



# Tyndall Industry Day – ICT for Health

## Agenda | Tuesday 17th September 2013

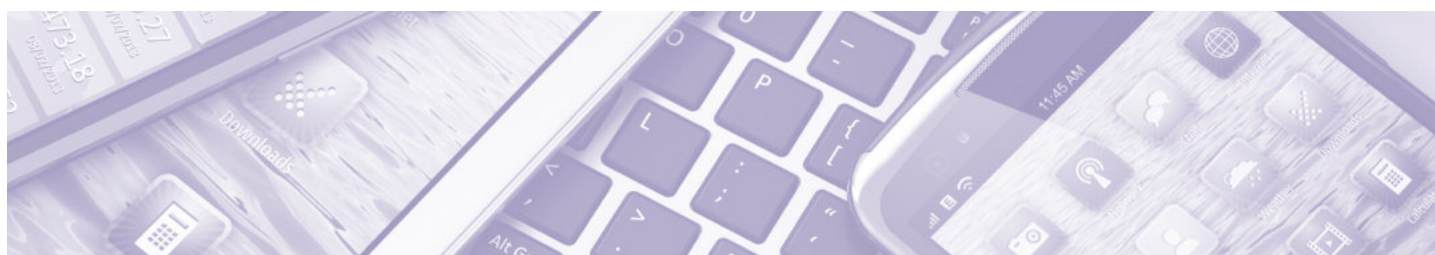
08:00 - 09:00	Coffee & Registration
09:00 - 09:15	Dr Kieran Drain: Welcoming Comments
09:15 - 09:30	Opening Address
09:30 - 09:50	Dr Paul Galvin: Health at Tyndall Overview
<b>Theme 1: Cardiac Rhythm Management (Chair: Dr Barry Dolan, Lake Region Medical)</b>	
09:50 - 10:20	Business Talk: Mr Paudie O'Connor (Boston Scientific Clonmel)
10:20 - 10:40	Clinical Talk: Dr Gerry Fahy (CUH)
10:40 - 11:00	Academic talk: Mr Ray Burke (Tyndall)
11:00 - 11:30	Networking Session and Posters/Demos
<b>Theme 2: Connected Health (Chair: Cleveland Clinic)</b>	
11:30 - 12:00	Business Talk: Qualcomm Life
12:00 - 12:20	Clinical Talk: Dr Johnny Walker (Hermitage Medical Clinic & Health Founders)
12.20 - 12.40	Academic Talk: Mr Rodd Bond (Netwell Centre Dundalk Institute of Technology)
12:40 - 13:00	Academic Talk: Dr Michael Walsh (Tyndall) Nenagh Hospital Falls Study
13:00 - 14:30	Lunch and Posters/Demos
<b>Theme 3: Diagnostics (Chair: Covidien)</b>	
14:30 - 14.45	Business Talk: TBD
14.45 - 15:05	Clinical Talk: Prof Louise Kenny (UCC, INFANT Centre & CUMH)
15:05 - 15:25	Academic Talk: Prof Cian Ó Mathúna (Tyndall) Microneedles
15:25 - 15.45	Business Talk: Mr Mark Evans (Radius Health)
15:45 - 16:15	Networking Session and Posters/Demos
<b>Theme 4: Surgical Innovations (Chair: Prof George Shorten, School of Medicine and ASSERT for Health Centre at UCC)</b>	
16:15 - 16:45	Business Talk: Stryker
16:45 - 17:05	Clinical Talk: Dr Paul Neary (RCSI and i360 Medical)
17:05 - 17:25	Clinical Talk: Mr James Harty (ASSERT for Health Centre at UCC, CUH and SIVUH)
17:25 - 17:45	Academic Talk: Dr Peter O'Brien (Tyndall)
17:45 - 18:30	Networking Session and Posters/Demos
<b>Clinical Talks</b>	
18.30 - 18.45	Dr Kieran Drain (Tyndall CEO) Vision of ICT for Health in Tyndall
18.45 - 19.45	Clinical talks: (1) Prof Noel Caplice (CUH- UCC CVRC) - <i>Innovation in interventional cardiology (stents) and cardiac repair post myocardial infarction.</i> (2) Dr Barry O'Reilly (CUH) – Robotic surgery (3) AN Other
19.45 - 21.00	Buffet Networking Dinner



# Tyndall Industry Day – Emerging Devices & Technologies

## Agenda | Wednesday 18th September 2013

08.00 - 09.00	Coffee & Registration	
09.00 - 09.10	Welcome Chair	Dr Kieran Drain Prof Cian Ó Mathúna
<b>Electronics Below 10 Nanometers</b>		
09.10 - 09.40	CMOS beyond 10 nanometers	Dr Stephen Keeney Global Foundries
09.40 - 10.00	Fabrication Challenges for Advanced CMOS	Dr Ray Duffy, Tyndall
10.00 - 10.30	Beyond CMOS: What Options are Out There ?	Dr Ann Kelleher, Intel
10.30 - 10.50	Characterisation Challenges for Advanced CMOS	Dr Paul Hurley, Tyndall
10.50 - 11.20	Networking Session and Posters/Demos	
<b>Design for Nanoelectronics</b>		
11.20 - 12.10	Building Technology Computer Aided Design for the Nanoscale	Mr Terry Ma, Synopsys
12.10 - 12.30	Nanoscale Challenges for Transistor Design	Dr Georgios Fagas, Tyndall
12.30 - 13.00	Emerging Trends & Technologies in Connectivity and Location on Mobile Platforms	Dr Cormac Conroy, Qualcomm
13.00 - 14.20	Lunch and Posters/Demos	
<b>Microstems Manufacture</b>		
14.20 - 14.50	Getting MEMS out of Development and to Market	Dr Norbert Meyer, VP Strategic Research, XFAB
14.50 - 15.10	Magnetic Sensors on Silicon	Dr Jan Kubik, Analog Devices
15.10 - 15.40	Vibrational Energy Harvesting	Dr Nathan Jackson, Tyndall
15.40 - 16.10	Microsystems Manufacturing Technologies	Dr Denis Doyle, Analog Devices
16.10 - 16.40	Networking Session and Posters/Demos	
<b>Heterogeneous Systems Integration</b>		
16.40 - 17.10	Integration of Photonic Devices	Mr Marcus Mooney, Seagate
17.10 - 17.40	Passive Interposers for Power Management	Prof Cian Ó Mathúna Tyndall
17.40 - 18.00	Photonic Integration on Silicon for Communication & Sensing Applications	Dr Peter O'Brien Tyndall
18.00 - 18.30	Systems Integration Opportunities in H2020	TBC
18.30 - 20.00	Networking Dinner	





# Tyndall Industry Day – Energy Efficiency in Buildings & Microgrids

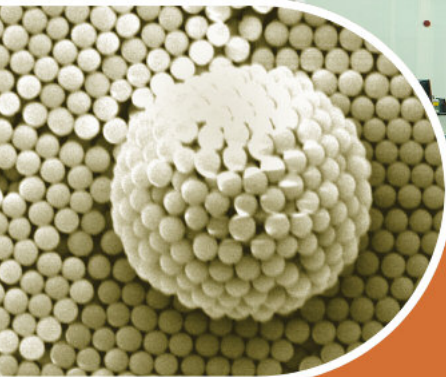
## Agenda | Thursday 19th September 2013

This event is being run in parallel with Advanced Thin Film Technologies for Nano-Manufacturing

08:00 - 09:00	Coffee & Registration	
09:00 - 09:10	Welcome + Opening Remarks & Objectives For The Day	Dr Kieran Drain & Mr Mike Hayes, Tyndall
<b>Industry Engagement &amp; Impact (Chair: Dr Domhnaill Herson, Bell Labs)</b>		
09:10 - 09:40	KeyNote – Ireland as a hub for collaborative research	Mr John Milton Benoit, UTRC
09.40 - 10.05	IERC – industry-led technology development, demonstrators, business models	Prof Tony Day, IERC
10.05 - 10.25	Tyndall Demonstrator – award winning EDM (energy demand management) in action	Mr Pat Mehigan, Tyndall
10.25 - 10.55	Networking Session and Posters/Demos	
<b>ICT4EE Perspectives (Chair: Mr Michael Kelleher, Bord Gáis Energy)</b>		
10:55 - 11:30	Keynote - Green research at Alcatel Lucent Bell Labs	Prof Thierry Klein, ALU Bell Labs
11.30 - 11.55	WSN Embedded Systems – a key enabler for ICT4EE* retrofit solutions (*ICT for Energy efficiency)	Mr Brendan O’Flynn, Tyndall
11.55 - 12.20	ICT4EE research at Tyndall – Conditional monitoring & Energy Harvesting for buildings and microgrids	Mr Mike Hayes, Tyndall
12.20 - 12.45	Endeco – energy demand management case study	Mr Michael Phelan, Endeco
12:45 - 1 4:00	Lunch and Posters/Demos	
<b>Microgrids to Smart Cities (Chair: Mr Roy Horgan, SolarPrint)</b>		
14.00 - 14.40	Key Note – (retrofit solutions for) improving energy efficiency in smart cities	Dr Lisa Amini, IBM
14.40 - 15.10	GreenCom – open source middleware enables data aggregation for microgrids	Dr Markus Eisenhauer, Fraunhofer
15.10 - 15.40	Networking Session and Posters/Demos	
<b>Storage Solutions/Collaborative Partnerships (Chair: Mr Michael Grufferty, Tyndall)</b>		
15.40 - 16.15	KeyNote – Storage solutions for micrgrids and the smart grid	Dr Neil Hewitt, UU
16.15 - 16.40	National and international collaboration on WSN ICT4EE projects	Dr Dirk Pesch, CIT
16.40 - 17.15	Public private partner demonstrators – IERC & Horizon 2020	Mr Jeff Smith, Bilfinger
17:15 - 17:30	Closing Remarks	







# Tyndall Industry Day – Advanced Thin Film Technologies for Nano-Manufacturing

**Agenda** | Thursday 19th September 2013

This event is being run in parallel with Energy Efficiency in Buildings & Microgrids

08.30-09.30	Coffee & Registration	
	<b>The Landscape of Atomic Scale Coatings (Chair: Dr Simon Elliott)</b>	
09.30-10.10	<b>Key Note:</b> Atomic Layer Deposition - Opportunities and Challenges	Prof Mikko Ritala, University of Helsinki
10.10-10.40	Advanced Material for Functional Coatings	Prof Martyn Pemble, Tyndall
10.40-11.00	Manufacturable High-k and Metal Gate Technology for 3D and Emerging Devices	Dr Atif Noori, Applied Materials
11.00-11.20	Title TBC	Dr John Plombon, Intel
11.20-11.40	Networking Session and Posters/Demos	
	<b>Perspectives on New Materials and Devices (Chair: Prof Martyn Pemble)</b>	
11.40-12:00	Title TBC	Dr Michael Todd, Henkel
12.00-12.20	Materials Modelling for Devices	Dr Simon Elliott, Tyndall
12.20-12.40	Dye Sensitised Solar Cells: A Materials Perspective	Dr Mazhar Bari, Solarprint
12.40-14.00	Lunch and Posters/Demos	
	<b>Design and Technologies for Commercial Coatings (Chair: Prof Martyn Pemble)</b>	
14.00-14.40	<b>Key Note:</b> Nanostructured surfaces through atmospheric pressure processing	Dr Holger Althues, Fraunhofer
14.40-15.00	Atmospheric Pressure CVD for Large Area Functional Surface Coatings	Prof David Sheel, CVD Technologies
15.00-15.20	Simulation-Driven Rational Design of Visible Light Activated TiO <sub>2</sub>	Dr Michael Nolan, Tyndall
15.20-15.40	Networking Session and Posters/Demos	
	<b>Applications of Novel Materials (Chair: Dr Michael Nolan)</b>	
15.40-16.00	Some Activities of The National Institute for Bioprocessing Research & Training (NIBRT)	Dr Reg Shaw, NIBRT
16.00-16.20	Air Purification by Heterogeneous Photocatalytic Oxidation	Mr Paul Gannon, Theta Chemicals
16.20-16.40	Atomic layer deposition of crystalline high-k HfSiO <sub>x</sub> as a low leakage and high breakdown field dielectric material	Prof Martyn Pemble, Tyndall
16:40-16:50	Closing Remarks	

