

## Materials for Sustainable Development Conference (MAT-SUS) (NFM22)

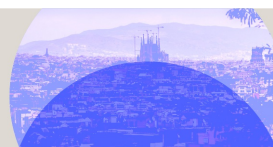
### #OPTONEXT - Next Gen Semiconductors for Optoelectronics

Barcelona, Spain, 2022 October 24th - 27th

Conference Chairs: Paul Shaw and Mike Hamsch

### Conference Program

October 24th - Day 1 (Monday)	
08:55 - 09:00	<b>Room S3 + S4 - Chair Introduction</b>
	<b>Session 1.1</b> Chair: Mujeeb Chaudhry
09:00 - 09:30	<u>Hugo Bronstein</u> ( <i>Department of Chemistry and Physics, University of Cambridge</i> ) 1.1-11 Synthesis and Understanding of Organic Heterointerfaces. Towards designer CT states?
09:30 - 10:00	<u>Matthew Griffith</u> ( <i>The University of Sydney</i> ) 1.1-12 Organic Semiconductors: Unlocking a New Frontier for Combining Chemical and Electrical Neuromodulation Stimuli
10:00 - 10:30	<u>Graham Turnbull</u> ( <i>Organic Semiconductor Centre, SUPA, School of Physics and Astronomy, University of St Andrews, St Andrews, U.K.</i> ), Ross Gillanders, James Glackin, Edward Ogugu, Ifor Samuel, Janja Filipi, Nikola Kezic 1.1-13 Organic Semiconductor Trace-Chemical Sensors for Environmental Monitoring and Security Applications
10:30 - 11:15	<b>Coffee Break</b>
	<b>Session 1.2</b> Chair: Matthew Griffith
11:15 - 11:45	<u>Oana Jurchescu</u> ( <i>Wake Forest University, US</i> ) 1.2-11 Molecular Electronic Devices for Current Rectification and Chemical Sensing
11:45 - 12:15	<u>Mariano Campoy-Quiles</u> ( <i>Institut de Ciència de Materials de Barcelona, ICMAB-CSIC Campus UAB</i> ) 1.2-12 Novel optoelectronic devices based on organic semiconductor gradients
12:15 - 15:15	<b>Lunch</b>
15:25 - 15:30	<b>Room S3 + S4 - Chair Introduction</b>
	<b>Session 1.3</b> Chair: Mariano Campoy Quiles
15:30 - 16:00	<u>Mujeeb U. Chaudhry</u> ( <i>Durham University</i> ) 1.3-11 Organic Light Emitting Field Effect Transistors: Advances and Perspectives
16:00 - 16:15	<u>QUAN LIU</u> ( <i>Hasselt University, Agoralaan 1</i> ), Koen Vandewal 1.3-T1 Interfacial layer induced n-doping of polymer:nonfullerene blends for high-performance narrowband near-infrared photodetectors
16:15 - 16:30	<u>Quentin Eynaud</u> ( <i>Centre Interdisciplinaire de Nanoscience de Marseille (CINaM, UMR CNRS 7325)</i> ), Olivier Margeat, Jörg Ackermann, Christine Vidélot-Ackermann, Carmen Rhuiz-Herrero, Tomoyuki Koganezawa, Noriyuki Yoshimoto 1.3-T2 From Broadband to Narrowband Organic Photodetectors Based on NFAs Based Polymer Blends: Impact of Thermal Annealing
16:30 - 16:35	<b>Symposium Closing</b>



### October 25th - Day 2 (Tuesday)

17:15 - 20:00 **Poster Session**

### October 26th - Day 3 (Wednesday)

19:30 - 22:00 **Social Dinner**

### October 27th - Day 4 (Thursday)

17:15 - 17:30 **General Closing**

## Poster Contribution

244	<u>Hwan-Hee Cho</u> ( <i>Department of Physics, Cavendish Laboratory, University of Cambridge; Cambridge, UK</i> ), Dan G. Congrave, Hugo Bronstein, Neil C. Greenham Matrix-free hyperfluorescent organic light-emitting diodes: opportunities and challenges
324	<u>Ewelina Zdanowicz</u> ( <i>Department of Semiconductor Materials Engineering, Wrocław University of Science and Technology</i> ), Artur P. Herman, Łukasz Przepis, Katarzyna Opołczyńska, Jarosław Serafińczuk, Henryk Turski, Robert Kudrawiec Electronic properties of perovskite/GaN interface probed using contactless electroreflectance spectroscopy
332	<u>Oleksandr Bezikonnyi</u> ( <i>Kaunas University of Technology, Kaunas, Lithuania</i> ), Yan Danyliv, Khrystyna Ivaniuk, Iryna Danyliv, Dmytro Volyniuk, Galyna Sych, Algirdas Lazauskas, Levani Skhirtladze, Hans Ågren, Pavlo Stakhira, Nataliya Karaush-Karmazin, Glib Baryshnikov Carbazole- $\sigma$ -sulfobenzimidazole-based emitter exhibiting mechanochromic TADF
333	<u>Dmytro Volyniuk</u> ( <i>Department of Polymer Chemistry and Technology, Kaunas University of Technology, Baršausko Str. 59, LT, 51423, Kaunas, Lithuania</i> ), Ranush Durgaryan, Jurate Simokaitiene, Oleksandr Bezikonnyi, Yan Danyliv, Kai Lin Woon, Juozas Vidas Grazulevicius Investigation of charge-transporting properties of dibenzothiophene-based derivatives as dopant-free hole-transporting materials of perovskite solar cells
336	<u>Galatopoulos F.</u> ( <i>Molecular Electronics and Photonics Research Unit, Department of Mechanical Engineering and Materials Science and Engineering, Cyprus University of Technology</i> ), Papagiorgis P., Chrusou A.Z., Bernasconi C., Bodnarchuk M.I., Kovalenko M.V., Itskos G., Choulis S.A: Photovoltaic Limitations of Colloidal Perovskite Nanocrystal Photovoltaics
337	Sergey Pozov, <u>Apostolos Ioakeimidis</u> ( <i>Molecular Electronics and Photonics Research Unit, Department of Mechanical Engineering and Materials Science and Engineering, Cyprus University of Technology</i> ), Modestos Athanasiou, Caterina Bernasconi, Maryna Bodnarchuk, Maksym Kovalenko, Grigorios Itskos, Stelios Choulis Device Performance of CsPbBr <sub>3</sub> Perovskite Nanocrystal based Light Emitting Diodes