



Comune di Perugia



UNIVERSITÀ DEGLI STUDI
DI PERUGIA



ITALIAN PHOTOCHEMISTRY MEETING 2017

Perugia, 14-16 December 2017

Sala dei Notari - Palazzo dei Priori
Piazza IV Novembre, 1 - Perugia

Thursday, December 14th

- 13:00-14:00 **Registration**
- 14:00-14:20 **Opening**
- 14:20-14:40 **Memory of Prof. Mazzucato and Prof. Pelizzetti**

FIRST SESSION

CHAIR: LOREDANA LATTERINI

14:40 **PL 01**

Filippo De Angelis

“Modeling Materials and Processes in Hybrid/Organic Photovoltaics: From Dye-sensitized to Perovskite Solar Cells”

15:25 **OC 01**

Filippo Monti, Nicola Armaroli, Elia Matteucci, Andrea Baschieri, Andrea Mazzanti, Letizia Sambri, Antonio Pertegás, Henk J. Bolink, Enrique Ortí, Andrea Gualandi and Pier Giorgio Cozzi

“Cyclometalated Iridium(III) Complexes for Electroluminescent Devices and Photocatalysis”

15:45 **OC 02**

María del Carmen Marín, Damianos Agathangelou, Yoelvis Orozco-Gonzalez, Hideki Kandori, Stefan Haacke and Massimo Olivucci

“Towards a rational reprogramming of reactive rhodopsins into fluorescent probes”

16:05 **OC 03**

Luca Capaldo, Maurizio Fagnoni, Günther Knör and Davide Ravelli

“Antimony-oxo Porphyrins as Visible-Light Photocatalysts for Hydrogen Atom Transfer (HAT) Reactions in Organic Synthesis”

16:25 – 16:55 **COFFEE BREAK**

CHAIR: CARLO ALBERTO BIGNOZZI

16:55 **KL1**

Keynote for the GIF Young Investigator Award 2017:

Mirco Natali and Franco Scandola

“A Molecular Approach Towards Artificial Photosynthesis and Solar-Driven Water Splitting”

17:25 **OC 04**

Lorenzo Casimiro, Giorgio Baggi, Massimo Baroncini, Serena Silvi, Alberto Credi and Stephen J. Loeb

“Supramolecular Tuning of Photochromism in Mechanically Interlocked Molecules”

17:45 **OC 05**

Marianna Marchini, Andrea Gualandi, Paola Ceroni and Pier Giorgio Cozzi

“Photochemical Investigation on the Mechanism of Photoredox Reactions Promoted by Visible Light”

18:05 **OC 06**

Ewelina Kuna, Amedeo Agosti and Giacomo Bergamini

“Novel supramolecular approach for photocatalytic applications”

18:25 **OC 07**

Valeria Caponetti, Gloria Guidetti, Marco Montalti and Giovanna Brusatin

“Self-assembling supramolecular structures as stimuli-responsive systems for sensing pH and anions in water”

18:45 **CONCLUSION**

Friday, December 15th

SECOND SESSION

CHAIR: MAURIZIO D’AURIA

09:00 **PL 02**

Maurizio Fagnoni, Davide Ravelli and Luca Capaldo

“Decatungstate Photocatalyzed C(sp³)-H / C(sp²)-H Functionalization: Selectivity and Applications in Organic Synthesis”

09:45 **OC 08**

Valentina Botti

“Enlightening the Interaction between Styryl-Azinium Iodides and Nucleic Acids”

10:05 **OC 09**

Annalisa Polo, Ivan Grigioni, Maria Vittoria Dozzi and Elena Selli

“TiO₂/BiVO₄ Heterojunction for Photoelectrochemical Water Splitting”

10:25 **OC 10**

Serena Berardi, Stefano Caramori, Giulio Cerullo, Maurizio Prato and Carlo Alberto Bignozzi

“Perylene Diimide Aggregates on Sb-Doped SnO₂: Charge Transfer Dynamics Relevant to Solar Fuel Generation”

10:45 – 11:15 **COFFEE BREAK**

CHAIR: ILSE MANET

11:15 **OC 11**

Jessica Barichello, Giuseppe Calogero, Ilaria Citro, Paolo Mariani, Luigi Vesce, Antonino Bartolotta, Aldo Di Carlo and Gaetano Di Marco

“Photoelectrochemical study on photovoltaics devices based on natural carotenoids pigments”

11:35 **OC 12**

Jeannette Manzi, Juan Manuel García-Ruiz and Marco Montalti

“Real time mapping pH in self-assembled inorganic structures by fluorescence microscopy”

11:55 **OC 13**

Benedetta Del Secco, Maria Letizia Focarete, Andrea Merlettini, Liviana Mummolo, Luca Prodi and Nelsi Zaccheroni

“Luminescent Nanoparticles release from biocompatible polymeric fibers”

12:15 **OC 14**

Alessio Cesaretti, Carmela Bonaccorso, Veronica Carboni, Benedetta Carlotti, Fausto Elisei, Cosimo G. Fortuna, Letizia Mencaroni and Anna Spalletti

“The many uses of some push-pull phenanthroline-derivatives: NLO materials, acid-base indicators and sensors for metal cations”

12:45–14:40 LUNCH AND POSTER SESSION

THIRD SESSION

CHAIR: MONICA CASELLI

14:40 **PL 03**

Salvatore Sortino

“Photocontrollable NO releasing constructs and their biomedical applications”

15:25 **OC 15**

Federico Palazzetti, Andrea Lombardi and Vincenzo Aquilanti

“Stereodirectional Photodissociation Dynamics of Oriented Chiral Molecules”

15:45 **OC 16**

Marcello La Rosa, S. Denisov, G. Jonusauskas, Serena Silvi, N. D. McClenaghan and Alberto Credi

“Long-lived luminescent Quantum Dots as result of reversible electronic energy transfer”

16:05 **OC 17**

Jessica Groppi, Lorenzo Casimiro, Giulio Ragazzon, Massimo Baroncini, Serena Silvi, Margherita Venturi and Alberto Credi

“Towards the Second Generation of Light Effected Autonomous Molecular Pumps”

16:25 – 16:55 COFFEE BREAK

CHAIR: SEBASTIANO CAMPAGNA

16:55 **OC 18**

Amedeo Agosti, Ewelina Kuna, Nakibli Yifat, Amirav Lilac and Giacomo Bergamini

“Hybrid Semiconductor Nanomaterials for Photocatalytic Organic Transformation”

17:15 **OC 19**

Sara Angeloni, Francesco Romano, Raffaello Mazzaro and Paola Ceroni

“Light harvesting antennae based on silicon nanocrystals”

17:35 **OC 20**

Christiaan de Vet, Leire Gartzia-Rivero, Philip Schäfer, Guillaume Raffy, Alberto Credi and André Del Guerzo

“Photopatterning of optically active nanofibers with spatial and orientational control”

17:55 **OC 21**

Mariangela Di Donato, Michael M. Lerch, Andrea Lapini, Adèle D. Laurent, Alessandro Iagatti, Laura Bussotti, Svante P.

Ihrig, Miroslav Medved, Denis Jacquemin, Wiktor Szymański, Wybren Jan Buma, Paolo Foggi and Ben L. Feringa

“Shedding Light on the Photo-Isomerization Pathway of Donor–Acceptor Stenhouse Adducts”

18:15 **CONCLUSION**

18:30 **GIF + GIDF MEMBERS ASSEMBLY**

20:30 **SOCIAL DINNER at “Ristorante del Sole”**

Saturday, December 16th

FOURTH SESSION

CHAIR: MARGHERITA VENTURI

09:00 **PL 04**

Fausto Puntoriero

Photoinduced energy/electron dynamics in multi-chromophoric supramolecular systems

09:45 **OC 22**

Giulia Zampini and Loredana Latterini

“Nanoengineering strategies to enhance PpIX photosensitizing activity in photodynamic therapy”

10:05 **OC 23**

Ivan Grigioni, Lucia Ganzer, Benedetto Bozzini, Giulio Cerullo and Elena Selli

“Ultrafast charge carrier dynamics in molybdenum-doped BiVO₄ photoanodes and their enhanced photoelectrochemical activity”

10:25 **OC 24**

Marco Minella, Claudio Minero and Fabrizio Sordello

“New insights into the Photocatalytic activity of TiO₂/reduced-Graphene Oxide: from the role of the substrate adsorption to the evidence of the electron transfer from rGO to TiO₂”

10:45 – 11:15 **COFFEE BREAK**

CHAIR: ELENA SELLI

11:15 **KL2**

Keynote for the best PhD Thesis in Photochemistry 2017:

Giulio Ragazzon, Serena Silvi, Alberto Credi

“Operating Molecular Machines: Thermodynamic and Kinetic Aspects”

11:45 **OC 25**

Andrea Barbieri, Filippo Monti, Barbara Ventura, Nicola Armaroli, Pedro Ferreira, Nuno Basilio, César A. T. Laia and A. Jorge Parola

“Cyclisation reaction dynamics of a dithienylethene photoswitch in supramolecular host-guest complexes”

12:05 **OC 26**

Giuseppina La Ganga, Fausto Puntoriero, Maurilio Galletta, Osamu Ishitani and Sebastiano Campagna

“New ruthenium based systems for photo-induced water oxidation”

12:25 **OC 27**

Benedetta Carlotti, Hyungjun Kim, Ifeanyi Kizito Madu, Zhengxu Cai, Valerii Shaparov, Paul M. Zimmerman, Luping Yu and Theodore Goodson III

“Charge Transfer and Aggregation Effects in the Performance of Planar vs. Twisted Perylene Diimide Isomers in Organic Solar Cells”

12:45 **CONCLUDING REMARKS AND**

BEST ORAL & POSTER PRESENTATION AWARDS