

Day 1 - Wednesday 24th February 2021

08:30 Registration

09:00 **Session 1** Dr Tim Phillips / Chris Rider, innoLAE 2021 Welcome

09:10 **Session 1.1** Sponsor Presentation - CPI , Platinum Sponsor

09:30 **Keynote 1.2** Tony Chahine, Myant
Stitch-by-stitch: How Innovations in LAE Enable Textiles to Transform the Way Humans Connect Across Daily Life

10:15 Break - Sponsor Exhibitions & Posters

10:45 **Session 2 Manufacturing I** Session Chair: Dr Neil Chilton, Printed Electronics
Session 3 Bioelectronics Session Chair: Prof George Malliaras, University of Cambridge

2.1	Dr Simon Ogier, SmartKem Ltd* Low temperature, robust OTFT technology	3.1	Prof Dr-Ing Thomas Stieglitz, University of Freiburg IMTEK* Flexible bioelectronics – microimplants for neuroprosthetic and bioelectronic medicine applications
2.2	Dr Vincenzo Pecunia, Soochow University Printed ambipolar deep-subthreshold TFTs for easy-to-fabricate ultra-low-power electronics	3.2	Dr Stuart Higgins, Imperial College London Insights for bioelectronics from high-aspect-ratio nanostructured cell – biomaterial interfaces
2.3	Dr Matthew Dyson, IDTechEx Trends in emerging manufacturing methods for flexible hybrid electronics	3.3	Dr Gemma Bale, University of Cambridge* Developing Novel Optical Techniques to Monitor the Brain Metabolism in Newborn Brain Injury
2.4	Dr Yun Fu Chan, CPI Ultrafast laser microwelding of optoelectronic device built on ultra-thin flexible glass (UltraWELD Project)	3.4	Alessandra Lo Fiego, Imperial College London Developing new conjugated polymers for bioelectronic medicine
2.5	Dr Aneta Wiatrowska, XTPL High-resolution printing of micrometer-size conductive structures for LAE	3.5	Dr Roozbeh Ghaffari, MC10/Epicore Biosystems* Soft, skin-interfaced systems with physiology and biochemical sensing capabilities

12:50 Break - Sponsor Exhibitions & Posters

13:00 **Session 4 Panel Discussion:** Strategies and challenges of translation of bioelectronic devices into the clinic
Panel Chair: Dr Alison Burdett, Sensium Healthcare

13:25 Lunch - Sponsor Exhibitions & Posters

14:30 **Session 5.1** Sponsor Presentations - Inseto , Gold Sponsor & Semitronics, Silver Sponsor

14:45 **Keynote 5.2** Prof Zhenan Bao, Stanford University Skin-inspired electronics & sensors

15:30 Break - Sponsor Exhibitions & Posters

16:00 **Session 6 Manufacturing II** Session Chair: Dr Simon Johnson, CPI
Session 7 Sustainability Session Chair: Dr Natasha Conway, Paragraf

6.1	John Tingay, Paragraf* Adoption of graphene as an electronic material	7.1	Dr Maria Smolander, VTT* Sustainability in flexible electronics
6.2	Tanay Topac, Stanford University Inverse design technique for precision deployment of large-scale stretchable sensor networks	7.2	Dr Rosa Cuellar Franca, University of Manchester* Measuring the environmental sustainability of graphene using Life Cycle Assessment: Challenges and way forward
6.3	Ziam Ghaznavi, Emerson & Renwick Roll-to-roll reactive ion etching nanoscale features in Si for next generation flexible electronics	7.3	Rob Hornby, National Physical Laboratory Dimensional metrology of lithium ion battery electrodes and cells to enable a circular economy
6.4	Jiajie Yang, University of Cambridge Intaglio Printed Flexible Quantum Dot Light-emitting Diode for Smart Lighting	7.4	Prof Michael Turner, University of Manchester Aqueous synthesis and processing of conjugated polymer nanoparticles for use in organic electronic devices
6.5	Dr Sarah Karmel, Photocentric Visible light 3d printing of batteries	7.5	Tudur David, Bangor University Using machine learning to enhance the reliability and sustainability of large area electronic components

18:05 Break - Sponsor Exhibitions & Posters

18:15 **Session 8 Panel Discussion:** Scale-up manufacturing of large-area electronics in the UK and Europe
Panel Chair: Dr Luigi Occhipinti, University of Cambridge

18:40 Evening Networking Reception

*Invited Speaker

Day 2 - Thursday 25th February 2021

09:00	Sponsor Exhibitions & Posters			
09:30	Dr Tim Phillips / Chris Rider, innoLAE 2021		Welcome to Day 2	
09:40	Sponsor Exhibitions & Posters			
10:00	Session 9	Novel Devices & Systems I Session Chair: Dr Catherine Ramsdale, PragmatIC	Session 10	Applications Session Chair: Cathy Curling, Curling Consulting
9.1		Prof Dr Gerwin Gelinck, HOLST/TU Eindhoven* Solution processed photodetectors for large-area imaging applications	10.1	Dr Steve Bennington, Q5D* Automotive and aerospace lightweighting
9.2		Dr Dimitra G. Georgiadou, University of Southampton* 100 GHz zinc oxide Schottky diodes processed from solution on a wafer scale	10.2	Dr Ton Van Mol, TNO/Holst Centre* Flexible electronics for human-centric health care
9.3		Dr Vincenzo Pecunia, Soochow University Lead-free perovskite-inspired semiconductors for indoor photovoltaics	10.3	Dr May Wheeler, FlexEnable High-performance materials and processes optimised for flexible displays and other OTFT applications
9.4		Sanghoon Baek, Pohang University of Science & Technology Inkjet-printed active matrix pressure sensor arrays for two-dimensional pulse measurement	10.4	Dafydd Ravenscroft, University of Cambridge Wearable piezoelectric haptic sensor for silent communications
9.5		Woojo Kim, Pohang University of Science and Technology Reverse-offset-printed organic nonvolatile memory thin-film transistor	10.5	Dr Joana Fonseca, CeNTI Development of large area printed sensors for smart buildings
12:05	Lunch - Sponsor Exhibitions & Posters			
13:55	Session 11.1	Sponsor Presentations - Phoseon, Silver Sponsor		
14:00	Keynote 11.2	Dr Steve Xu, Sibel Health	Large area electronics for advanced physiological monitoring: applications for COVID-19 and beyond	
14:45	Lunch - Sponsor Exhibitions & Posters			
15:15	Session 12	Novel Devices & Systems II Session Chair: Dr Dimitra Georgiadou, University of Southampton	Session 13	High Performance Materials Session Chair: Prof Cinzia Casiraghi, University of Manchester
12.1		Dr Mario Caironi, IIT - FLEEP Technologies* From polymer transistors operating at radio-frequencies to edible electronics	13.1	Dr Ted Sargent, University of Toronto* Large-area LEDs and photodetectors for consumer electronics
12.2		Dr Ravinder Dahiya, University of Glasgow* Electronic Skin – from Energy Sink to Energy Source	13.2	Dr Martin Heeney, Imperial College London* Tuning conjugated polymers by post-polymerization Modification
12.3		Aimee Wyatt, CPI A highly uniform thermoformed lighting panel for automotive applications	13.3	Dr Atif Aziz, University of Cambridge A scalable, high viscosity, and very conductive DWCNT ink for printable electronics and EMI shielding
12.4		Dr Feras Alkhalil, PragmatIC Towards ubiquitous flexible sensor electronics	13.4	Dr Khaled Parvez, Manchester University Water-based inkjet printable inks made by electrochemically exfoliated graphene
12.5		Dr Simon Johnson, CPI Novel hybrid circuit assembly for battery free smart garments	13.5	Filipe Richheimer, National Physical Laboratory Nanoscale investigation of degradation mechanisms in triple-cation perovskite films
17:20	Session 14.1	Speaker Prize Sponsored by CPI & Poster Prize Sponsored by Inseto		

*Invited Speaker