

# PROGRAM 6JIF



**Jornadas Ibéricas de Fotoquímica**

11- 14 DE SETEMBRO, 2018 **Aveiro**

<http://6jif.eventos.chemistry.pt/>

Grupo de Fotoquímica da Sociedade Portuguesa de Química  
Grupo Especializado de Fotoquímica de la Real Sociedad Española de Química  
Universidade de Aveiro/Universidade de Coimbra

## COMMITTEES

### ORGANIZING COMMITTEE

**Luís António Ferreira Martins Dias Carlos**, Chair

Universidade de Aveiro

**João Sérgio Seixas de Melo**, Co-Chair

Universidade de Coimbra

**Leonardo Mendes**

Sociedade Portuguesa de Química

**Cristina Campos**

Sociedade Portuguesa de Química

### SCIENTIFIC COMMITTEE

**António Maçanita**

Universidade de Lisboa

**Fernando Pina**

Universidade Nova de Lisboa

**Hugh Burrows**

Universidade de Coimbra

**Luis Manuel Frutos Gaité**

Universidad de Alcalá, Alcalá de Henares, Madrid

**Virginie Lhiaubet-Vallet**

Instituto Universitario Mixto de Tecnología Química, UPV-CSIC, Valencia

**Wajih Al-Soufi**

Universidade de Santiago de Compostela

### LOCAL ORGANIZING COMMITTEE

**Maria Rute Ferreira André**

**Paulo Ribeiro Claro**

**Carlos Brites**

**Mariela Nolasco**

**Sandra Correia**

**João Ramalho**

**Ana Rita Frias**

## SPONSORS

### INSTITUTIONAL SPONSORS

university of aveiro  
theoria poiesis praxis



ciceco  
aveiro institute of materials



FCTUC FACULDADE DE CIÊNCIAS  
E TECNOLOGIA  
UNIVERSIDADE DE COIMBRA



### FINANTIAL SPONSORS



# PROGRAM

**Tuesday September 11, 2018**

**09:00 – 17:00 h** SALA DE ACTOS ACADÉMICOS – RECTORY BUILDING

*Chairs: Sérgio Seixas de Melo and Rute Ferreira*

## ***Training School on the basics of Photochemical, Photophysical and Photobiological Processes***

<http://academia.web.ua.pt/extraSCIRP/espacos/?t=1&id=10>

**09:00 – 10:30 h**

**Manuel Prieto**

Centro Química-Física Molecular, IST, Universidade de Lisboa, Portugal

*"Principles of Fluorescence and Energy Transfer (FRET) Methodologies"*

**COFFEE BREAK**

**10:30 – 10:45 h** HALL OF RECTORY BUILDING

**10:45 – 12:15 h**

**Luis Manuel Frutos Gaité**

Unidad Docente de Química Física, Universidad de Alcalá, Madrid, Spain

*"Theoretical Photochemistry"*

**LUNCH**

**12:15 – 13:30 h** UNIVERSITY'S RESTARANT

**13:35 – 15:00 h**

**José Manuel Gaspar Martinho**

Centro de Química-Física Molecular, IST, Universidade de Lisboa, Portugal

*"Two-photon absorption, imaging and sensing"*

**15:00 – 16:30 h**

**Wajih Al-Soufi**

Universidad de Santiago de Compostela, Spain

*"Supramolecular association studied by fluorescence spectroscopy"*

*(emphasis on Single Molecule Fluorescence and Fluorescence Correlation Spectroscopy)*

**16:30 – 17:00 h** INTERACTION WITH STUDENTS

**18:00 – 19:00 h** HALL OF RECTORY BUILDING

**REGISTRATION**

**19:00 h** RECEPTION

SANTA JOANA MUSEUM

**Wednesday September 12, 2018**

09:00 – 18:30 h SALA DE ACTOS ACADÉMICOS – RECTORY BUILDING

<http://academia.web.ua.pt/extraSCIRP/espacos/?t=1&id=10>

08:00 – 18:00 h HALL OF RECTORY BUILDING

**REGISTRATION**

08:40 – 09:00 h SALA DE ACTOS ACADÉMICOS – RECTORY BUILDING

**Opening ceremony**, welcome addresses by Prof. Luís Carlos, Prof. Artur Silva, Vice-rector University of Aveiro and President of the SPQ and Prof. Sérgio Seixas de Melo

**SESSION I** Chair: Luís Manuel Frutos Gaité

09:00 – 10:00 h PLENARY LECTURE

**Mario Nuno Berberan e Santos**

Centro de Química-Física Molecular, IST, Universidade de Lisboa, Portugal

*“Developments in thermally activated delayed fluorescence”*

10:00 – 10:30 h KEYNOTE LECTURE

**Juan Casado Cordón**

Department of Physical Chemistry, Universidad de Malaga, Spain

*“Diradicals: Structure and spectroscopy”*

COFFEE BREAK AND POSTER SESSION

10:30 – 11:00 h SENADO ROOM – RECTORY BUILDING

**SESSION II** Chairs: Sérgio Seixas de Melo and Rachel Evans

11:00 – 11:20 h INVITED LECTURE

**Julia Pérez Prieto**

Instituto de Ciencia Molecular, Universidad de Valencia, Spain

*“Exceptional optical features of lead halide perovskites”*

11:20 – 11:35 h ORAL COMMUNICATION

**A. J. Moro, L. Rodriguez, J. C. Lima***“Naphthyridine-based Gold(I) complexes: new tools for nucleotide sensing using aggregation induced emission”*

11:35 – 11:50 h ORAL COMMUNICATION

**B. Casteleiro, T. Ribeiro, J. M. G. Martinho, J. P.S. Farinha***“Hybrid gold nanoclusters-polymer nanoparticles as fluorescent probes”*

11:50 – 12:05 h ORAL COMMUNICATION

**P. M. R. Paulo, S. M. B. Costa, D. Botequim, R. Oliveira-Silva, D. M. F. Prazeres, A. P. Francisco, C. A. T. Laia, J. P. Conde***“Anisotropic gold nanoantennas for enhancing fluorescence detection: From single to dimer nanoparticles”*

12:05 – 12:20 h ORAL COMMUNICATION

**G. Orellana, A. B. Descalzo, J. Q. Albuquerque***“Sensing 1,3-dicarbonyl toxins with luminescent ruthenium(II)-polypyridyl complexes”*

12:20 – 12:35 h ORAL COMMUNICATION

**Biju Francis, Mariela M. Nolasco, Paula Brandão, Rute A. S. Ferreira, Luís D. Carlos***“Eu<sup>3+</sup>-complex-based hybrid materials for luminescent solar concentrators”*

	<b>LUNCH</b>
--	--------------

<b>12:45 – 14:00 h</b>	<b>UNIVERSITY'S RESTAURANT</b>
------------------------	--------------------------------

<b>SESSION III</b>	<i>Chairs: Hugh Burrows and Juan Casado Cordón</i>
--------------------	--

<b>14:00 – 15:00 h</b>	<b>PLENARY LECTURE</b>
------------------------	------------------------

**Rachel Evans**

Department of Materials Science &amp; Metallurgy, University of Cambridge, UK

*"Spectral conversion materials to harvest sunlight in the urban landscape"*

<b>15:00 – 15:30 h</b>	<b>KEYNOTE LECTURE</b>
------------------------	------------------------

**José Paulo Farinha**

Departamento de Engenharia Química, IST, Universidade de Lisboa, Portugal

*"Bright and stable nanomaterials for imaging and diagnostics"*

<b>15:30 – 15:50 h</b>	<b>INVITED LECTURE</b>
------------------------	------------------------

**Francisco Galindo**

Departamento de Química Inorgánica y Orgánica, Universitat Jaume I de Castellón, Spain

*"Photoactive nanoclusters embedded in self-assembled fibrillar networks"*

<b>15:50 – 16:10 h</b>	<b>INVITED LECTURE</b>
------------------------	------------------------

**Carlos Serpa**

Departamento de Engenharia Química, Universidade de Coimbra, Portugal

*"Piezophotonics"*

<b>16:10 – 16:25h</b>	<b>ORAL COMMUNICATION</b>
-----------------------	---------------------------

**I. F. A. Mariz, E. M. S. Maçôas, J. M. G. Martinho, C. Santos, C. Correia***"On the origin of the emission of carbon nanodots: molecule-like fluorophores vs nanographene-like clusters"*

	<b>COFFEE BREAK AND POSTER SESSION</b>
--	--

<b>16:30 – 17:30 h</b>	<b>SENADO ROOM – RECTORY BUILDING</b>
------------------------	---------------------------------------

<b>SESSION IV</b>	<i>Chair: Manuel Prieto</i>
-------------------	-----------------------------

<b>17:30 – 17:50 h</b>	<b>INVITED LECTURE</b>
------------------------	------------------------

**João Carlos Lima**

Departamento de Química, Universidade Nova de Lisboa, Portugal

*"Gold(I) complexes self-assembly, luminescence and applications"*

<b>17:50 – 18:10 h</b>	<b>INVITED LECTURE</b>
------------------------	------------------------

**Mario Gutierrez Tovar**

Universidad de Castilla La Mancha, Spain

*"Luminescent Zr-Based MOFs: From Fundamental to LED application"*

<b>18:10 – 18:30 h</b>	<b>INVITED LECTURE</b>
------------------------	------------------------

**Joaquim Faria**

Departamento de Engenharia Química, Universidade do Porto, Portugal

*"Shining new light on ancient formulations: preparation and photoproperties of graphitic carbon nitrides"*

<b>18:30 – 19:30 h</b>	<b>GRUFO-RSEQ/GFQ-SPQ Meeting</b>
------------------------	-----------------------------------

**Thursday September 13, 2018**

**09:00 – 18:10 h** SALA DE ACTOS ACADÉMICOS – RECTORY BUILDING

<http://academia.web.ua.pt/extraSCIRP/espacos/?t=1&id=10>

**SESSION V** Chair: Gaspar Martinho

**09:00 – 10:00 h** PLENARY LECTURE

**Juan Penedo-Esteiro**

Laboratory for Biophysics and Biomolecular Dynamics, University of St. Andrews, UK

*“Single-molecule photophysics of conjugated polymers in solution”*

**10:00 – 10:30 h** KEYNOTE LECTURE

**António Jorge Dias Parola**

Departamento de Química, Universidade Nova de Lisboa, Portugal

*“Photochromic supramolecular host-guest systems”*

**COFFEE BREAK AND POSTER SESSION**

**10:30 – 11:00 h** SENADO ROOM – RECTORY BUILDING

**SESSION VI** Chairs: Juan Penedo-Esteiro and José Paulo Farinha

**11:00 – 11:20 h** INVITED LECTURE

**Carlos Baleizão**

Centro de Química-Física Molecular, IST, Universidade de Lisboa, Portugal

*“Perylenediimides as building blocks for functional nanomaterials”*

**11:20 – 11:35 h** ORAL COMMUNICATION

**M. L. Renart, A. Coutinho, J. A. Poveda, M. Giudici, A. Fedorov, M. Berberan-Santos, J. Gonzalez-Ros, M. Prieto**

*“The membrane potassium channel KcsA - Exact analytical solutions for advanced homo-FRET to retrieve structural information”*

**11:35 – 11:50 h** ORAL COMMUNICATION

**C. M. Nunes, I. Reva, R. Fausto**

*“Photochemistry of aryl nitrenes: Doorway to elusive intermediates and tunnelling reactions”*

**11:50 – 12:05 h** ORAL COMMUNICATION

**A. M. Melo, J. Coraor, G. Alpha-Cobb, S. Elbaum-Garfinkle, E. Rhoades**

*“Determining a topological model for tau bound to tubulin heterodimers by SMFRET: Insights into its function/dysfunction”*

**12:05 – 12:20 h** ORAL COMMUNICATION

**Diego Sampedro**

*“Photoprotection: insights from theory and experiment”*

**12:20 – 12:35 h** ORAL COMMUNICATION

**C. S. H. Jesus, C. Serpa, R. Quintã, H. T. Soares**

*“Autofluorescence of protein aggregates enable in-vitro screening of anti-amyloid drugs”*

**LUNCH**

**12:45 – 14:00 h** UNIVERSITY'S RESTAURANT

**SESSION VII** Chairs: Mario Nuno Berberan e Santos and Julia Pérez Prieto

14:00 – 14:30 h KEYNOTE LECTURE

**Virginia Martínez Martínez**

Departamento de Química Física, Universidad del País Vasco, Spain

*“Fluorescent dyes into 1D-zeolitic materials for optical applications”*

14:30 – 15:00 h KEYNOTE LECTURE

**Carlos Lodeiro Espiño**

Departamento de Química, Universidade Nova de Lisboa, Portugal

*“Chalcogenide chemistry applied in the synthesis of noble nanomaterials: the role of light and water”*

15:00 – 15:20 h INVITED LECTURE

**Elisabete M. S. Castanheira**

Departamento de Física, Universidade do Minho, Portugal

*“Magnetoliposomes as nanocarriers for fluorescent potential antitumor drugs”*

15:20 – 15:35 h ORAL COMMUNICATION

**A. Orte, J. A. González-Vera, F. J. Fueyo-González, Á. Ruiz-Arias, M. Morris, R. Herranz**

*“Quinolimide-based solvatochromic fluorophores”*

15:35 – 15:50 h ORAL COMMUNICATION

**D. R. Ramos, O. N. H. Kaabeche, M. Iazykov, J. A. Santaballa, R. Zouaghi, M. Canle**

*“Photodegradation of ionic liquids: Relevant aspects concerning photocatalyst activity”*

COFFEE BREAK AND POSTER SESSION

15:50 – 17:30 h SENADO ROOM – RECTORY BUILDING

**SESSION VIII** Chair: Luis Manuel Frutos Gaité

**2017 & 2018 winners of the best PhD thesis in photochemistry of the GRUFO**

17:30 – 17:50 h INVITED LECTURE

**Fabio Julia**

School of Chemistry, University of Manchester, UK

*“Photophysical and photochemical properties of cyclometalated platinum(II) and platinum(IV) complexes”*

17:50 – 18:10 h INVITED LECTURE

**Laura Francés-Soriano**

Institut de Biologie Intégrative de la Cellule, CNRS, France

*“NIR-responsive nanohybrids for efficient energy transfer”*

18:45 – 20:15h MOLICEIRO SIGHTSEEING TRIP

20:30 h CONFERENCE DINNER: RESTAURANTE OLARIA



**Friday September 14, 2018**

09:00 – 13:00 h SALA DE ACTOS ACADÉMICOS – RECTORY BUILDING

<http://academia.web.ua.pt/extraSCIRP/espacos/?t=1&id=10>**SESSION IX** Chair: Wajih Al-Soufi

09:00 – 10:00 h PLENARY LECTURE

**Luis Arnaut**

Departamento de Química, Universidade de Coimbra, Portugal

*"From Photochemistry to Photomedicine: Health Solutions from Fundamental Science"*

10:00 – 10:30 h KEYNOTE LECTURE

**Uwe Pischel**

Center for Research in Sustainable Chemistry, Universidad de Huelva, Spain

*"Molecular engineering of two-photon absorbing four-coordinate organoboron fluorophores"*

COFFEE BREAK

10:30 – 11:00 h HALL OF RECTORY BUILDING

**SESSION X** Chairs: Virginia Martínez Martínez and Uwe Pischel

11:00 – 11:20 h INVITED LECTURE

**Ángela Sastre Santos**

Instituto de Bioingeniería, Universidad Miguel Hernández, Elche, Spain

*"Photophysical and synthesis of fused-phthalocyanine systems"*

11:20 – 11:35 h ORAL COMMUNICATION

**E. Aguiló, R. Gavara, A. Moro, J. C. Lima, L. Rodríguez***"Tuning luminescence properties and morphologies in Au(I) supramolecular structures"*

11:35 – 11:50 h ORAL COMMUNICATION

**M. Novo, W. Al-Soufi, L. Piñeiro***"DNA intercalators studied by single-molecule fluorescence techniques"*

11:50 – 12:05 h ORAL COMMUNICATION

**E. Perez-Inestrosa, D. Collado Martín, Y. Vida, F. Najera, V. Stamenkovic***"Aminonaphthalimide-squaraine DYADS: Photophysical properties and bioimaging application"*

12:05 – 12:20 h ORAL COMMUNICATION

**R. Prieto-Montero, I. Lopez-Arbeloa, S. Lacombe, V. Martinez-Martinez***"Dye/silica nanoparticles for biomedical applications"*

12:20 – 12:35 h ORAL COMMUNICATION

**L. M. Frutos, M. Marazzi***"Tuning spectroscopic and photoreactivity properties of optical switches by external forces"*

12:35 h CLOSING