



## Meet Dr Vincenzo Pecunia

Dr Vincenzo Pecunia completed his BSc and MSc in Electronics Engineering at Politecnico di Milano, Italy. He then carried out his doctoral work on organic electronics under the supervision of Professor Henning Sirringhaus at the University of Cambridge. He is currently working on the EPSRC Centre's iPESS project at the Optoelectronics Group of the Cavendish Laboratory, University of Cambridge. His research interests include solution-based organic, metal-oxide and hybrid transistors, and process integration for flexible and printed electronics.

When presented with the opportunity to join the EPSRC Centre for Innovative Manufacturing in Large-Area Electronics, I was enthused by its ambitious plan to establish large-area electronics (LAE) as a core research domain for manufacturing innovation in the UK. LAE has formidable potential to redefine the way electronics is conceived and produced. Moreover, by capitalising on the wealth of fundamental and applied knowledge developed in research laboratories across the country, LAE bears the promise of generating added value for small and medium enterprises in the UK.

Over the past year as a researcher at the EPSRC Centre, I have been working on the iPESS project, aiming at the realization of a hybrid platform for smart sensor systems. In particular, my focus has been the development of an integration scheme for the fabrication of an analogue frontend. In tune with the spirit of the EPSRC Centre, the project gives emphasis to manufacturability and large-area integration. The electronic materials of choice are thus solution-based, patterned additively, and compatible with low-cost plastic substrates.

One aspect I have enjoyed greatly as a researcher at the EPSRC Centre is the possibility of exchanging ideas with other researchers and industrial

partners active in the field of LAE. The project supervision by Professor Sirringhaus at Cambridge and the close collaboration with Professor Turner's group at the University of Manchester have provided invaluable insight and perspective. Moreover, the involvement of Plastic Electronics Limited has been fundamental for the adoption of state-of-the-art printing methods into the iPESS project. Praiseworthy is also the first Innovations in Large-Area Electronics conference, which allowed UK researchers and companies to come together and share the latest results and directions of interest. I am thus convinced that the ambitions of the EPSRC Centre have found their preliminary fulfilment in the successful linking of a variety of research fields and in the bridging of industry and academia.

Large-area electronics will not happen overnight. I believe that the challenges lie not only at a fundamental level, in the harnessing of functional materials into electronic systems, but also in achieving system functionality with approaches that are easily manufacturable. The EPSRC Centre has a clear vision of both, and the understanding that a synergistic attitude is essential to overcome them. This is why working at the EPSRC Centre as a researcher has been fascinating and exciting so far, and I definitely look forward to more.