CONFERENCE PROGRAMME

innoLAE 2020

DAY ONE

08:30 Registration

09:00 ***Session 1*** FCA

Mr Chris Rider Chair, innoLAE 2020 — *Welcome*

09:15 *Keynote 1.1* **Dr Emre Ozer*** Arm — *Thinking Out of the Box to Enable Low-cost Smart Objects with Flexible Electronics*

10:10 *Refreshments, Exhibition*

10:40 ***Session 2* Novel devices and systems** FCA

2.1 **Dr Yoeri van de Burgt*** TU Eindhoven
Organic Electronic Materials for Neuromorphic Computing and Adaptive Biointerfaces

2.2 **Mr Abhishek Chandramohan** PragmatIC
Low Cost Thin Film Schottky for Flexible Electronics Application

2.3 **Dr Kiron Prabha Rajeev** Neudrive Limited
High mobility OTFT devices; material formulation, process development and applications

2.4 **Dr Ulrike Kraft** University of Cambridge
Improving the operational stability of polymer transistors through passivation of water-induced traps

2.5 **Dr Kris Myny*** IMEC
Flexible thin-film transistor platform for healthcare patches

***Session 3* LAE for Energy** RFP

3.1 **Dr Pritesh Hiralal*** Zinergy
The combination of Thin Energy and Flexible IoT - Adapting Printed Batteries for Long Range communications

3.2 **Dr Yun Fu Chan** CPI
Enhancement of Lithium Anode by Plasma Surface Modification, Physical Vapour Deposition and Atomic Layer Deposition Coatings for High Performance of Li-S Batteries (LiFE Project)

3.3 **Mr Pavlos Giannakou** University of Surrey
Inkjet Printing as a Facile Route towards Low Cost Electrochemical Energy Storage

3.4 **Mr Mahmoud Wagih** University of Southampton
A Broadband Outlook on Flexible and Textile RF Energy Harvesting and Wireless Power Transfer: from Near-Field to 5G

3.5 **Dr Joe Briscoe** Queen Mary University of London
Methylammonium lead triiodide photovoltaic devices produced using scalable aerosol-assisted chemical vapour deposition

12:45 *Lunch, Exhibition*

14:00 ***Session 4*** **Plenary** FCA

Plenary 4.1 **Mr Mike Clausen** CPI — *Large Area Electronics – Scaling up to volume manufacture*

Keynote 4.2 **Professor Mark Poliks*** Binghampton University — *Flexible Hybrid Electronics -- "Unpackaged" Electronics for the Next Generation of Wearable Devices*

15:05 *Refreshments, Exhibition*

15:25 ***Session 5* Applications enabled by advanced manufacturing** FCA

5.1 **Dr Barbara Stadlober*** Joanneum Research
Ferroelectric Polymer Sensors for Flexible Electronics

5.2 **Mr Merijn Giesbers** TNO / Holst Centre
Integrated Electronic Functionalities in 3D printed products

5.3 **Mr Michael Johnson** Imperial College London
In-situ manufacturing of thin-film spacecraft, landers and rovers

5.4 **Dr Sanjiv Sambandan** University of Cambridge / Indian Institute of Science
Self-healing printed thin film transistor circuits

5.5 **Dr Mario Caironi*** IIT Milano
Direct-Written and Low-Voltage Polymer Field-Effect Transistors Operating at Radio-Frequencies

***Session 6* Bioelectronics** RFP

6.1 **Dr Eleni Stavrinidou*** Linkoping University
Plants-Electronics interface

6.2 **Mr Ben Woodington** University of Cambridge
Development of a minimally invasive spinal cord interface utilising thin film electronics

6.3 **Dr Christian Nielsen** Queen Mary University of London
New Semiconducting Materials for Organic Bioelectronic Applications

6.4 **Dr Vincenzo Curto** University of Cambridge
High-density flexible probes for the neural interface

6.5 **Prof Josep Samitier*** IBEC Barcelona
Bioelectronics for organ-on-a-chip monitoring

***Session 7* Emerging Technology for Displays (SID)** BMP

7.1 **Dr Guillaume Fichet** FlexEnable
Low cost, organic LCDs on Plastic - flexible displays for every surface

7.2 **Mr Sang Yun Bang** University of Cambridge
Scalable full-colour transfer printed quantum dot light-emitting diode onto active matrix display

7.3 **Dr Clément Talagrand** Bodle Technologies
LTPS driven microheater array for phase-change material based reflective display

7.4 **Dr Grigorios Rigas** M-Solv Ltd
Advanced Manufacturing of flexible touch sensors for next generation foldable displays

7.5 **Mr Russell Bailey** Pro-Lite Technology Ltd
Display metrology and the challenges measuring flexible displays

17:30 ***Poster session and drinks reception***

19:45 **Conference Dinner** ***(coaches depart at 19:00)*** Queens' College

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DAY TWO

08:30	*Tea/coffee*	
09:00	***Session 8***	FCA
	Mr Chris Rider Chair, innoLAE 2020	*Welcome to day 2*
09:10	*Keynote 3* **Professor Sir Richard Friend*** University of Cambridge	*Thin Film Electronics – Limits to Performance*
10:00	*Poster Prize announcement*	
10:15	*Refreshments, exhibition*	
10:40	***Session 9*** **High performance materials for LAE** FCA	***Session 10*** **Wearables for healthcare** RFP
	9.1 **Dr Selina Ambrose*** Promethean Particles *Large-Scale Continuous Manufacture of Nanomaterials for Conductive Inks* *9.2* **Dr Aiman Rahmanudin** University of Manchester *Bottom-up Chemical Approach for Engineering Thin Films of Organic Electronic Materials for Field-Effect Transistors* *9.3* **Mr Thomas Eldridge** CHASM Advanced Materials Inc. *Innovative approach to large format touch screens through flexible hybrid transparent conductive films* *9.4* **Professor Pedro Barquinha** NOVA.ID.FCT *Autonomous flexible electronics with zinc-tin oxide thin films and nanostructures* *9.5* **Dr Luigi Occhipinti *** University of Cambridge *Graphene and two-dimensional materials, from production to applications in sensors and opto-electronics*	*10.1* **Dr Alison Burdett*** Sensium *Early detection of postoperative patient deterioration through wearable wireless monitoring* *10.2* **Dr Abiodun Komolafe** University of Southampton *Wearable functional e-textiles based on flexible filament circuits* *10.3* **Mr Michael Kasimatis** Imperial College London *Monolithic Solder-on Nanoporous Si-Cu Contacts for Stretchable Silicone Composite Sensors* *10.4* **Dr Russel Torah** University of Southampton *EU-H2020 project WEARPLEX - Wearable multiplexed biomedical electrodes* *10.5* **Mr Yasin Cotur** Imperial College London *Flexible acoustic transducer for monitoring vital signs*
12:45	*Lunch, exhibition*	
13:45	***Session 11*** **Sensors** FCA	***Session 12*** **Advanced manufacturing processes and equipment** RFP
	11.1 **Dr Firat Güder*** Imperial College London *Near "zero-cost" paper-based electrical gas sensors for measuring food quality* *11.2* **Professor Gregory Whiting** University of Colorado Boulder *Biodegradable printed sensors for monitoring soil conditions* *11.3* **Dr Daniel Tobjörk** Cambridge Display Technology Ltd. *OTFT gas sensors for applications in post-harvest monitoring* *11.4* **Dr Robert Valentine** CPI *Fabrication of a printed, flexible temperature and humidity sensor device that is technology enabler for IoT* *11.5* **Mr Pelumi Oluwasanya** University of Cambridge *Wearable sensors for personal exposure monitoring*	*12.1* **Professor Duncan Hand** Heriot-Watt University Picosecond laser microwelding: a novel technique for hermetic joining of transparent materials *12.2* **Dr James Blakesley** National Physical Laboratory *A new tool for high-speed quantitative functional imaging of large-area electronics* *12.3* **Mr Vikram Turkani** NovaCentrix *Next Generation Paper: Cost-Effective Printed Electronics Techniques Advancing Augmented Book Manufacturability* *12.4* **Dr Ivor Guiney*** Paragraf Ltd *Next Generation Large Area Graphene for Electronics* *12.5* **Mr Thomas Kolbusch** Coatema *Silver nanowires application on big scale for flexible displays and flexible electronics*
15:50	***Close/refreshments***	

**** invited speakers***

LOCATIONS

FCA: Francis Crick Auditorium

RFP: Rosalind Franklin Pavilion

BMP: Barbara McClintock Pavilion

Queens' College: Coach transport for the conference dinner will leave the conference centre at 7 pm