

Tyndall Technology Days 2016 - Powering the Future Internet

From: 11 Oct 2016 , 08:00AM **To:** 11 Oct 2016 , 07:00PM Croke Park, Dublin



Powering the Future Internet

Tyndall Technology Days 2016

11th October 2016, Dublin, Ireland.

The future internet promises a world of a trillion sensors where objects communicate with us and each other to link our homes, offices and factories to enable a smart, efficient, secure and connected world.

However, this vision brings many challenges. The growing number of internet-enabled devices, coupled with increased data storage requirements in power-hungry data centres, has spurred a need for new ways to generate and manage power and connectivity.

Solutions for future internet growth and sustainability, through powering and connecting the IoT, will be addressed at the fourth Tyndall Technology Days, 11 October 2016, Croke Park, Dublin, from 9.00am to 5.30pm, followed by a networking reception in the Croke Park GAA Museum.

Register for your ticket today!

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Speakers

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Register

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Venue

PLenary Session		
Chair: Julie Donnelly, Programme Manager, Tyndall National Institute		
9.00am	Welcome Kieran F. Drain , CEO, Tyndall National Institute	
9.10am	Enabling the Internet of Things Katsu Nakamura , ADI Fellow, CTO of Healthcare-Consumer-IoT Business Unit, Ultra Low Power Technology Group Director, Analog Devices	
9.40am	Technology roadmaps for powering devices & big data in IoT Steve Moffatt , Chief Technical Officer, FrontEnd Products, Applied Materials	
10.10am	Getting off the hype curve and down to business – panel discussion Helen McBrean , Atlantic Bridge, Claire Peawg , IBM, Mark Fergusson , SPI, Martin Shanahan , IDA, Kieran Drain , Tyndall National Institute. Chaired by John Kennedy, Silicon Republic.	
10.30am	Tea/coffee & demos	
POWERING THE IOT		CONNECTING THE IOT
Ultra-low power processing for smart sensors		Data centres
11.00am	Market trends Harry Zeeves , Principal Analyst, UTEchEd	Using photonic integrated circuits to scale networks for the IoT challenge Johan Bäck , Sr Sales Account Manager, Infinera
11.20am	Energy management: the fundamental enabler of the IoT Francesco Carobolante , VP of Engineering, Qualcomm	Photonics innovation support to boost the competitiveness of European SMEs Hugo Thienpont , Director of Research, Brussels Photonics Team, Department of Applied Physics and Photonics, Faculty of Engineering - Vrije Universiteit
11.40am	Pushing intelligence to the edge with ULP, high precision data converters Ivan O'Connell , Principal investigator, Tyndall National Institute	Microelectronics for data centre interconnects Peter Osleaur , Senior Researcher, Tyndall National Institute
12.00pm	ULP design aspects of wearable electronics operating in adaptive environments Robert Newberry , Director Electronic Product Engineering, Sanmina	Dynamic architectures in IoT Deirdre Carthy , Lead Technologist, Data Science & IoT Strategy, Innovation Garage – Johnson Controls
12.20pm	Two-minute elevator pitches Agri-food smart sensor systems - Niamh Creedon Electrochemical energy storage - Tomas Clancy Energy harvesting & storage - Rosemary O'Keeffe Wireless sensor networks - Marco Bekasatos	Two-minute elevator pitches Photonics Packaging - Marc Rensing Biophotonics - Huihui Lu Photonics Systems - Stefano Porto
12.40pm Lunch & demos		
Energy management – generation and storage		Network evolution
Chair: Beth Massey , Head of Research, International Energy Research Centre		
2.10pm	The reality of energy harvesting Lorandt Foelkel , Business Development Manager for Energy Harvesting, FAZ for Eastern Europe - Baltic countries, Russia and Turkey, Würth Elektronik eSOS GmbH & CO. KG	Overview of trends Torsten Wiplejewski , Business Development Manager, Hardware and Engineering Department, Huawei
2.30pm	Design of efficient thermoelectric materials for powering the IoT: a material modelling perspective Ivana Savić , Senior Researcher, Tyndall National Institute	What's trending in the communications world? Linda Doyle , Director of CONNECT & Professor of Engineering & The Arts in Trinity College
2.50pm	Trench capacitor technology enables high density integrated power management solutions for IoT applications Frederic Valron , Research Program Manager, IPDA	Building an IoT network Mark Bannon , CEO, VT Networks
3.10pm	Advances in energy transducer power density for real-life applications Sabali Ray , Head of Micropower Systems and Nanomagnetism, Tyndall National Institute	Fibre-to-the-Everything Networks Paul Townsend , Head of Photonics Centre, Tyndall & Director of IPC
3.30pm	Tea/coffee & demos	
System integration		Photonic enabling technologies
Chair: Mike Hayes , Senior Program Manager, Tyndall National Institute		
4.00pm	Batteries – energy storage solutions roadmap for low power IoT devices Jeff Sather , VP Technology and Customer Solutions, Cymbet	Device assembly & packaging – driving volumes up & costs down? Peter O'Brien , Head of Photonics Packaging Group Tyndall National Institute & Deputy Centre Director, iPIC
4.20pm	Device and system design considerations for the commercialisation of vibration energy harvesters Steve Beeby , Prof of Electronics, University of Southampton	Current and future lasers for optical communications networks Jim Somers , CEO, Eliana Photonics
4.40pm	Architectures and PMIC design for ultra-low-power systems Seamus O'Driscoll , Principal Investigator, Tyndall National Institute	Liam Barry , Principle Investigator, Dublin City University.
5.00pm	Wrap up	Wrap up
5.20pm	Evening reception	Evening reception