTFT) backplane process that was typically applied to PET film substrates. James then championed the use of this technology to build flexible LCD displays onto TAC film for the first time – a very low cost yet optically ideal plastic film for this application, since it is already optimised for use in the light path of LCDs as a film for polarisers. The low processing temperature of OTFT (100 °C) meant that TAC could be used as the TFT substrate in place of glass. James was instrumental in the building of FlexEnable's first monochrome OLCDs in 2015, and then with colleagues in developing the full cell process to a point where it could be manufactured on existing FPD lines.



OLCD is now being [transferred into mass production in China](#), to bring these displays to the many applications where today's flexible OLED displays are not suitable, either because of cost/area or brightness and lifetime limitations. These applications include notebooks, tablets, monitors, smart home appliances, automotive, digital signage and many others.