

The "Setena Edició de les Jornades Doctorals" aims to strengthen the links between the research groups of our Department to promote interdisciplinary and more ambitious research projects. In addition, it aims to relate the chemical research performed by the PhD students of the UAB Chemistry PhD program, and related programs, with Industrial and Entrepreneurial Opportunities. In this edition, the "Jornades Doctorals-2017" includes an exciting series of conferences by 3rd year UAB-Chemistry PhD students and four lectures by academic and industrial experts in different fields of chemistry:

#### Evamarie Hey-Hawkins

##### Full Professor at the Inorganic Chemistry institute, University of Leipzig

Evamarie Hey-Hawkins has been a Full Professor of Inorganic Chemistry at Leipzig University, Germany, since 1993. She has held positions at universities in the UK, Australia and Germany. She has published more than 435 papers and received several awards including the degree of "Distinguished Woman in Chemistry and Chemical Engineering" by IUPAC (2013), the Nenitescu Medal (2016) and two honorary doctoral degrees. Her scientific interests are manifold and comprise inorganic chemistry/organometallic chemistry, organophosphorus chemistry, biologically active boron compounds, heterometallic transition metal complexes and catalysis.

#### Aitziber López

##### Investigadora IkerBasque, CIC biomAGUNE

Aitziber L. Cortajarena joined CIC-BiomaGUNE in 2016 as Ikerbasque Research Professor. Since her PhD in 2002, she has held positions at different institutions such as Yale University, Weizmann Institute Biomolecular or IMDEA Nanociencia. She has been awarded with an ERC Consolidator Grant in 2014. Her research interests focus on protein engineering toward the generation of bio-functional nanostructures and bioinspired materials for applications in nano-biotechnology and nanomedicine.

#### Ricarda Miller

##### Lab Leader of Disease Control Chemistry, CropScience Division, Bayer SAS

Ricarda Miller underwent doctoral studies under the supervision of Prof. Ulrich Groth and Prof. Victor Snieckus at the Konstanz Research School of Chemical Biology. She then moved to the Institute of Chemical Research of Catalonia (ICIQ), Tarragona, Spain, for a postdoctoral stay in the group of Prof. Antonio Echavarren, working on total syntheses of complex Natural Products using Au(I)-catalyzed key steps. Ricarda Miller started her professional career in 2013 as a laboratory leader and project manager at the crop science division of Bayer in Lyon, France

#### Romà Tauler

##### Professor Investigador ID/EA, CSIC

Romà Tauler has an extensive scientific career at different institutions. He has held positions at the University of Barcelona, University of Innsbruck, or the University of Washington and CSIC. He has published around 350 scientific articles and has been awarded with an ERC Advanced Grant in 2012 and the Kowalski Prize in 2009. His research interests are chemometrics, particularly the development of new factor analysis and multivariate curve resolution methods for the analysis multiway and multiset data, and their applications to Omic Sciences, Environmental Chemistry, Analytical and Bioanalytical Chemistry.

We look forward to your participation in this event.

The Organizing Committee

#### Organizing, Scientific and Prizes Committee:

- Prof. Mariona Sodupe, PhD Coordinator of the studies in Chemistry and President of the Chemistry PhD Committee (UAB)
- Prof. Félix Busqué, Master Coordinator of the studies in Chemistry and President of the Chemistry Master Committee (UAB)
- Prof. Xavier Sala, Secretary of PhD and Master Studies Committee (UAB)
- Prof. Rosa M<sup>o</sup> Sebastian, Vocal of PhD and Master Studies Committee (UAB)
- Prof. Clara Viñas, Vocal of PhD and Master Studies Committee (ICMAB)
- Prof. Daniel Maspocho, Vocal of PhD and Master Studies Committee (ICN2)
- Elena Oleshkevich, PhD Student, Department of Chemistry, (UAB)
- Daniel Herrera, PhD student Department of Chemistry, (UAB)

#### Further information:

The Lectures and Flash Presentations will take place at **Sala d'Actes**, Faculty of Sciences

The Poster Exhibition and coffee break will take place at the **1st floor hall**, in front of the Sala de Juntes (next to the Sala de Graus), Faculty of Sciences

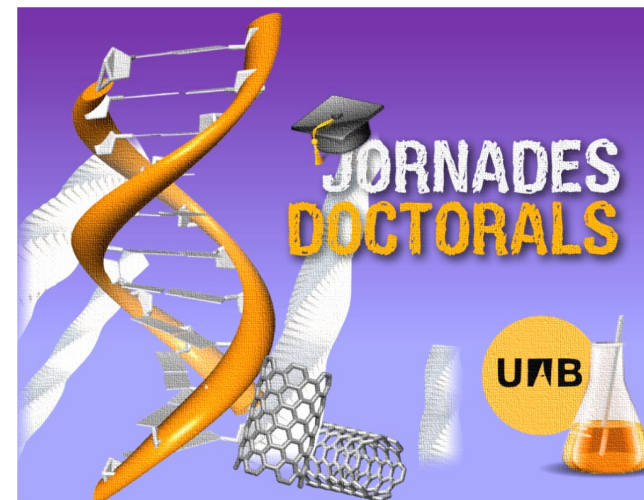
#### Contact details

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## Department of Chemistry

### Activities for PhD Students

**May 31 to June 2, 2017**

**Sala d'Actes  
Faculty of Sciences**

Universitat  
Autònoma de  
Barcelona



# May, 31

**12:00 - 12:15** Opening Ceremony

**12:15 - 13:15** Jornades Doctorals Lecture:

Chairman: Prof. Santiago MasPOCH

**“Chemometrics: a powerful tool for the investigation of high throughput omics environmental analytical data”**

Prof. Romà Tauler

**13:15 - 16:00** Break

**16:00 - 18:00** Flash Presentations I

Chairman: Xavier Sala

16:00 - 16:15 Comparing nucleic acid lateral flow and electrochemical genosensing for the simultaneous detection of foodborne pathogens, **Alejandra Ben Aissa**, (FP1.1)

16:15 - 16:30  $\sigma$ -Donating ligands containing Fe=CH<sub>2</sub> favours low-spin and improves the ratio olefin metathesis/cyclopropanation, **Égíl de Brito Sá**, (FP1.2)

16:30 - 16:45 Clean and Renewable Generation of H<sub>2</sub> from H<sub>2</sub>O Catalyzed by Ru Nanoparticles, **Jordi Creus Casanovas**, (FP1.3)

16:45 - 17:00 Composite salt in porous metal-organic frameworks for adsorption heat transformation, **Luis Carlos Garzón Tovar** (FP1.4)

17:00 - 17:15 Impact of the in-situ rise of hydrogen partial pressure for graphene shape evolution during CVD growth, **Zewdu Messele Gebeyehu** (FP1.5)

17:15 - 17:30 Fluorine: an amazing halogen, **Albert Granados Toda** (FP1.6)

17:30 - 17:45 Screening of Gene Mutation by using Metallacarboranes as Redox Potential Electrochemical Indicators, **Isabel Fuentes Sempere** (FP1.7)

17:45 - 18:00 Efficient Sb(III)/Sb(V) adsorption by SPION supported on Metalzorb® Sponge®, **Verónica Verdugo Andrés** (FP1.8)

# June, 1

**10:00 - 11:00** Jornades Doctorals Lecture

Chairwoman: Prof. Clara Viñas

**“Carboranes - Highly Versatile Scaffolds in Ligand and Drug Design”**

Prof. Evamarie Hey-Hawkins

**11:00 - 11:45** Coffee Break and Poster Session

**11:45 - 13:15** Flash Presentations II

Chairman: Prof. Daniel MasPOCH

11:45 - 12:00 Electrocatalytic hydrogen evolution by earth-abundant metal complexes bearing bis(imino)pyridine scaffolds, **Bing Jiang** (FP2.1)

12:00 - 12:15 Nanotechnology-based lateral flow biosensors, **Daniel Quesada González** (FP2.2)

12:15 - 12:30 Stereoselective synthesis and evaluation of polyfunctionalized cyclohexanes as potencial antitumor agents, **Laia Solé Viñals** (FP2.3)

12:30 - 12:45 Coordination polymer particles as nanoplatfoms for HIV antiretroviral drug release, **Rubén Solórzano Rodríguez** (FP2.4)

12:45 - 13:00 Molecularly Imprinted Polymer-decorated Magnetite Nanoparticles for Selective Sulfonamide Detection, **Alejandro Zamora Galvez** (FP2.5)

13:00 - 13:15 Development of New Strategies in Nuclear Magnetic Resonance, **Andre Roberto Oliveira Fredi** (FP2.6)

**13:15 - 16:00** Break

**16:00 - 17:00** Flash Presentations III

Chairwoman: Rosa Maria Sebastian

16:00 - 16:15 Organocatalytic Tandem and Multicomponent Reactions by Zn-MOF Squaramide Materials under Solvent Free Conditions, **Claudia Vignatti Abellan** (FP3.1)

16:15 - 16:30 Uncovering the surface chemistry of LnF<sub>3</sub> nanoparticles, **Jordi Martínez Esain** (FP3.2)

16:30 - 16:45 New biocomposites based on ABS (acrylonitrile butadiene styrene copolymers) and wood fibers suitable for injection molding with aesthetic properties, **Marc Pérez Fernandez** (FP3.3)

16:45 - 17:00 Smart Materials: Superhydrophobic and Microbicidal, **Ana Maria Montagut Pérez** (FP3.4)

**17:00 - 18:00** Jornades Doctorals Lecture

Chairwoman: Rosa Maria Sebastian

**“Azole Fungicides – A Never Ending Innovation Story”**

Prof. Ricarda Miller

# June, 2

**10:00 - 11:00** Flash Presentations IV

Chairman: Prof. Mariona Sodupe

10:00 - 10:15 Implementation of rapid analytical technologies to advanced pharmaceutical manufacturing, **Judit Brassier Font** (FP4.1)

10:15-10:30 Benzoxazines: synthesis and reactivity Polybenzoxazines, **Alba Martos Camí** (FP4.2)

10:30-10:45 Highly sensitive electrocatalytic and optical biosensors based on hollow AuAg nanoparticles, **Lorenzo Russo** (FP4.3)

10:45-11:00 Use of NIR spectroscopy for industrial freeze-dryer moisture mapping during PPQ batches of a freeze-dried product , **Glòria Clua Palau** (FP4.4)

**11:00 - 11:45** Coffee Break

**11:45 - 12:45** Jornades Doctorals Lecture

Chairman: Prof. Félix Busqué

**“Protein engineering for bioinspired hybrid structures and materials”**

Prof. Aitziber López

**12:45 - 13:15** Award and closing ceremony

Jornades Doctorals 2017 distinguished Diploma, along with an iPad, will be given to the two best Poster-Flash Presentations. **Prizes awarded by HNA Group**

