

MADRID2023

July 3rd/7th

ICOE

16th International
Conference on
Organic Electronic



SCIENTIFIC PROGRAMME



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WELCOME

We are honored to welcome you at the 16th edition of the International Conference on Organic Electronics (ICOE2023) in Madrid (Spain). The ICOE conference series is dedicated to the state-of-the-art research in organic electronics and became one of the major conferences in the field. ICOE2023 in Madrid, follows the previous editions held in Hasselt (2019), Bordeaux (2018), St. Petersburg (2017), Bratislava (2016), Erlangen (2015), Modena (2014), Grenoble (2013), Tarragona (2012), Rome (2011), Paris (2010), Liverpool (2009) and Eindhoven (2009).

ICOE 2023 provides an interdisciplinary forum for researchers from academia and industry to discuss fundamental aspects of organic semiconductors, demonstrate their position on the road-map for organic electronics and exchange ideas on new materials, technologies, and future applications. The conference will cover all areas related to organic electronics and photonics including chemistry, physics, biology, materials science, nanoscience, device engineering and commercialization.

ICOE2023 is hosted at the Complutense University in Madrid. One of the oldest universities in the world. Actually, its origins lie in the middle ages, when King Sancho IV of Castile created the Studium General in 1293.

Our University is located on a wonderful campus that occupies most of the Ciudad Universitaria district of Madrid, with annexes in the close district of Somosaguas which, altogether, allow hosting over 75.000 students and over 5.000 professors involved in teaching duties. These figures make Complutense University the largest university in Spain and one of the largest universities in Europe.

Currently, Complutense University ranks among the top universities in Spain and, along these over seven centuries of history, the University of Madrid has provided invaluable contributions in the sciences, fine arts, and political leadership to our country. Since ICOE-2023 Conference is devoted to science, some renowned Spanish scientists such as Nobel Prize winners Santiago Ramón y Cajal (1906) and Severo Ochoa (1959) are among those distinguished and prominent alumni from our University.



We acknowledge the support provided by the Faculty of Physics in the person of its Dean, Prof. Ángel Gómez Nicola, for celebrating this ICOE in its fantastic and historic “aula magna Blas Cabrera”, as well as the support by the Dean of the Faculty of Chemistry, Prof. M^a Teresa Villalba Díaz.

I would also like to remark the importance of the contribution of science to the modern society. Needless to say that the impressive progress of our society along the last two centuries is based on the scientific achievements and their application to the technological advances. Furthermore, a free and educated citizen of this century must have an important knowledge of science. Since the industrial revolution, the modern society is based on the knowledge and education as powerful engines to fuel the social progress. Today the so-called “knowledge-based society” requires, more than ever, new ideas. As stated by Albert Einstein, “In crisis times, ideas are more important than knowledge”. Science is based on the knowledge but also on visionary ideas.

Your work is, therefore, highly appreciated by the society and, in this regard, I would like to encourage you to continue with your personal efforts in the search for new ideas able to give rise to new concepts in science, new materials, new applications and, eventually, a new way of living in a better society.

The Organizing Committee



COMMITTEES

International Advisory Board

- Zhena Bao *Stanford University, USA*
Fabio Biscarini *UNIMORE, Italy*
Yvan Bonnasieux *Ecole Polytechnique CNRS, France*
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Natalie Stingelin *Georgia Tech, USA*
Guillaume Wantz *University of Bordeaux, France*
Martin Weis *STU FEI, Slovakia*

Local Organising Committee ICOE-16 (2023)

- Nazario Martín *Conference chairman*
Ana Ferruelo Nicolás *Administrative secretary*
Agustín Molina *Secretary organizer*
José Manuel Santos *Secretary organizer*
Inés García-Benito *Secretary organizer*
Javier Urieta Mora *Secretary organizer*

PROGRAMME AT A GLANCE

ICOE 2023 CONFERENCE SCHEDULE (3RD - 7TH JULY 2023, MADRID, SPAIN)

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00 - 9:15 h					
9:15 - 9:30 h		Colin Nuckolls	Xinliang Feng	Natalie Stingelin	Eugenio Coronado
9:30 - 9:45 h					
9:45 - 10:00h		Koen Vandewal	David Écija	Emilio Palomares	Fernando Martín
10:00 - 10:15 h					
10:15 - 10:30 h		Lorenzo Zani	Giovanni Bottari	Charles Patterson	Linda Angela Zotti
10:30 - 10:45 h					
10:45 - 11:00 h		Coffee break	Coffee break	Coffee break & poster	Coffee break & poster
11:00 - 11:15 h					
11:15 - 11:30 h		Marcel Mayor	Anthoula Papageorgiou	Yana Vaynzof	Jenny Nelson
11:30 - 11:45 h					
11:45 - 12:00 h		Thuc-Quyen Nguyen	Maurizio Prato	Jovana Milic	Beatriz Illescas Helena Alves
12:00 - 12:15 h		Pierre-Antoine Bouit	Alessandro Minotto	Ángela Sastre-Santos	Yutaka Wakayama
12:15 - 12:30 h		Eugenia Martínez-Ferrero	Ana Charas	Alessio Dessi	Daniel Iglesias
12:30 - 12:45 h	Registration	Gert-Jan Wetzelaer	David García-Fresnadillo	Elena Mena-Osteritz	Wojciech Pisula
12:45 - 13:00 h		Eva M. García-Frutos	Johannes Gierschner	Leonidas Palilis	Henrique Leonel Gomes
13:00 - 13:15 h		Kaspars Traskovskis	Petri Murto	Pilar de la Cruz	Poster awards & closing remarks
13:15 - 13:30 h					
13:30 - 13:45 h	Get together				
13:45 - 14:00 h		Lunch	Lunch	Lunch	
14:00 - 14:15 h					
14:15 - 14:30 h	Open ceremony				

PROGRAMME AT A GLANCE

ICOE 2023 CONFERENCE SCHEDULE (3RD - 7TH JULY 2023, MADRID, SPAIN)

	Monday	Tuesday	Wednesday	Thursday
14:30 - 14:45 h	Latha Venkataraman	Christoph Brabec	Emilio Pérez	Ji-Seon Kim
14:45 - 15:00 h				
15:00 - 15:15 h			Segi Yu	
15:15 - 15:30 h	Sandrine Heutz	Juan Casado	Yuanyuan Hu	Tomás Torres
15:30 - 15:45 h				
15:45 - 16:00 h	Hitoshi Seo	Jana Zaumseil	José L. Segura	
16:00 - 16:15 h	Coffee break	Coffee break	Coffee break & poster	
16:15 - 16:30 h				
16:30 - 16:45 h	Herre van de Zant	Shu Seki	Poster session & coffee / refreshements	Sylvain Chambon
16:45 - 17:00 h				David Curiel
17:00 - 17:15 h	Francisco Molina-López	Marta Mas-Torrent		Anastasia Soultati
17:15 - 17:30 h				
17:30 - 17:45 h	Edmund Leary	Short oral 1-4	Short Oral 5-15	
17:45 - 18:00 h	José M. Marín-Beloqui			
18:00 - 18:15 h	Flash 1-13	Flash 14-26		Free afternoon & social activity
18:15 - 18:30 h				
18:30 - 18:45 h				
18:45 - 19:00 h				

SCIENTIFIC PROGRAMME

MONDAY, JULY 3RD

12H00 REGISTRATION

13H15 GET TOGETHER

14H15 OPEN CEREMONY

MO-1

Chair: Koen Vandewal

14h30 **PLENARY LECTURE: Latha Venkataraman**

PL-01

ULTRAHIGH CONDUCTANCE IN RADICAL BASED LONG MOLECULAR WIRES

Latha Venkataraman.

Columbia University, New York, United States.

15h15 **INVITED SPEAKER: Sandrine Heutz**

IL-01

MOLECULAR SPINS AS A TOOL FOR MULTIMODAL CHARACTERIZATION AND ENERGY-SAVING TECHNOLOGIES

Sandrine Heutz¹, D. Lubert-Perquel², D. Kim¹, E. Salvadori³, C. W. M. Kay⁴,

A. Zsumska⁵, M. Azouzzi⁵, J. Nelson⁵, G. Aeppli⁶, M. Warner⁶, H. Demetriou¹.

¹Department of Materials/London Centre for Nanotechnology, Imperial College London, UK; ²National Renewable Energy Laboratory (NREL), Golden, USA; ³Department of Chemistry, University of Turin, Italy; ⁴Department of Chemistry, University of Saarland, Germany; ⁵Department of Physics, Imperial College London, UK; ⁶London Centre for Nanotechnology, UCL, London. ETH, EPFL, PSI, Switzerland.

15h45 **ORAL CONTRIBUTION: Hitoshi Seo**

OC-01

ANOMALOUS SPIN TRANSPORT IN MAGNETIC MOLECULAR CONDUCTORS

Hitoshi Seo.

RIKEN, Wako, Japan.

16H00 – 16H30

COFFEE BREAK

MO-2

Chair: Sandrine Heutz

16h30 INVITED SPEAKER: Herre van de Zant

IL-02

INTERFERING ELECTRON WAVES IN SINGLE-MOLECULE JUNCTIONS

Herre S.J. Van Der Zant.

Quantum Nanoscience Department, Kavli Institute of Nanoscience, Delft University of Technology, Delft, Netherlands.

17h00 INVITED SPEAKER: Francisco Molina-López

IL-03

UNIAXIAL MOLECULAR ANISOTROPY AS A STRATEGY TO BOOST THE PERFORMANCE OF ORGANIC ELECTRONICS: A CASE STUDY FOR OFETS AND THERMOELECTRICS

Francisco Molina-Lopez.

KU Leuven, Leuven, Belgium.

17h30 ORAL CONTRIBUTION: Edmund Leary

OC-02

HOW DOES ANTIAROMATICITY AFFECT SINGLE-MOLECULE CONDUCTANCE?

Edmund Leary¹, Lydia Abellán¹, Maximilian Schmidt², Daniel Wassy², Mathias Hermann², M. Teresa González¹, Nicolás Agrait³, Linda A. Zotti³, Birgit Esser².

¹IMDEA Nanociencia, Madrid, Spain; ²University of Freiburg, Freiburg, Germany; ³Universidad Autónoma de Madrid, Madrid, Spain.

17h45 ORAL CONTRIBUTION: José M. Marín-Beloqui

OC-03

TRUNCATED CONJUGATION IN FUSED HETEROCYCLE-BASED CONDUCTING POLYMERS: WHEN GREATER PLANARITY DOES NOT ENHANCE

Jose Manuel Marin-Beloqui.

Universidad de Málaga, Málaga, Spain.

18H00

FLASH ORAL CONTRIBUTIONS - SESSION 1

- FP-01
PRECISE DESIGN OF TRIDIMENSIONAL RYLENIMIDE SEMICONDUCTORS FOR SUSTAINABLE APPLICATIONS. THE EFFECT OF DIMENSIONALITY IN OSCS AND PHOTO-ELECTROCATALYSIS.
Matías J. Alonso Navarro¹, Fátima Suárez-Blas¹, Elena Gala¹, Alejandro de la Peña¹, M. Mar Ramos¹, José L. Segura².
¹Rey Juan Carlos University, Madrid, Spain; ²Complutense of Madrid University, Madrid, Spain.
- FP-02
INVESTIGATION OF NEW TADF MATERIALS DERIVATIVE OF THE 1,3,5-TRIAZINE MOLECULE
Eyad Al Souki¹, Ikbal Marghad², Mathieu Sauthier³.
¹University of Lille - Labkicosmos Company, Villeneuve-d'Ascq, France; ²Labkicosmos Company, Villeneuve-d'Ascq, France; ³University of Lille, Villeneuve-d'Ascq, France.
- FP-03
IN-SITU SURFACE DEPOSITION AND CHARACTERIZATION OF MULTI-SPIN-CARRYING METALLACROWN MOLECULES
Benedikt Baumann¹, Frederik Pütz¹, Ellen Brennfleck¹, Richard Blättner¹, Yves Kurek¹, Lukas Bolz¹, Robert Ranecki¹, Anne Lüpke², Dominik Laible², Stefan Lach¹, Eva Rentschler², Christiane Ziegler¹.
¹RPTU, Kaiserslautern, Germany; ²JGU, Mainz, Germany.
- FP-04
UNDERSTANDING THE STRUCTURAL DETAILS THAT ENABLE HIGH MOBILITIES IN NONCRYSTALLINE CONJUGATED POLYMERS
Jack Coker¹, Anders Gertsen², Xingyuan Shi¹, Matthew Ward¹, Stefania Moro³, Giovanni Costantini³, Iain McCulloch⁴, Jarvist Frost¹, Jenny Nelson¹.
¹Imperial College London, London, United Kingdom; ²Technical University of Denmark, Kongens Lyngby, Denmark; ³University of Birmingham, Birmingham, United Kingdom; ⁴University of Oxford, Oxford, United Kingdom.
- FP-05
EXPLORING THE BOUNDARIES OF CHEMICAL BONDING: OLIGOYNE-CUMULENE TRANSFORMATION IN CYCLOPENTA[H,I] ACEANTHRYLENE DIMERS
Álvaro Corrochano Fernández¹, Samara Medina², Sumit Chaurasia¹, Juan Casado², Tomás Torres¹, Giovanni Bottari¹.
¹Universidad Autónoma de Madrid, Madrid, Spain; ²Universidad de Málaga, Málaga, Spain.

- FP-06
SEMICONDUCTING TRIBLOCK COPOLYMERS AND THEIR USE IN SARS-COV-2 OFET BIOSENSORS
Kristina Ditte¹, Trang Anh Nguyen Le², Oliver Ditzer¹, Diana Isabel Sandoval Bojorquez², Soosang Chae¹, Michael Bachmann², Larysa Baraban², Franziska Lissel¹.
¹IPF Dresden, Dresden, Germany; ²HZDR, Dresden, Germany.
- FP-07
SYNTHESIS OF PHOTOCROMIC MOLECULES FOR DYE SENSITIZED SOLAR CELLS WITH NEUTRAL COLORATION
Samuel Fauvel, Alix Haurez, Valid-Mwatati Mwalukuku, Jose-Maria Andres-Castan, Cyril Aumaitre, Renaud Demadrille.
CEA, Grenoble, France.
- FP-08
LIGHT-FROZEN DYNAMIC COVALENT SYNTHESIS OF SEMI-CONDUCTING POLYMERS AND SIZE-DEFINED OLIGOMERS
Adèle Gapin¹, Aliocha Skrzypczak¹, Mélanie Legros², Catherine Foussat², Piétrick Hudhomme¹, Antoine Goujon¹.
¹Université d'Angers, Angers Cedex 1, France; ²Institut Charles Sadron, Strasbourg, France.
- FP-09
CHARGE-TRANSFER COMPLEXES: IMPLEMENTATION IN SOLUTION-PROCESSED ORGANIC FIELD-EFFECT TRANSISTORS
Maria Elisabetta Giglio¹, Sergi Riera Galindo¹, Carme Martinez Domingo¹, Tommaso Salzillo², Jose Miguel Asensi Lopez³, Marta Mas-Torrent¹.
¹ICMAB-CSIC, Bellaterra, Spain; ²University of Bologna, Bologna, Italy; ³University of Barcelona, Barcelona, Spain.
- FP-10
AGGREGATION OF OLIGOYNES
Fernando Gordillo¹, Rik Tykwinski², Juan Casado¹.
¹Facultad de Ciencias, Universidad de Málaga, Málaga, Spain; ²Department of Chemistry, University of Alberta, Alberta, Canada.
- FP-11
NEW APPROACH TO MODULATE THE PROPERTIES OF CHIRAL MOLECULAR NANOGRAFENES: OVERLAPPING BILAYERS
Patricia Izquierdo-García¹, Jesús M. Fernández-García¹, Nazario Martín².
¹Departamento de Química Orgánica I, Facultad de Ciencias Químicas, Universidad Complutense, Madrid, Spain; ²Departamento de Química Orgánica I, Facultad de Ciencias Químicas, Universidad Complutense; IMDEA-Nanociencia, C/ Faraday, 9, Campus de Cantoblanco, Madrid, Spain.

- FP-12
PARTICULAR ASPECTS OF SUBPHthalocyanine-BASED MOLECULAR MATERIALS: ON-SURFACE CHEMISTRY, SPIN-SELECTION AND SUPRAMOLECULAR ORGANIZATION.

Jorge Labella.

Universidad Autónoma de Madrid, Madrid, Spain.

- FP-13
FLEXIBLE HYBRID SUPERCAPACITORS FROM RENEWABLE RESOURCES

Tomáš Lapka, Petr Mazúr, Fatima Hassouna.

University of Chemistry and Technology in Prague, Prague, Czech Republic.

TUESDAY, JULY 4TH

TU-1

Chair: Emilio M. Pérez

09h00 **PLENARY LECTURE: Colin Nuckolls**

PL-02

NEW MATERIALS FOR ENERGY STORAGE AND CONVERSION

Colin Nuckolls.

Columbia University, New York, United States.

09h45 **INVITED SPEAKER: Koen Vandewal**

IL-04

NEW DEVICE ARCHITECTURES AND PERFORMANCE LIMITING FACTORS OF ORGANIC NEAR-INFRARED DETECTORS

Koen Vandewal.

IMO-IMOMECE, Hasselt University, Wetenschapspark 1, 3590 Diepenbeek, Belgium, Diepenbeek, Belgium.

10h15 **ORAL CONTRIBUTION: Lorenzo Zani**

OC-04

ORGANIC EMITTERS FOR SOLAR COLLECTION AND CONCENTRATION DEVICES

Lorenzo Zani, Matteo Bartolini, Costanza Papucci, Alessio Dessi, Daniele Franchi, Gianna Reginato, Alessandro Mordini, Massimo Calamante.

Institute of Chemistry of Organometallic Compounds (CNR-ICCOM), Sesto Fiorentino, Italy.

10H30 – 11H00 **COFFEE BREAK**

TU-2

Chair: Marta Mas-Torrent

11h00 **INVITED SPEAKER: Marcel Mayor**

IL-05

MECHANOSENSITIVE STRUCTURES IN MOLECULAR JUNCTIONS

Marcel Mayor¹, Kevin Weiland¹, Patrick Zwich¹, Ksenia Reznikova¹, Almudena Gallego¹, Herre H. S. J. Van Der Zant², Davide Stefani², Chunwei Hsu², Mickael Perrin², Maria Abbassi², Diana Dulić², Fabian Pauly³, Maxim Skripnik³, Werner Schosser³, Katawoura Beltako³.

¹University of Basel, Department of Chemistry, Basel, Switzerland;

²Kavli Institute of Nanoscience, Delft University of Technology, Delft, Netherlands; ³Institute of Physics, University of Augsburg, Augsburg, Germany.

- 11h30 INVITED SPEAKER: Thuc-Quyen Nguyen**
IL-06
ORGANIC SEMICONDUCTORS FOR APPLICATION IN NEAR IR PHOTODETECTORS
Thuc-Quyen Nguyen.
Center for Polymers and Organic Solids, University of California, Santa Barbara, United States.
- 12h00 ORAL CONTRIBUTION: Pierre-Antoine Bouit**
OC-05
BENZOPHOSPHOLES: HIGHLY TUNABLE MOLECULAR PLATFORM TO PREPARE ORGANIC AND HYBRID LEDS
Bouit Pierre-Antoine.
ISCR Univ Rennes CNRS, Rennes, France.
- 12h15 ORAL CONTRIBUTION: Eugenia Martínez-Ferrero**
OC-06
APPLICATION OF SELF-ASSEMBLED MOLECULES IN THE SELECTIVE CONTACTS OF NANOCRYSTAL LIGHT EMITTING DIODES
Eugenia Martínez-Ferrero, Sarika Kumari, Laia Marin-Moncusi, Jose G Sanchez, María Mendez, Emilio Palomares.
ICIQ, Tarragona, Spain.
- 12h30 ORAL CONTRIBUTION: Gert-Jan Wetzelaer**
OC-07
EFFICIENT SINGLE-LAYER BLUE ORGANIC LIGHT-EMITTING DIODES
Gert-Jan Wetzelaer, Oskar Sachnik, Xiao Tan, Yungui Li, Jasper Michels, Paul Blom.
Max Planck Institute for Polymer Research, Mainz, Germany.
- 12h45 ORAL CONTRIBUTION: Eva M. García-Frutos**
OC-08
AZAINDOLE DERIVATES FOR NON-DOPED ORGANIC LIGHT-EMITTING DEVICES
Eva M. García Frutos¹, Cristina Martín², Gustavo De Miguel³, Johan Hofkens⁴.
¹Instituto de Ciencia de Materiales de Madrid, Madrid, Spain; ²Universidad de Castilla-la Mancha, Albacete, Spain; ³Universidad de Cordoba, Córdoba, Spain; ⁴KU Leuven, Leuven, Belgium.
- 13h00 ORAL CONTRIBUTION: Kaspars Traskovskis**
OC-09
ORGANOMETALLIC COPPER COMPLEXES AS DUAL-EMITTING MATERIALS FOR SIMPLE DESIGN SINGLE-EMITTER WHITE OLEDs
Kaspars Traskovskis¹, Armands Ruduss¹, Kitija Stucere², Aivars Vembris².
¹Riga Technical University, Riga, Latvia; ²Institute of Solid State Physics, University of Latvia, Riga, Latvia.

13H15 – 14H30

LUNCH

TU-3

Chair: Herre van der Zant

14h30

PLENARY SPEAKER: Christoph J. Brabec

PL-03

TOWARDS A DIGITAL TWIN FOR ORGANIC AND PEROVSKITE PHOTOVOLTAICS

Christoph J. Brabec.

Institute of Materials for Electronic and Energy Technology (i-MEET), Friedrich-Alexander-Universität Erlangen-Nürnberg, Martensstrasse 7, 91058 Erlangen, Germany. High Throughput Methods in Photovoltaics, Forschungszentrum Jülich GmbH, Hemholtz Institute Erlangen-Nürnberg for Renewable Energy (HI ERN), Immerwahrstraße 2, 91058, Erlangen, Germany

15h15

INVITED SPEAKER: Juan Casado

IL-07

ELECTRICAL AND PHOTONIC APPLICATIONS OF ORGANIC DIRADICALS

Juan Casado.

a Department of Physical Chemistry, Faculty of Science, University of Málaga, Málaga, Spain.

15h45

ORAL CONTRIBUTION: Jana Zaumseil

OC-10

CIRCULARLY POLARIZED NEAR-INFRARED PHOTO- AND ELECTROLUMINESCENCE FROM ENANTIOPURE SINGLE-CHIRALITY SINGLE-WALLED CARBON NANOTUBES

Yohei Yomogida¹, Finn L. Sebastian², Yuuya Hosokawa¹, Nicolas F. Zorn², Sonja Wieland², Kazuhiro Yanagi¹, Jana Zaumseil².

¹Tokyo Metropolitan University, Tokyo, Japan; ²Heidelberg University, Heidelberg, Germany.

16H00 – 16H30

COFFEE BREAK

TU-4

Chair: Francisco Molina-López

16h30

INVITED SPEAKER: Shu Seki

IL-08

ELECTRON/SPIN TRANSPORT IN SYMMETRY BREAKING CONJUGATED MOLECULAR MATERIALS

Shu Seki.

Department of Molecular Engineering, Kyoto University, Kyoto, Japan.

17h00 INVITED SPEAKER: Marta Mas-Torrent

IL-09

FILMS OF SMALL MOLECULE/POLYSTYRENE BLENDS FOR HIGH PERFORMANCE OF FETs FOR SENSING APPLICATIONSMarta Mas-Torrent.*Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), Bellaterra, Spain.***17H30****SHORT ORAL CONTRIBUTIONS - SESSION 1**

• SO-01

ORGANIC PHOTODETECTORS AND THEIR TOLERANCE TO IMPURITIESChloé Dindault¹, Gilles Roche², Tanguy Jousselein-Oba¹, Sébastien Taillemite³, Sylvain Chambon², Pierre-Antoine Bonnardel³, Lionel Hirsch², Guillaume Wantz².*¹Univ. Bordeaux, CNRS, Bordeaux INP, IMS, UMR 5218 & SEQENS SAS, Bordeaux, France; ²Univ. Bordeaux, CNRS, Bordeaux INP, IMS, UMR 5218, Bordeaux, France; ³SEQENS SAS, Paris, France.*

• SO-02

AUTOMATED STATISTICAL ANALYSIS OF RAMAN SPECTRA OF NANOMATERIALSNatalia Martín Sabanés, Matthew D. Eaton, Sara Moreno Da Silva, Emilio M. Pérez.*IMDEA Nanoscience, Madrid, Spain.*

• SO-03

ORGANIC THIN FILM-BASED DEVICES FOR DIRECT AND INDIRECT DETECTION OF PROTONSIlaria Fratelli¹, Laura Basiricò¹, Andrea Ciavatti¹, John Anthony², Sabrina Calvi³, Sara Maria Carturan⁴, Antonio Valletta³, Alberto Aloisio⁵, Stefania De Rosa³, Felix Pino⁶, Marcello Campajola⁷, Sandra Moretto⁶, Luca Tortora³, Matteo Rapisarda⁸, Massimo Chiari⁹, Francesco Tommasino¹⁰, Ettore Sarnelli¹¹, Luigi Mariucci⁸, Paolo Branchini³, Alberto Quaranta¹⁰, Beatrice Fraboni¹.*¹University of Bologna - Department of Physics and Astronomy, Bologna, Italy; ²Department of Chemistry, University of Kentucky, Lexington, United States; ³National Institute of Nuclear Physics - Roma 3, Roma, Italy; ⁴National Institute of Nuclear Physics - Laboratori Nazionali di Legnaro, Legnaro, Italy; ⁵University of Naples Federico II, Department of Physics, Naples, Italy; ⁶Department of Physics and Astronomy, University of Padova, Padova, Italy; ⁷National Institute of Nuclear Physics - Naples, Naples, Italy; ⁸CNR - Institute for Microelectronics and Microsystems (IMM), Roma, Italy; ⁹National Institute of Nuclear Physics - Florence, Firenze, Italy; ¹⁰National Institute of Nuclear Physics - TIFPA, Trento, Italy; ¹¹National Institute of Nuclear Physics - Naples, Napoli, Italy.*

- SO-04
COVALENT MICROPATTERNING OF GRAPHENE BY TUNABLE EMULSIONS

Marina Garrido, Alicia Naranjo, Natalia Martín Sabanés, Emilio Pérez.
IMDEA Nanociencia, Madrid, Spain.

18H00

FLASH ORAL CONTRIBUTIONS - SESSION 2

- FP-14
DONOR-ACCEPTOR MOLECULAR NANOGRAFENES
Juan Lión-Villar¹, Jesús M. Fernández-García², Nazario Martín.
¹Departamento de Química Orgánica I, Facultad de CC. Químicas, Universidad Complutense de Madrid; IMDEA-Nanociencia, C/ Faraday, 9. Campus de Cantoblanco, Madrid, Spain; ²Departamento de Química Orgánica I, Facultad de CC. Químicas, Universidad Complutense de Madrid, Madrid, Spain.
- FP-15
THE IMPACT OF MOLECULAR AND MICROSTRUCTURAL PROPERTIES ON EFFICIENT CHARGE SEPARATION IN ORGANIC SOLAR CELLS
Daniel Medranda¹, Mohammed Azzouzi², Jenny Nelson².
¹Imperial College, London, United Arab Emirates; ²Imperial College, London, United Kingdom.
- FP-16
PLANAR CHIRALITY ENABLES NARROW BANDGAP CONJUGATED POLYMERS WITH RED CIRCULARLY POLARIZED LUMINESCENCE
Teodora Moiseanu¹, Rituparno Chowdhury², Juan Manuel Moreno Naranjo³, James Hill¹, Larissa Hogenhout¹, Robert Phipps¹, Matthew J. Fuchter³, Richard Friend², Hugo Bronstein¹.
¹Yusuf Hamied Department of Chemistry, University of Cambridge, Cambridge, United Kingdom; ²Cavendish Laboratory, University of Cambridge, Cambridge, United Kingdom; ³Department of Chemistry, Imperial College London, London, United Kingdom.
- FP-17
THE HETEROATOM EFFECT IN AMBIPOLAR DIRADICALS
Sergio Moles Quintero, Juan Casado.
University of Málaga, Málaga, Spain.
- FP-18
CHARACTERIZATION OF SPIN-COATED OLED STRUCTURES USING ORGANIC MAGNETIC FIELD EFFECTS
Morgenstern Annika¹, Weber Dominik², Zahn Dietrich R.t.¹, Schondelmaier Daniel², Salvan Georgeta¹.
¹Chemnitz University of Technology, Chemnitz, Germany; ²Westfälische Hochschule Zwickau, Zwickau, Germany.

- FP-19
ELECTRON SPIN RESONANCE OF SYSTEMATICALLY DOPED POLYMERIC SEMICONDUCTORS
Tarig Mustafa, Dionisius Tjhe, Xinglong Ren, Ian Jacobs, Yuxuan Huang, Clare Grey, Henning Sirringhaus.
University of Cambridge, Cambridge, United Kingdom.
- FP-20
NANOSIZING ALLOWS COMPLETE INDIVIDUALIZATION AND SIGNIFICANT REINFORCEMENT IN POLYMER-SWNT COMPOSITES
Julia Villalva¹, Amalia Rapakousiou¹, Miguel A. Monclús², Juan P. Fernández Blázquez², Jimena De La Vega², Alicia Naranjo Chacón¹, Mariano Vera Hidalgo¹, Luisa Ruiz González³, Henrik Pedersen⁴, Emilio M. Pérez¹.
¹IMDEA Nanociencia, Madrid, Spain; ²IMDEA Materiales, Madrid, Spain; ³Universidad Complutense de Madrid, Madrid, Spain; ⁴Nanocore ApS, Copenhagen, Denmark.
- FP-21
NEW HYBRID MATERIALS BASED ON CARBON NANODOTS AND GLYCOFULLERENES FOR BIOLOGICAL APPLICATIONS.
Gema Nieto-Ortiz, Justo Cabrera-González, Laura Rodríguez-Pérez, Beatriz M. Illescas, María Ángeles Herranz, Nazario Martín.
Universidad Complutense de Madrid, Madrid, Spain.
- FP-22
SYNTHESIS OF NON-SYMMETRICAL CONJUGATED POLYMERS STARTING FROM NITRO-PERYLENE DIIMIDE
Maxime Roger¹, Oksana Krupka², Véronique Montembault³, Laurent Fontaine³, Piétrick Hudhomme².
¹Université Angers, MOLTECH-Anjou, Angers, France; ²Université Angers, MOLTECH-Anjou, Angers, France; ³Le Mans Université - IMMM, Le Mans, France.
- FP-23
INVESTIGATING CHARGE TRAP DENSITY AT POLYMER-DIELECTRIC INTERFACES OF THIN FILM TRANSISTORS WITH PHOTOEXCITATION SPECTROSCOPY
Yu Kang Song, Jiyoul Lee.
Pukyong National University, Busan, South Korea.

- FP-24
NOVEL DONOR-ACCEPTOR COMBINATIONS AFFORDING LOW VOLTAGE LOSSES IN INDOOR ORGANIC PHOTOVOLTAICS
Dries Theunissen¹, Xueshi Jiang², Koen Vandewal², Wouter Maes¹.
¹Hasselt University, Institute for Materials Research (IMO-IMOMEC), Design & Synthesis of Organic Semiconductors (DSOS); IMEC, Associated Laboratory IMOMEC, Diepenbeek, Belgium; ²IMEC, Associated Laboratory IMOMEC; Hasselt University, Institute for Materials Research (IMO-IMOMEC), Organic Opto-Electronics (OOE), Diepenbeek, Belgium.
- FP-25
TTM-ACCEPTOR RADICALS FOR DOUBLET EMISSION
Lucy Walker, Petri Murto, Lujo Matasovic, Weixuan Zeng, Sebastian Gorgon, Rituparno Chowdhury, Biwen Li, Pratyush Ghosh, Hugo Bronstein, Richard H. Friend.
University of Cambridge, Cambridge, United Kingdom.
- FP-26
ELECTROLYTE GATE TRANSISTOR-BASED BIOSENSORS FOR COVID-19 DETECTION
Jaehyun Yoo, Jiyoul Lee.
Pukyong National University, Busan, South Korea.

WEDNESDAY, JULY 5TH

WE-1

Chair: Colin Nuckolls

09h00 PLENARY LECTURE: Xinliang Feng

PL-04

TWO-DIMENSIONAL CONJUGATED POLYMERS: FROM DREAM TO REALITY

Xinliang Feng.

Max Planck Institute of Microstructure Physics; Technische Universitaet Dresden, Dresden, Germany.

09h45 INVITED SPEAKER: David Écija

IL-10

ON-SURFACE COVALENT SYNTHESIS OF II-CONJUGATED NANOMATERIALS

David Écija.

IMDEA Nanoscience, Madrid, Spain.

10h15 ORAL CONTRIBUTION: Giovanni Bottari

OC-11

PORPHYRIN-BASED NANOARCHITECTURES: BOTTOM-UP FABRICATION AND ATOMIC-SCALE CHARACTERIZATION

Giovanni Bottari¹, Luis Mateo¹, Tomás Torres¹, Qiang Sun², Pascal Ruffieux², Roman Fasel², Roberto Robles³, Nicolas Lorente³.

¹Universidad Autónoma de Madrid, Madrid, Spain; ²Empa-Swiss Federal Laboratories for Materials Science and Technology, Dübendorf, Switzerland;

³Centro de Física de Materiales (CSIC-UPV/EHU), San Sebastián, Spain.

10H30 – 11H00

COFFEE BREAK

WE-2

Chair: Juan Casado

11h00 INVITED SPEAKER: Anthoula Papageorgiou

IL-11

ENGINEERING DIVERSITY OF ON-SURFACE COORDINATION POLYMERS FROM INDIGO AND IRON

Anthoula C. Papageorgiou¹, Hongxiang Xu², Ritam Chakraborty³, Biao Yang², Abhishek K. Adak³, Dennis Meier², Alex Riss², Joachim Reichert², Shobhana Narasimhan³, Johannes V. Barth².

¹Technical University of Munich, TUM School of Natural Sciences, Physics Department E20, Munich, Germany; ²Department of Chemistry, Laboratory of Physical Chemistry, National and Kapodistrian University of Athens, Athens, Greece; ³Technical University of Munich, TUM School of Natural Sciences, Physics Department E20, Munich, Germany; ³Jawaharlal Nehru Centre for Advanced Scientific Research, India, Bengaluru, India.

11h30 INVITED SPEAKER: Maurizio Prato

IL-12

CARBON NANODOTS: THE MISSING LINK BETWEEN THE MOLECULAR AND THE NANOSCALE WORLDS

Maurizio Prato.

Department of Chemical and Pharmaceutical Sciences, University of Trieste, Italy; CIC BiomaGUNE, San Sebastián, Spain.

12h00 ORAL CONTRIBUTION: Alessandro Minotto

OC-12

SINGLET EXCITON FISSION AS A PROBE OF THE AMORPHOUS-TO-CRYSTAL TRANSITION IN RUBRENE THIN FILMS

Alessandro Minotto, Silvia Trabattoni, Luisa Raimondo, Alice Pancaldi, Jacopo Perego, Angiolina Comotti, Carlo Antonini, Francesco Meinardi, Angelo Monguzzi, Adele Sassella.

University of Milano-Bicocca, Milan, Italy.

12h15 ORAL CONTRIBUTION: Ana Charas

OC-13

OXETANES AS A NEW CLASS OF DOPANTS FOR PEDOT: PSS AND APPLICATIONS AS WATER-RESISTANT TRANSPARENT ELECTRODES

Ana Charas¹, Sara Jorge¹, António Ablú¹, Fábio Garrudo¹, Adelino Galvão², Luís Santos³, Jorge Morgado¹.

¹Instituto de Telecomunicações, Lisbon, Portugal; ²Instituto Superior Técnico, Universidade de Lisboa, Lisbon, Portugal; ³Instituto Superior Técnico, Universidade de Lisboa, Lisbon, Portugal.

12h30 ORAL CONTRIBUTION: David García-Fresnadillo

OC-14

ON THE THERMALLY ACTIVATED DELAYED FLUORESCENCE, ANTI-KASHA AND DUAL FLUORESCENCE AND PHOSPHORESCENCE OF CURVED NANOGRAFENES

David García-Fresnadillo¹, Sergio Ramírez-Barroso², Jesús Manuel Fernández-García¹, Fernando Romeo-Gella³, Lara Martínez-Fernández³, Inés Corral³, Reinhold Wannemacher⁴, Nazario Martín².

¹Organic Chemistry Dept., Faculty of Chemistry, Universidad Complutense de Madrid, Madrid, Spain; ²Organic Chemistry Dept., Faculty of Chemistry, Universidad Complutense de Madrid; ; IMDEA Nanoscience, C/Faraday 9, Campus de Cantoblanco., Madrid, Spain; ³Chemistry Dept., Universidad Autónoma de Madrid, Campus de Cantoblanco., Madrid, Spain; ⁴IMDEA Nanoscience, C/Faraday 9, Campus de Cantoblanco, Madrid, Spain.

12h45 ORAL CONTRIBUTION: Johannes Gierschner

OC-15

CHARGE TRANSFER STATE ENGINEERING FOR TAILOR-MADE LUMINESCENT ORGANIC MATERIALS

Johannes Gierschner¹, Siyang Feng¹, Lianxuan Wang¹, Juan Carlos Roldao¹, Begoña Milián Medina², Reinhold Wannemacher¹, Frank Würthner³, Zengqi Xie⁴, Min Sang Kwon⁵, Soo Young Park⁵.

¹IMDEA Nanociencia, Madrid, Spain; ²University of Valencia, Valencia, Spain; ³University of Würzburg, Würzburg, Germany; ⁴South China University of Technology, Guangzhou, China; ⁵Seoul National University, Seoul, South Korea.

13h00 ORAL CONTRIBUTION: Petri Murto

OC-16

MESITYLATED TRITYL RADICALS AS A NEW PLATFORM FOR DOUBLET EMISSION

Petri Murto, Rituparno Chowdhury, Sebastian Gorgon, Erjuan Guo, Weixuan Zeng, Yuqi Sun, Haydn Francis, Laura Brown, Biwen Li, Hwan-Hee Cho, Richard H. Friend, Hugo Bronstein.

University of Cambridge, Cambridge, United Kingdom.

13H15 – 14H30 LUNCH

WE-3

Chair: Ángela Sastre-Santos

14h30 INVITED SPEAKER: Emilio Pérez

IL-13

NOVEL CHEMICAL TOOLS TO MODIFY CARBON NANOTUBES AND 2D MATERIALS

Emilio M. Pérez.

IMDEA Nanociencia, Madrid, Spain.

15h00 INVITED SPEAKER: Aurelio Mateo-Alonso

IL-14

STERIC CROWDING IN COVALENT ORGANIC FRAMEWORKS

Aurelio Mateo-Alonso.

POLYMA, University of the Basque Country, Avenida de Tolosa 72, 20018 San Sebastian, Spain; Ikerbasque, Basque Foundation for Science, Bilbao, Spain.

15h30 ORAL CONTRIBUTION: Segi Yu

OC-17

CARBON NANOTUBES AND GRAPHENE IN ELECTROLUMINESCENCE DEVICES

Segi Yu¹, Kwangsin Ahn¹, So-Yeon Jun².

¹Hankuk University of Foreign Studies, Yongin, South Korea; ²Korea Institute of Industrial Technology, Incheon, South Korea.

15h45 ORAL CONTRIBUTION: Yuanyuan Hu

OC-18

DOPING OF ORGANIC SEMICONDUCTORS: NOVEL DOPANTS, MECHANISMS AND APPLICATIONS

Yuanyuan Hu.

Hunan University, Changsha, China.

WE-4

16H00

POSTER SESSION & COFFEE/REFRESHMENTS

• P-01

A ROUTE TOWARDS THE DESIGN OF PEDOT: PSS INK-JET INK FOR LARGE-SCALE PEROVSKITE SOLAR CELL

Duygu Akin Kara, Alper Ekici, Ceylan Zafer.

Ege University -Solar energy Institute, Bornova, Turkey.

• P-02

CARBON NANODOTS INTERFACE WITH BODIPY CHROMOPHORES BY BOTTOM-UP APPROACHES

Jaime T. Alcolea-Cerdán¹, D. González-Pinardo¹, L. Rodríguez-Pérez¹, M. A. Herranz¹, N. Martín².

¹Department of Organic Chemistry, Faculty of Chemistry, Universidad Complutense de Madrid, Madrid, Spain; ²Department of Organic Chemistry, Faculty of Chemistry, Universidad Complutense de Madrid; IMDEA Nanociencia, c/Faraday 9, Campus Cantoblanco, Madrid, Spain.

• P-03

THEORETICAL INSIGHTS INTO CHARGE CARRIER GENERATION AND DYNAMICS IN ORGANIC SEMICONDUCTORS THROUGH DENSITY FUNCTIONAL THEORY

Fabian Bauch, Chuan-Ding Dong, Stefan Schumacher.

Paderborn University, Paderborn, Germany.

• P-04

ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY (EIS) CHARACTERIZATION OF A PRINTED DRY ELECTRODE FOR NEUROMUSCULAR ELECTRICAL STIMULATION

Pablo F. Betancur¹, Youssif Merhi², Teresa S. Ripolles¹, Peter H. Mikkelsen², Pablo P. Boix¹, Shweta Agarwala².

¹Universidad de Valencia, Instituto de Ciencia de Materiales, Valencia, Spain; ²Department of Electrical and Computer Engineering, Aarhus University, Aarhus, Denmark.

- P-05
HIGH TRIPLET ENERGY POLYMERS CONTAINING PHOSPHINE OXIDE AS NOVEL HOSTS FOR SOLUTION-PROCESSABLE ORGANIC LIGHT-EMITTING DIODES
Enrique Caldera-Cruz¹, Takuya Tsuda¹, Heidi Thomas², Paulius Imbrasas², Roman Tkachov³, Tim Achenbach², Sebastian Reineke², Anton Kiriy⁴, Brigitte Voit¹.
¹Leibniz Institute of Polymer Research Dresden, Dresden, Germany; ²Technische Universität Dresden, Dresden, Germany; ³beeOLED GmbH, Dresden, Germany; ⁴Privat, Dresden, Germany.
- P-06
DYNAMIC ELECTROCHEMISTRY OF ANTHANTHRONE
Abel Cárdenas¹, Frédéric Lirette², José Marín¹, David Casanova³, Jean-François Morin², Juan Casado¹.
¹University of Málaga, Málaga, Spain; ²Université Laval, Québec, Canada; ³Basque Foundation for Science (DC) & Donostia International Physics Center, San Sebastián, Spain.
- P-07
THE ROLE OF PROCESSING ON ELECTRON-ACCEPTOR FILM MORPHOLOGY
Leticia Christopholi.
Karlstad University, Karlstad, Sweden.
- P-08
BIPOLAR THIOXANTHONE DERIVATIVES FOR OLEDs
Asta Dabulienė¹, Jurate Simokaitienė¹, Simas Macionis¹, Dalius Gudeika¹, Dmytro Volyniuk¹, Malek Mahmoudi¹, Rita Sadzeviciene², Sigitas Stoncius², Juozas V. Grazulevicius¹.
¹Kaunas University of Technology, Kaunas, Lithuania; ²Center for Physical Sciences and Technology, Vilnius, Lithuania.
- P-09
TOWARDS GLASSY COLUMNAR LC MATRICES FOR ANISOTROPIC TADF
Wilson De Oliveira¹, Mariliagabriela Belarmino Cabral¹, Hugo Marchi Luciano², Fabricia Nunes Da Silva³, Giliandro Farias², Hugo Gallardo², Eduard Westphal⁴, Ivan Bechtold², Andre Vieira³, Fabien Durola¹, Harald Bock¹.
¹Univ. de Bordeaux, Pessac, France; ²UFSC, Florianopolis, Brazil; ³UFBA, Salvador, Brazil; ⁴UFBA, Florianopolis, Brazil.
- P-10
MOLECULAR DOPING OF ORGANIC SEMICONDUCTORS ANALYZED BY BROKEN-SYMMETRY DFT
Dong Chuanding, Bauch Fabian, Schumacher Stefan.
Paderborn University, Paderborn, Germany.

- P-11
PHOSPHORESCENT IRIIDIUM(III) COMPLEXES FEATURING INTER- AND INTRAMOLECULAR II-II STACKING BETWEEN FLUORINATED AND UNFLUORINATED AROMATIC FRAGMENTS
Kirills Dmitrijevs¹, Kaspars Traskovskis¹, Valdis Kokars¹, Sergey Belyakov².
¹Institute of Applied Chemistry, Riga Technical University, Riga, Latvia; ²Latvian Institute of Organic Synthesis, Riga, Latvia.
- P-12
ANTHRYL-FUSED TETRACYANOQUINODIMETHANE (TCNQ) DERIVATIVES. A VERSATILE ELECTRON-ACCEPTOR MOIETY.
Oscar Fernández Vera, Luis Manuel Mateo, Giovanni Bottari, Tomás Torres.
Universidad Autónoma de Madrid, Madrid, Spain.
- P-13
PYRROLOPYRROLE AZA-BODIPY PHOTOSENSITIZERS FOR IMAGE-GUIDED PHOTODYNAMIC THERAPY
Mathias Fraiponts¹, Wouter Maes¹, Benoît Champagne².
¹Hasselt University, Hasselt, Belgium; ²University of Namur, Namur, Belgium.
- P-14
SUPRAMOLECULAR AND ON-SURFACE ORGANIZATION OF PERIPHERALLY CHLORINATED SUBPHTHALOCYANINES
Marta Gómez Gómez, Jorge Labella, Tomás Torres.
Universidad Autónoma de Madrid, Madrid, Spain.
- P-15
CARBAZOLE DERIVATIVE ACCEPTOR MOLECULES FOR NON-FULLERENE ORGANIC SOLAR CELLS
Gulay Zeynep Gunel, Duygu Akin Kara, Tamer Yesil, Ceylan Zafer.
Ege University Solar Energy Institute, Izmir, Turkey.
- P-16
CONTROLLABLE CRYSTALLIZATION OF EMISSIVE LAYERS IN OLEDs: INVESTIGATING THE ROLE OF CONFORMATIONAL STABILIZATION AND PROPERTIES ENHANCEMENT FOR HIGHER EFFICIENCIES AND COLOUR TUNING
Matas Guzauskas¹, Dmytro Volyniuk¹, Irena Kulszewicz-Bajer², Algirdas Lazauskas¹, Adam Pron², Juozas Vidas Grazulevicius¹.
¹Kaunas University of Technology, Kaunas, Lithuania; ²Warsaw University of Technology, Warsaw, Poland.

- P-17
REDOX-ACTIVE METALLOPOLYMERS AND THEIR POTENTIAL APPLICATION IN ELECTROCHROMIC MULTI-STATE MEMORY DEVICE
Franziska Lissel¹, Po Yuen Ho², Evgenia Dmitrieva³, Ningwei Sun², Olga Guskova².
¹Technische Universität Hamburg, Hamburg, Germany; ²Leibniz-Institut für Polymerforschung (IPF) Dresden e.V., Dresden, Germany; ³Leibniz-Institut für Festkörper- und Werkstoffforschung (IFW) Dresden, Dresden, Germany.
- P-18
SERIES OF HIGHLY LUMINESCENT THIAZOLINE CARBENE-AU(I)-AMIDE COMPLEXES AND EVALUATION OF OLED APPLICATION
Annija Jece, Zanis Sisojevs, Armands Ruduss, Kaspars Traskovskis.
Institute of Applied Chemistry, Riga Technical University, Riga, Latvia.
- P-19
IMPACT OF CHEMICAL MODIFICATIONS ON CRYSTAL STRUCTURE OF POLYDIKETOPYRROLOPYRROLE COPOLYMERS
Robert Kahl¹, Gert Krauss², Andreas Erhardt², Oleksandr Dolynchuk¹, Mukundan Thelakkat², Thomas Thurn-Albrecht¹.
¹Martin Luther University Halle-Wittenberg, Halle, Germany; ²University of Bayreuth, Bayreuth, Germany.
- P-20
HYBRID SUPERCAPASITORS WITH ORGANIC SINGLE CRYSTAL NANOCOMPOSITE ELECTRODES
Koray Kara¹, Burak Gultekin².
¹Izmir Katip Celebi University, Izmir, Turkey; ²Ege University, Izmir, Turkey.
- P-21
EXPERIMENTAL AND THEORETICAL STUDY OF EXCIPLEX-FORMING COMPOUNDS CONTAINING TRIFLUOROBIPHENYL AND 3,6-DI-TERT-BUTYLCARBAZOLE UNITS AND THEIR PERFORMANCE IN OLEDs
Rasa Keruckiene¹, Matas Guzauskas¹, Joseph Cameron², Peter J. Skabara², Dmytro Volyniuk¹, Gjergji Sini³, Juozas V. Grazulevicius¹.
¹Kaunas University of Technology, Kaunas, Lithuania; ²University of Glasgow, Glasgow, United Kingdom; ³CY Paris Cergy Université, Paris, France.
- P-22
SELF-ASSEMBLED SUBPC CAGE CATALYZED FOR REGIOSELECTIVE FUNCTIONALIZATION OF FULLERENE IN AQUEOUS MEDIA
Sunit Kumar.
Universidad Autónoma de Madrid (UAM), Madrid, Spain.

- P-23
IMPURITY ANALYSIS OF ORGANIC THIN FILM BY SOLUTION PROCESS USING LASER DESORPTION/IONIZATION MASS IMAGING SYSTEM
Chan-Jae Lee¹, Jooyeon Oh², Insun Yoon¹, Youngmin Kim¹.
¹Korea Electronics Technology Institute, Seongnam, South Korea; ²ASTA, Suwon, South Korea.
- P-24
CARBAZOLE DERIVATIVES WITH CYANO GROUPS FOR PHOTODETECTOR APPLICATIONS
Karolis Leitonas, Viktorija Andrulėviciene, Dmytro Volyniuk, Juozas V. Grazulevicius.
Kaunas University of Technology, Kaunas, Lithuania.
- P-25
ELECTROCHEMICAL ACTIVATION OF THIN FILM POLY(P-PHENYLENEDIAMINE) ON A SCREEN PRINTED CARBON ELECTRODE BY METHYLENE BLUE
Sabine Lenggger.
Silicon Austria Labs GmbH, Villach, Austria.
- P-26
POLAR, COLUMNAR SUBPHTHALOCYANINE-BASED SUPRAMOLECULAR STRUCTURES: DESIGN, SYNTHESIS AND CHARACTERIZATION.
Elisa López Serrano¹, Enrique Ortí², Jorge Labella Santodomingo¹, Tomás Torres Cebada¹.
¹Universidad Autónoma de Madrid, Madrid, Spain; ²Universidad de Valencia, Valencia, Spain.
- P-27
SYNTHESIS OF TERTHIOPHENE LIGANDS FOR THE PREPARATION AND STUDY OF ORGANIC-INORGANIC 2D HYBRID PEROVSKITES IN PHOTOVOLTAIC DEVICES.
Laija Marín Moncusí, Carlos Eduardo Puerto Galvis, Eugenia Martínez-Ferrero, Emilio Palomares.
ICIQ, Tarragona, Spain.
- P-28
AGGREGATION-INDUCED EMISSION LUMINOGENS: LEVERAGING RESTRICTED INTRAMOLECULAR ROTATION IN PROPELLER-SHAPED SYSTEMS
Arturo Martínez-Berná, Jesús Manuel Fernández-García, Nazario Martín.
Universidad Complutense de Madrid, Madrid, Spain.

- P-29
SELF-ASSEMBLED PYRENE-BASED HOLE TRANSPORTING LAYERS FOR NARROW-BANDGAP INVERTED PEROVSKITE SOLAR CELLS
Miriam Más-Montoya¹, Paula Gómez¹, Junke Wang², René A. J. Janssen², David Curiel¹.
¹University of Murcia, Murcia, Spain; ²Eindhoven University of Technology, Eindhoven, Netherlands.

- P-30
SPIRO-DERIVATIVES AS HOLE TRANSPORTING MATERIALS FOR IMPROVING THE PERFORMANCE OF PEROVSKITE SOLAR CELLS
Silvia Orecchio¹, Javier Urieta-Mora², Inés García-Benito², Jaeki Jeong³, Juan Aragón⁴, Agustín Molina-Ontoria², Enrique Ortí⁵, Michael Grätzel³, Francesco Giacalone¹, Nazario Martín².
¹University of Palermo, Palermo, Italy; ²Dpto. de Química Orgánica, Facultad de Química, Universidad Complutense, Madrid, Spain, Madrid, Spain; ³École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, Lausanne, Switzerland; ⁴Instituto de Ciencia Molecular, Universidad de Valencia, Paterna, Spain, Paterna, Spain; ⁵d Instituto de Ciencia Molecular, Universidad de Valencia, Paterna, Spain, Paterna, Spain.

- P-31
ORGANIC MEMRISTOR FOR RESISTIVE MEMORY AND BRAIN-INSPIRED SYNAPTIC LEARNING
Ambika Pandey¹, Andrei Chernyshev¹, Yadu Ram Panthi¹, Jiri Pflieger², Jiri Zednik¹.
¹Charles University, Prague, Czech Republic; ²Institute of Macromolecular Chemistry, Prague, Czech Republic.

- P-32
MECHANICALLY ROBUST CHARGE COLLECTION OF ORGANIC PHOTOVOLTAICS WITH AMORPHOUS ALUMINUM-BASED ALLOY THIN-FILM ELECTRODES
Jae Sang Cho¹, Woongsik Jang¹, Chan-Jae Lee², Dong Hwan Wang¹, Keumhwan Park³.
¹Chung-Ang University, Seoul, South Korea; ²Korea Electronics Technology Institute, Seongnam-si, South Korea; ³Korea Electronics Technology Institute, Seongman-si, South Korea.

- P-33
SYNTHETIC APPROACH TOWARD FUNCTIONALIZED DIBENZO[HI,ST]OVALENES AS HIGHLY STABLE AND EMISSIVE NANOGRAFPHENES WITH ZIGZAG EDGES
Saurav Raj, Xiushang Xu, Akimitsu Narita.
Okinawa Institute of Science and Technology Graduate University (OIST), 1919-1 Tancha, Onna-son, Kunigami, Okinawa 904- 0495, Japan.

- P-34
PULSED LASER SYNTHESIS OF CARBON NANOPARTICLES FROM GLUCOSE.
Antonio Ribeiro González.
Complutense University of Madrid, Madrid, Spain.
- P-35
MOLECULAR DESIGN OPTIMIZATION OF SULFONYL FUNCTIONALIZED CARBENE-METAL-AMIDE EMITTERS FOR APPLICATION IN VACUUM-PROCESSED OLEDs
Armands Ruduss, Annija Jece, Kaspars Traskovskis.
Riga Technical University, Riga, Latvia.
- P-36
SYNTHESIS AND CHARACTERIZATION OF 1,8-NAPHTHALIMIDES FOR OLED APPLICATIONS
Jurate Simokaitiene, Naveen Masimukku, Dalius Gudeika, Dmytro Volyniuk, Oleksandr Bezikonnyi, Asta Dabuliene, Karolis Leitonas, Juozas V Grazulevicius.
Kaunas University of Technology, Kaunas, Lithuania.
- P-37
HIGHLY LUMINESCENT BENZOTHAZOLINE CARBENE-CU(I)-AMIDE COMPLEXES.
Zanis Sisojevs¹, Armands Ruduss¹, Kaspars Traskovskis¹, Sergey Belyakov².
¹Riga Technical University, Riga, Latvia; ²Latvian Institute of Organic Synthesis, Riga, Latvia.
- P-38
PHOTORESPONSE OF COPPER PHTHALOCYANINE FIELD-EFFECT TRANSISTORS
Tomas Vincze, Michal Micjan, Juraj Nevrela, Martin Weis.
Slovak University of Technology in Bratislava, Bratislava, Slovakia.
- P-39
PHENAZINE-SUBSTITUTED ACRIDONES WITH REVERSIBLY SWITCHABLE EMISSION FOR EFFICIENT ORGANIC LIGHT-EMITTING DIODES
Dmytro Volyniuk¹, Matas Guzauskas¹, Irena Kulszewicz-Bajer², Malek Mahmoudi¹, Algirdas Lazauskas¹, Vidmantas Jasinskas³, Adam Pron⁴, Vidmantas Gulbinas³, Juozas Grazulevicius¹.
¹Kaunas University of Technology, Kaunas, Lithuania; ²Warsaw University of Technology, Warsaw, Poland; ³Center for Physical Sciences and Technology, Vilnius, Lithuania; ⁴Warsaw University of Technology, Warsaw, Lithuania.

- P-40
COVALENT FUNCTIONALIZATION CONTROLLED BY MOLECULAR DESIGN FOR APTAMERIC RECOGNITION OF SEROTONIN IN GRAPHENE-BASED FIELD-EFFECT TRANSISTORS
Cecilia Wetzel¹, Sergi Brosel-Oliu², Elisabet Prats-Alfonso², Anton Guimera², Alejandro Criado³, Maurizio Prato¹.
¹*CICbiomaGUNE, Donostia, Spain;* ²*IMB-CNM, Barcelona, Spain;* ³*CICA, A Coruña, Spain.*
- P-41
PHOTOSWITCHABLE POLYMERS FOR ORGANIC ELECTROCHEMICAL TRANSISTORS
Sultaan Yousaf, Hugo Bronstein.
University of Cambridge, Cambridge, United Kingdom.
- P-42
ELECTRONIC MEMORY EFFECT AND SYNAPTIC PLASTICITY ON DIKETOPYRROLOPYRROLE-THIOPHENE-BASED THIN FILMS
Yadu Ram Panthi¹, Jiri Pflieger², Ambika Pandey¹, Petra Horáková³.
¹*Institute of Macromolecular Chemistry, Czech Academy of Sciences; Faculty of Mathematics and Physics, Charles University, Praha, Czech Republic;* ²*Institute of Macromolecular Chemistry, Czech Academy of Sciences, Praha, Czech Republic;* ³*Centre for Organic Chemistry, Rybitvi 296, 533 54 Rybitvi, Czech Republic, Rybitvi, Czech Republic.*
- P-43
NEW FUNCTIONAL ANTHRACENE BASED LIQUID CRYSTALS TOWARDS OPTOELECTRONIC DEVICE APPLICATIONS
Abir Moghnieh¹, Pierre-Edouard Danjou², Khaoula Ferchichi¹, Yahia Boussoualem¹, Abdelylahaa Daoudi¹
¹*Unit of Dynamics and Structure of Molecular Materials (UDSMM) UR 4476, ULCO, 145 Avenue Maurice Schumann 59140 Dunkerque, France;* ²*Unit of Environmental Chemistry and Interactions with Living Organisms (UCEIV) UR 4492, ULCO, 145 Avenue Maurice Schumann 59140 Dunkerque, France.*
- P-44
DERIVATIVE OF DIPHENYL SULFONE AND CARBAZOLE AS BIPOLAR HOST FOR EFFICIENT ELECTROLUMINESCENT DEVICES
Juozas V. Grazulevicius¹, Dalius Gudeika¹, Oleksandr Bezvikonnyi¹, Naveen Masimukku¹, Dmytro Volyniuk¹, Chia-Hsun Chen², Wen-Cheng Ding², Jiun-Haw Lee², Tien-Lung Chiu³
¹*Department of Polymer Chemistry and Technology, Kaunas University of Technology, K. Barsausko st.59, LT- 51423, Kaunas, Lithuania;* ²*Graduate Institute of Photonics and Optoelectronics, National Taiwan University, 1, Section 4, Roosevelt Road, Taipei 10617, Taiwan;* ³*Department of Electrical Engineering, Yuan Ze University, 135 Yuan-Tung Road, Taoyuan 32003, Taiwan.*

THURSDAY, JULY 6TH

TH-1

Chair: **Jenny Nelson**

09h00 **PLENARY LECTURE: Natalie Stingelin**

PL-05

**DECIPHERING THE DIFFERENCE BETWEEN FLEXIBLE CHAIN
AND HAIRY-ROD POLYMER SEMICONDUCTORS**

Natalie Stingelin.

Georgia Institute of Technology, Atlanta, United States.

09h45 **INVITED SPEAKER: Emilio Palomares**

IL-15

**MOLECULAR PHOTOVOLTAIC DEVICES: THE CENTRAL ROLE OF
CHEMISTRY**

Emilio J. Palomares Gil.

*ICIQ-BIST. Avda. Països Catalans, 16. Tarragona. E-43007; ICREA.
Avda. Passeig Lluís Companys, 23., Barcelona, Spain.*

10h15 **ORAL CONTRIBUTION: Charles Patterson**

OC-19

**CHARGE TRANSFER STATES AND ELECTROABSORPTION
SPECTROSCOPY: CHALLENGES TO THEORY**

Charles Patterson, Debapriya Chaudhuri, Smruti Sahoo.

Trinity College Dublin, Dublin, Republic of Ireland.

10H30 – 11H00 **COFFEE BREAK & POSTERS**

TH-2

Chair: **Segi Yu**

11h00 **INVITED SPEAKER: Yana Vaynzof**

IL-16

**VAPOR DEPOSITION OF METAL HALIDE PEROVSKITES -
PHOTOVOLTAICS AND BEYOND**

Yana Vaynzof.

*Technische Universität Dresden; Leibniz Institute for Solid State and
Materials Research, Dresden, Germany.*

11h30 **INVITED SPEAKER: Jovana Milic**

IL-17

MULTIFUNCTIONAL LAYERED HYBRID PEROVSKITES

Jovana V. Milić.

*Adolphe Merkle Institute, University of Fribourg, Fribourg,
Switzerland.*

- 12h00 ORAL CONTRIBUTION: Ángela Sastre-Santos**
OC-20
FLUORINATED- AND NON-FLUORINATED-ZN(II) AND CU(II) PHTHALOCYANINES AS SYMMETRICAL VS ASYMMETRICAL HOLE SELECTIVE MATERIALS
Ángela Sastre-Santos¹, Adrián Hernández¹, Naveen Harindu Hemasiri², Samrana Kazim³, Javier Ortiz¹, Shahzada Ahmad².
¹Universidad Miguel Hernández de Elche, Elche, Spain; ²Basque Center for Materials, Bilbao, Spain; ³Basque Center for Materials, Bilbao, Spain.
- 12h15 ORAL CONTRIBUTION: Alessio Dessi**
OC-21
NEW DITHIENO[3,2-B:2',3'-D]PYRROLE-BASED ORGANIC PRECURSORS OF HOLE-TRANSPORTING SELF-ASSEMBLED MONOLAYERS FOR HIGHLY EFFICIENT PEROVSKITE SOLAR CELLS
Alessio Dessi¹, Matteo Salvi², Daimiota Takhellambam³, Luigi Angelo Castriotta³, Massimo Calamante¹, Daniele Franchi¹, Lorenzo Zani¹, Gianna Reginato¹, Alessandro Mordini¹, Aldo Di Carlo⁴.
¹CNR-ICCOM, Sesto Fiorentino, Italy; ²University of Siena, Siena, Italy; ³CHOSE, Rome, Italy; ⁴CNR-ISM, Rome, Italy.
- 12h30 ORAL CONTRIBUTION: Elena Mena-Osteritz**
OC-22
DONOR-ACCEPTOR DYADS AND TRIADS AS NEW MOLECULAR TOPOLOGIES FOR SINGLE-MATERIAL ORGANIC SOLAR CELLS
Elena Mena-Osteritz, Astrid Vogt, Peter Bäuerle.
Ulm University, Ulm, Germany.
- 12h45 ORAL CONTRIBUTION: Leonidas Palilis**
OC-23
CARBON NANODOTS AS ELECTRON TRANSPORT MATERIALS IN ORGANIC AND HYBRID PHOTOVOLTAICS
Leonidas Palilis¹, Maria Vasilopoulou².
¹University of Patras, Patras, Greece; ²National Center for Scientific Research Demokritos, Athens, Greece.
- 13h00 ORAL CONTRIBUTION: Pilar de la Cruz**
OC-24
CYCLOPENTADITHIOPHENEVINYLENE OLIGOMERS FOR ORGANIC ELECTRONICS
Pilar De La Cruz, Rocio Dominguez, Fernando G. Guijarro, Rubén Caballero, Fernando Langa.
INAMOL-Universidad de Castilla-La Mancha, Toledo, Spain.

13H15 – 14H30

LUNCH

TH-3

Chair: Jovana Milic

14h30 PLENARY LECTURE: Ji-Seon Kim

PL-06

KEY MOLECULAR PERSPECTIVES FOR HIGH-PERFORMANCE NON-FULLERENE ACCEPTOR ORGANIC PHOTOVOLTAICS

Ji-Seon Kim.

Department of Physics and Centre for Processable Electronics, Imperial College, London, United Kingdom.

15h15 INVITED SPEAKER: Tomás Torres

IL-18

SUBPHthalOCYANINES: SINGULAR NONPLANAR AROMATIC COMPOUNDS WITH APPLICATIONS AS PHOTSENSITIVE AND ELECTROACTIVE MATERIALS

Tomas Torres, Adriana Agramunt, Juan B. Laforga, Marta Gomez-Gomez, Elisa Lopez-Serrano, Jorge Labella.

Autónoma University of Madrid, Madrid, Spain.

15h45 ORAL CONTRIBUTION: José L. Segura

OC-25

NAPHTHALIMIDE-BASED ASSEMBLIES FOR THE DEVELOPMENT OF N-TYPE AND AMBIPOLAR ORGANIC SEMICONDUCTORS. FROM THE MOLECULE TO THE MACROMOLECULE TO THE FRAMEWORK

José L. Segura¹, Alejandro De La Peña², Elena Gala², Matías J. Alonso-Navarro², Fátima Suárez Blas², Marcos Martínez Fernández¹, Marta Gordo Lozano¹, M. Mar Ramos².

¹Universidad Complutense de Madrid, Madrid, Spain; ²Universidad Rey Juan Carlos, Móstoles, Spain.

16H00 – 16H30

COFFEE BREAK & POSTERS

TH-4

Chair: Petri Murto

16h30 INVITED SPEAKER: Sylvain Chambon

IL-19

WATER-BASED ORGANIC SEMICONDUCTOR NANOPARTICLES DISPERSIONS: AN ENVIRONMENTALLY FRIENDLY ROUTE FOR ORGANIC PHOTOVOLTAICS

Sylvain Chambon¹, Hugo Laval², Alexandre Holmes³, Gwenaél Bonfante⁴, Anthony Genot⁴, Antoine Bousquet³, Kazuhiko Hirakawa⁴, Takaya Kubo⁵, Guillaume Wantz², Natalie Holmes⁶.

¹Univ. Bordeaux, CNRS, Bordeaux INP, IMS, UMR 5218, F-33400 Talence, France; LIMMS/CNRS-IIS, The University of Tokyo, 4-6-1 Komaba, Meguro-ku, Tokyo, Japan; ²Univ. Bordeaux, CNRS, Bordeaux INP, IMS, UMR 5218, F-33400, Talence, France; ³Universite de Pau et des Pays de l'Adour, E2S UPPA, CNRS, IPREM, Pau, France; ⁴LIMMS/CNRS-IIS, The University of Tokyo, 4-6-1 Komaba, Meguro-ku, Tokyo, Japan; ⁵RCAT, The University of Tokyo, 4-6-1 Komaba, Meguro-ku, Tokyo, Japan; ⁶Australian Centre for Microscopy and Microanalysis, The University of Sydney, Sydney, Australia.

17h00 ORAL CONTRIBUTION: David Curiel

OC-26

HYDROGEN BOND-DIRECTED NANOSTRUCTURATION OF CONJUGATED SMALL MOLECULES FOR ELECTRONIC APPLICATIONS

David Curiel¹, Miriam Más-Montoya¹, Paula Gómez¹, Javier Méndez², Iván Mora³.

¹University of Murcia, Murcia, Spain; ²Institute of Materials Science of Madrid - CSIC, Madrid, Spain; ³University Jaime I, Castellón de la Plana, Spain.

17h15 ORAL CONTRIBUTION: Anastasia Soultati

OC-27

FLUORINE-DOPED TANTALUM PENTOXIDE FOR STABLE ORGANIC/PEROVSKITE LIGHT-EMITTING DIODES

Anastasia Soultati, Μαρία Βασιλοπούλου.

National Center for Scientific Research Demokritos, Athens, Greece.



17H30

SHORT ORAL CONTRIBUTIONS - SESSION 2

- SO-05
THERMAL ANNEALING AS AN EFFECTIVE ROUTE TO MODULATE POLYMER THIN FILM DISSOLUTION
Katherina Haase, Shaoling Bai, Jonathan Perez Andrade, Felix Talnack, Vojtech Millek, Stefan C. B. Mannsfeld.
TU Dresden, Dresden, Germany.
- SO-06
SUPRAMOLECULAR SELF-ASSEMBLY OF THIOPHENE DERIVATIVES VIA HALOGEN BONDING
Shiv Kumar¹, Carole Body², Tom Leyssens², Kristof Van Hecke³, Gilles Berger¹, Arie Van Der Lee⁴, Danielle Laurencin⁴, Sébastien Richeter⁴, Sébastien Clément⁴, Franck Meyer¹.
¹Université Libre de Bruxelles, Brussels, Belgium; ²Université Catholique de Louvain, Louvain-la-Neuve, Belgium; ³Ghent University, Ghent, Belgium; ⁴Université de Montpellier, Montpellier, France.
- SO-07
ENABLING SINGLET FISSION IN PENTACENE-DECORATED SUPRAMOLECULAR POLYMERS
Giulia Lavarida¹, Ashish Sharma², Marko Beslac¹, Joost J. B. Van Der Tol¹, Tobias Schnitzer¹, Stefan C. J. Meskers¹, Luis M. Campos³, Akshay Rao², Richard H. Friend², E. W. Meijer¹.
¹Eindhoven University of Technology, Eindhoven, Netherlands; ²University of Cambridge, Cambridge, United Kingdom; ³Columbia University, New York, United States.
- SO-08
ULTRAFast DYNAMICS ON FJORD-EDGED NANOGRAFENES FOR LASING APPLICATIONS
Rafael Muñoz-Mármol¹, Xiushang Xu², Andrea Villa¹, Giulia Folpini³, Giuseppe M. Paternò¹, Akimitsu Narita⁴, Francesco Scotognella¹.
¹Politecnico di Milano, Milan, Italy; ²Okinawa Institute of Science and Technology Graduate University, Okinawa, Japan; ³Istituto Italiano di Tecnologia, Milan, Italy; ⁴Okinawa Institute of Science and Technology Graduate University, Okinawa, Italy.
- SO-09
FLUORESCENT GLYCOFULLERENE-PORPHYRIN CONJUGATES FOR ANTIVIRAL APPLICATIONS
Jennifer Patino Alonso, Justo Cabrera González, Beatriz Illescas Martínez, Nazario Martín León.
Universidad Complutense de Madrid, Madrid, Spain.

- SO-10
NOVEL CONDUCTING TRIMERS FOR IN VIVO ELECTRONIC FUNCTIONALIZATION OF TISSUES
Eleni Pavlopoulou¹, Daniele Mantione², Emin Istif², Gwennael Dufil³, Lorenzo Vallan², Daniela Parker³, Eleni Stavrinidou³.
¹FORTH/IESL, Heraklion, Greece; ²Laboratoire de Chimie des Polymères Organiques, Université de Bordeaux, Bordeaux INP, CNRS, Bordeaux, France; ³Laboratory of Organic Electronics, Linköping University, Linköping, Sweden.
- SO-11
INSIGHTS FROM OPTOELECTRONIC SMALL PERTURBATION TECHNIQUES ON PHOTOVOLTAIC PROCESS IN PHOTOCROMIC DYE-SENSITIZED SOLAR CELLS
Antonio J. Riquelme¹, Valid M. Mwalukuku¹, Johan Liotier¹, Yann Kervella¹, Quentin Huault¹, Alix Haurez¹, Stéphanie Narbey², Patricia Sánchez-Fernández³, Renán Escalante³, Juan A. Anta³, Renaud Demadrille¹.
¹Interdisciplinary Research Institute of Grenoble (IRIG), Grenoble, France; ²Solaronix SA, Aubonne, Switzerland; ³Universidad Pablo de Olavide, Sevilla, Spain.
- SO-12
EFFECTS OF THE CHALCOGEN-SUBSTITUTED FULLERENE DERIVATIVES ON THE PERFORMANCE OF TERNARY ORGANIC SOLAR CELLS BASED ON PM6:Y6
José G. Sánchez¹, Andrea Cabrera-Espinoza², Eugenia Martínez-Ferrero¹, Juan Luis Delgado², Emilio Palomares¹.
¹Institut Català d'Investigació Química (ICIQ), Tarragona, Spain; ²POLYMAT, University of the Basque Country UPV/EHU, San Sebastian, Spain.
- SO-13
ON-SURFACE SYNTHESIS OF 2D SUPRAMOLECULAR ORGANIC RADICAL FRAMEWORKS
Ana Sánchez-Grande¹, Federico Frezza Frezza¹, Adam Matěj¹, Pingo Mutombo¹, David Curiel², Pavel Jelínek¹.
¹Institute of physics of Czech Academy of Science, Prague, Czech Republic; ²Department of Organic Chemistry of University of Murcia, Murcia, Spain.



- SO-14
SPIRO-PHENOTHIAZINE AS BUILDING BLOCK FOR IMPROVING THE LONG-TERM STABILITY OF HOLE-TRANSPORTING MATERIALS IN PEROVSKITE SOLAR CELLS

Javier Urieta-Mora¹, Inés García-Benito¹, Silvia Orecchio², Jaeki Jeong³, Juan Aragón⁴, Agustín Molina-Ontoria², Enrique Ortí⁴, Michael Grätzel³, Nazario Martín¹.

¹Dpto. de Química Orgánica, Facultad de Química, Universidad Complutense; IMDEA-Nanoscience, Madrid, Spain; ²Dpto. de Química Orgánica, Facultad de Química, Universidad Complutense, Madrid, Spain; ³École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland; ⁴Instituto de Ciencia Molecular, Universidad de Valencia, Paterna, Spain.

- SO-15
TETRABROMO-P-QUINODIMETHANES (TBQS): VERSATILE BUILDING BLOCKS FOR ORGANIC ELECTRONICS

Diego J. Vicent¹, José Santos¹, José I. Urgel², David Écija², Nazario Martín¹.

¹Universidad Complutense de Madrid, Madrid, Spain; ²IMDEA Nanoscience, Madrid, Spain.

FRIDAY, JULY 7TH

FR-1

Chair: Yana Vaynzof

09h00 PLENARY LECTURE: Eugenio Coronado

PL-07

TWO-DIMENSIONAL MATERIALS FOR MOLECULAR ELECTRONICS

Eugenio Coronado, Carla Boix-Constant, Miguel Gavara, Samuel Mañas-Valero.

Instituto de Ciencia Molecular (ICMol). Universidad de Valencia, Valencia, Spain.

09h45 INVITED SPEAKER: Fernando Martín

IL-20

REAL-TIME IMAGING AND CONTROL OF ELECTRON MOTION IN MOLECULES: TOWARDS ATTOCHEMISTRY

Fernando Martín.

Departamento de Química, Universidad Autónoma de Madrid; Instituto Madrileño de Estudios Avanzados en Nanociencia (IMDEA-Nano), Cantoblanco, Madrid, Spain.

10h15 ORAL CONTRIBUTION: Linda Angela Zotti

OC-28

CONSTRAINED DFT FOR MOLECULAR JUNCTIONS

Linda Angela Zotti¹, Wynand Dednam², Enrico Lombardi², Juan José Palacios¹.

¹Universidad Autónoma de Madrid, Madrid, Spain; ²University of South Africa, Johannesburg, South Africa.

10H30 – 11H00 COFFEE BREAK & POSTERS

FR-2

11h00 INVITED SPEAKER: Jenny Nelson

IL-22

INFLUENCE OF CHEMICAL STRUCTURE ON PROPERTIES OF MIXED CONDUCTING CONJUGATED POLYMER ELECTRODES

Jenny Nelson¹, Nicholas Siemons¹, Hang Yu¹, Sachetan Tuladhar¹, Iona Anderson¹, Alexander Giovannitti².

¹Department of Physics, Imperial College London, London, United Kingdom;

²Department of Chemistry, Chalmers University, Göteborg, Sweden.

11h30 ORAL CONTRIBUTION

Beatriz Illescas

- 11h45 ORAL CONTRIBUTION: Helena Alves**
OC-29
SCALABLE PRODUCTION OF ORGANIC BASED CRYSTALLINE PHOTONIC DEVICES
Helena Alves, Ana Oliveira, João Serra, Ismael Domingos, Sara Sequeira, Diana Leitão.
INESC MN, Lisboa, Portugal.
- 12h00 ORAL CONTRIBUTION: Yutaka Wakayama**
OC-30
ANTIAMBIPOLAR TRANSISTORS FOR NOVEL MULTI-VALUED LOGIC CIRCUITS
Yutaka Wakayama, Debdatta Panigrahi, Ryoma Hayakawa, Junko Aimi.
National Institute for Materials Science, Tsukuba, Japan.
- 12h15 ORAL CONTRIBUTION: Daniel Iglesias**
OC-31
LIGHT-PROGRAMMABLE 2D MATERIALS ENABLED BY SUPRAMOLECULAR FUNCTIONALIZATION.
Daniel Iglesias.
Universidad de Castilla-La Mancha, Ciudad Real, Spain.
- 12h30 ORAL CONTRIBUTION: Wojciech Pisula**
OC-32
MENISCUS-GUIDED COATING OF ORGANIC SEMICONDUCTORS FOR APPLICATIONS IN FIELD-EFFECT TRANSISTORS
Wojciech Pisula.
Lodz University of Technology, Lodz, Poland.
- 12h45 ORAL CONTRIBUTION: Henrique Leonel Gomes**
OC-33
ELECTROPHYSIOLOGICAL ELECTRODES BASED ON CONDUCTING POLYMERS FOR RECORDING THE BIOELECTRICAL ACTIVITY OF NON-ELECTROGENIC CELLS
Henrique Leonel Gomes¹, Maria Do Carmo Medeiros², Rute Felix³, Deborah Mary Power³.
¹Instituto de Telecomunicações, Coimbra, Portugal; ²Universidade de Coimbra, Coimbra, Portugal; ³Centro de Ciências do Mar, Faro, Portugal.
- 13H00 POSTER AWARDS & CLOSING REMARKS**



GENERAL INFORMATION

CONGRESS VENUE

UNIVERSIDAD COMPLUTENSE DE MADRID, FACULTAD DE CIENCIAS FÍSICAS

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OPENING HOURS:

- **Monday July 3rd, 2023:** From 12:00 PM to 7:00 PM
- **Tuesday July 4th, 2023:** From 8:30 AM to 7:00 PM
- **Wednesday July 5th, 2023:** From 8:30 AM to 6:00 PM
- **Thursday July 6th, 2023:** From 8:30 AM to 7:00 PM
- **Friday July 7th, 2023:** From 8:30 AM to 2:00 PM

CONGRESS WEB

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Available on the Congress website the scientific programme in PDF format (programme section) and the ABSTRACT BOOK ONLINE (papers section).

LANGUAGE

The official language of the congress is English. Sessions and posters will be presented in English. Simultaneous translation will not be provided.

CONGRESS BADGE

All participants will receive a name badge upon registration. Admission to the conference venue is possible only with a valid badge. In addition, badges must be worn throughout the congress and at the social activities. Entrance to meeting rooms and poster area will not be allowed to any person without badge.

CERTIFICATES

ATTENDANCE

Attendance certificates will be sent in electronic format by email once the Conference is finished and the satisfaction survey is filled in.

ORAL COMMUNICATIONS & POSTERS

Certificates of presentation will be sent after the Conference, by e-mail, to the corresponding contact author.

COFFEE POINTS

Coffee breaks will take place on Gabinete Room.

Schedule:

- **Monday July 3rd, 2023:** From 4:00 PM to 4:30 PM
- **Tuesday July 4th, 2023:** From 10:30 AM to 11:00 AM and from 4:00 PM to 4:30 PM
- **Wednesday July 5th, 2023:** From 10:30 AM to 11:00 AM and from 4:00 PM to 4:30 PM
- **Thursday July 6th, 2023:** From 10:30 AM to 11:00 AM and from 4:00 PM to 4:30 PM
- **Friday July 7th, 2023:** From 10:30 AM to 11:00 AM and from 4:00 PM to 4:30 PM

LUNCH BREAK

Lunch will be provided at the Venue from Monday to Friday. Please follow the instructions of the staff and show your badge at the entrance.



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