

**Day 1 - Western Gateway Building - UCC**

**Registration: 8:30 - 9:00 a.m. in the Atrium, Western Gateway Building, UCC**

<b>Session</b>	<b>Time</b>	<b>Presentation</b>	<b>Author</b>	<b>Affiliation</b>
<b>Session 1</b>	<b>Theme: Advanced packaging session 1</b>			
<b>Plenary talk</b>	<b>9:00 - 10:00 a.m.</b>	<b>Emergence of Glass Panel Packaging and 3D Glass Panel Embedded Package for Superior Bandwidth &amp; Emergence of Indian Electronics</b>	<b>Prof. Rao Tummala</b>	<b>IBM, Georgia Tech, Retd</b>
<b>Morning Session</b>	<b>Co chairs: Prof. Rao Tummala and Prof. Cian Ó Mathúna</b>			
Paper	10:00 - 10:25 a.m.	Physical design enablement of 3 dies stacked 3D-Ics	Mohamed Naeim	IMEC
Paper	10:25 - 10:50 a.m.	Impact of Super-long-throw PVD on TSV Metallization and Die-to-Wafer 3D Integration Based on Via-last	Jiayi Shen	Tohoku University
<b>Invited talk</b>	<b>10:50 - 11:20 a.m.</b>	<b>Micro-Transfer Printing – An advanced assembly technology for heterogeneous integration</b>	<b>Alin Fecioru</b>	<b>Xceleprint</b>
<b>Invited talk</b>	<b>11:20 - 11:50 a.m.</b>	<b>Power Electronics Packaging</b>	<b>Dr. Jayakrishnan Chandrappan</b>	<b>CSA Catapult, UK</b>
Paper	11:50 - 12:15 p.m.	Parallelized Serial Daisy Chain Structure for Continuous In Situ Monitoring of Defect Formation	Andrew Ferris	Sandia Labs
<b>Lunch</b>	<b>12:15 - 2:00 p.m.</b>	<b>Lunch</b>		

<b>Afternoon Session</b>	<b>Co chairs: Brian Corbett and Grace O'Malley</b>			
<b>Session 2</b>	<b>Theme: Advanced packaging session 2</b>			
Paper	2:00 - 2:25 p.m.	Chiplet Set For Artificial Intelligence	Joshua Stevens	NCSU
Paper	2:25 - 2:50 p.m.	Patterned InterVia for Heterogeneous Integration of III-V devices onto silicon photonics using micro-Transfer Printing	Ali Uzun	Tyndall
Paper	2:50 - 3:15 p.m.	3DIC integration with D2D bump-less Cu bonding	Ali Roshanghias	Silicon Austria Labs
Paper	3:15 - 3:40 p.m.	Thermal Management Strategies for Co-packaged Optics on Glass Interposers in Next-Generation Photonic Packaging	Parnika Gupta	Tyndall
<b>Break</b>	<b>3:40 - 4:00 p.m.</b>	<b>Tea break</b>		
<b>Invited talk</b>	<b>4:00 - 4:30 p.m.</b>	<b>IC and photonic device fabrication and packaging services</b>	<b>Dr. Romano Hoofman</b>	<b>IMEC</b>
<b>Invited talk</b>	<b>4:30 - 5:00 p.m.</b>	<b>Photonic Systems-in-Packages based on thin glass – pSiP</b>	<b>Dr. Gunnar Böttger</b>	<b>Fraunhofer IZM</b>
<b>Invited talk</b>	<b>5:00 – 5:30 p.m.</b>	<b>Advanced Packaging Goes to Market</b>	<b>Robert Patti</b>	<b>NHanced Semiconductors, Inc</b>
Paper	5:30- 5:55 p.m.	A study on a tether-less approach towards Micro-Transfer-Printing of large-footprint power micro-inductor chiplets	Somnath Pal	Tyndall

<b>Day 2 - Western Gateway Building - UCC</b>				
<b>Registration: 8:30 - 9:00 a.m. in the Atrium, Western Gateway Building, UCC</b>				
<b>Session 3</b>	<b>Theme: European Chips Act and pilot lines</b>			
<b>Plenary talk</b>	<b>9:00 - 9:30 a.m.</b>	<b>EU Chip act</b>	<b>Colette Maloney</b>	<b>European Commission</b>
<b>Invited talks</b>	<b>9:30 - 10:00 a.m.</b>	<b>European Packaging Pilot Line</b>	<b>Peter O'Brien</b>	<b>Tyndall</b>
<b>Morning session</b>	<b>Co chairs: Prof. Peter O'Brien and Dr. Romano Hoofman</b>			
<b>Session 4</b>	<b>Theme: Hybrid Bonding, test metrology and Thermal Management</b>			
<b>Invited talk</b>	<b>10:00 - 10:30 a.m.</b>	<b>Advanced interconnects for chiplets</b>	<b>Jonathan Abdilla</b>	<b>Besi</b>
Paper	10:30 - 10:55 a.m.	Cu Electrode Surface Features and Cu-SiO <sub>2</sub> Hybrid Bonding	Murugesan Mariappan	Tohoku University
Paper	10:55 - 11:20 a.m.	Efficient Test Pattern Generation for Large Numbers of Inter-Die Interconnects in Chiplet-Based Packages	Slimane Boutobza	Cadence
Paper	11:20 - 11:45 a.m.	Review of Hybrid Integration Techniques for integrating III-V onto Silicon	Erik Masselink	Gatech
Paper	11:45 - 12:10 p.m.	Thermal cycling and fatigue life analysis of a GaN wide-bandgap laterally conducting power packaging	Pouria Zaghari	NCSU
Paper	12:10 - 12:35 p.m.	SiGe BiCMOS Technology with Embedded Microchannels based on Cu Pillar PCB Integration Enabling sub-THz Microfluidic Sensor Applications	Emre Can Durmaz	Leibniz Institute for High Performance Microelectronics, IHP
<b>Lunch</b>	<b>12:35 p.m. to 2:00 p.m.</b>	<b>Lunch</b>		

<b>Afternoon Session</b>	<b>Co chairs: Ms. Rayhane and Dr. Peter Ramm</b>			
<b>Plenary talk</b>	<b>2:00 - 3:00 p.m.</b>	<b>Recent Advances in 3D Heterogeneous Integration Capabilities and Future Possibilities</b>	<b>Dr. Paul Fischer</b>	<b>Intel</b>
<b>Session 5</b>	<b>Theme: Emerging Technologies</b>			
Paper	3:00 - 3:25 p.m.	Fast, accurate assembly-level physical verification of 3DIC packages	Nermeen Hossam	Siemens
Paper	3:25 - 3:50 p.m.	Effective release and transfer print of telecom wavelength devices	Hemalatha Muthuganesan	Tyndall
Paper	3:50 - 4:15 p.m.	Single-Mode Expanded-Beam Pluggable Module for Photonic Integrated Circuits	Kamil Gradkowski	Tyndall
Paper	4:15 - 4:40 p.m.	High performance, multi-layered, 2.5D interposer for RF Applications	Matthew Jordan	Sandia Labs
Paper	4:40 – 5:05 p.m.	Development of an Ultra High Density Electrical Interposer for 2.5D Co-Packaging of a Silicon Photonic MEMs Chip	Arun Kumar Mallik	Tyndall
<b><i>Social event / Gala dinner</i></b>	<b><i>7:00 – 10:00 p.m.</i></b>	<b><i>Gala Dinner at the River Lee Hotel</i></b>		

<b>Day 3 - Tyndall National Institute</b>				
<b>Morning Session</b>	<b>Session Co-chairs: Prof. Paul Franzon and TBC</b>			
<b>Session 6</b>	<b>Theme: System integration and thermal management</b>			
<b>Tour</b>	9:00 - 10:00 a.m.	<b>Tyndall Tour</b>		
<b>Plenary talk</b>	10:00 - 10:45 a.m.	<b>Performance Enablement Through VIPack FOPOP for Mobile and Networking</b>	<b>Mark Gerber</b>	<b>ASE Global group</b>
<b>Break</b>	10:45 - 11:00 a.m.	<i>Tea</i>		
<b>Invited talk</b>	11:00 - 11:30 a.m.	<b>Integrated biomedical systems</b>	<b>Stefan Andersson-Engels</b>	<b>Tyndall</b>
<b>Invited talk</b>	11:30 - 12:00 p.m.	<b>3D integration for Quantum Computing</b>	<b>Prof. Ryoichi Ishihara</b>	<b>TU Delft</b>
Paper	12:00 - 12:25 p.m.	Thermal insulation in superconducting flip-chip assemblies	Joel Hätingen	VTT
Paper	12:25 - 12:50 p.m.	Measurement Point Selection Algorithms for Testing Power TSVs	Koutaro Hachiya	Teikyo Heisei University, Japan
Paper	12:50 to 1:15 p.m.	Thermal Estimation for 3D-ICs through Generative Networks	Paul Franzon	NCSU
<b>Lunch</b>	1:15 - 2:30 p.m.	<i>Lunch</i>		