



instituto
IMDEA nanociencia

Discussion meeting on

Progress in Organic Optoelectronics and Energy Conversion

13th·14th
dec 2018

Conference room
IMDEA Nanociencia
C/ Faraday, 9
28049 Madrid



Local Organizer: Dr. Johannes Gierschner, IMDEA Nanoscience, johannes.gierschner@imdea.org

Thursday, 13.12.2018

Session 1 Chair: Larry Lüer

14:00 Welcome & Introduction: J. Gierschner

14:10-14:30 **Emilio Pérez** (IMDEA): *Regulation of SWNT catalysts through encapsulation within macrocycles*

14:30-14:50 Manuel Vázquez Sulleiro (IMDEA): *Covalent functionalization of graphene derivatives for novel carbon interfaces*

14:50-15:10 **Enrique Cánovas** (IMDEA): *Band-like charge transport in a semiconducting 2D metal organic framework*

15:10-15:30 Ahmad Sousaraei (IMDEA): *Towards sub-ppm Ammonia Detection with Mixed Matrix Membranes of crosslinked PDMS and Luminescent Metal-Organic Framework through Turn-On Effect: Sensing in Gas and Aqueous Phases*

15:30-16:00 Coffee Break & Poster Session

Session 2 Chair: Juan Carlos Sancho Garcia

16:00-16:20 **Larry Lüer** (IMDEA): *Long range charge transfer: overcoming energy losses in organic photovoltaics*

16:20-16:40 Abasi Abudulimu (IMDEA): *Charge Dynamics at the Perovskite/Hole-Transporting-Material Interface, and Its Role on the Solar Cell Performance*

16:40-17:00 **Reinhold Wannemacher** (IMDEA): *Spectroscopy of Rare Earth Metal Organic Frameworks*

17:00-17:20 Qi Zhang (IMDEA): *Novel hosts for efficient energy transfer to F8BT polymer yielding low threshold DFB lasing*

17:20-17:40 Chen Sun (IMDEA): *The Influence of β -Phase Conformation on Transient Absorption and Light Amplifying Properties of Polydiarylfuorene*

17:40-18:00 **Stavros Anthanasopoulos** (UC3M): *Global theory of hopping exciton transport in disordered semiconductors*

Friday, 14.12.2018

Session 3 *Chair: Begoña Milián Medina*

09:00-09:20 **Juan Carlos Sancho-García** (U. Alicante): *Disclosing (poly)radicalism in SWCNT by modern DFT methods*

09:20-09:40 Andres Perez-Guardiola (U. Alicante): *The 2D Structure and Charge Transport properties of CycloParaPhenylenes on Graphite Surfaces*

09:40-10:00 Ricardo Ortiz Cano (U. Alicante): *Inelastic Spin-Flip Spectroscopy of Local Spin Moments in Nanographenes*

10:00-10:20 **M^aCarmen Ruiz Delgado** (U. Malaga): *Carbazole-based Biradicaloids as Potential Building Blocks for Dynamic Covalent Chemistry*

10:20-10:40 Irene Badía-Domínguez (U. Malaga): *Multiresponsive Chromic Soft Materials: Formation of Strongly Coupled Sigma-Dimers from IndoloCarbazole-based Biradicaloids*

10:40-11:10 Coffee Break

Session 4 *Chair: M^aCarmen Ruiz Delgado*

11:10-11:30 **Dooshaye Moonshiram** (IMDEA): *Capturing the photoexcited states of solar fuel catalysts for artificial photosynthesis through ultrafast x-ray spectroscopy*

11:30-11:50 **Johannes Gierschner** (IMDEA): *CT States for Functional Organic Materials*

11:50-12:10 Santosh Kumar Behera (IMDEA): *Dual Emission in Organic Molecules*

12:10-12:30 **Begoña Milián Medina** (U. Valencia): *Crossed 2D vs. Slipped 1D π -Stacking in Polymorphs of Crystalline Organic Thin Films: Impact on the Electronic and Optical Response*

12:30-12:50 Juan Roldao (IMDEA & U. Valencia): *Efficient All-Organic Photocatalysts for Polymerization Reactions*

12:50-13:00 Conclusion

Poster Session

Giovanny Carvalho dos Santos (U. Bauru & IMDEA): *Quinoline Derivatives as Luminescent Materials: Photophysics and Applications*

Mortaza Eskandari (Zanjan, Iran & IMDEA): *Photophysics of Cationic Dyes: Porphyrins and Cyanines*