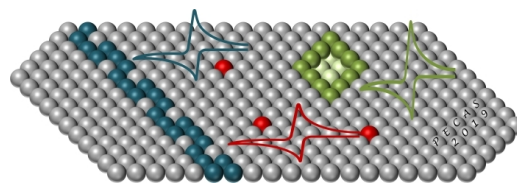




# Photo- and ElectroCatalysis at the Atomic Scale (PECAS2019)



**27.Aug - 30.Aug 2019**

**Cod. Z19-19**

**Mod.:**

Face-to-face

**Edition**

2019

**Activity type**

Workshop

**Date**

27.Aug - 30.Aug 2019

**Location**

Miramar Palace

**Languages**

English

**Academic Validity**

40 hours

**Web**

<http://pecas2019.dipc.org>

**Organising Committee**



## Description

The school on PhotoElectroCatalysis at the Atomic Scale (PECAS) is aimed at promoting various opportunities for interdisciplinary discussion of scientists and students of physics, material science, chemistry and electrochemistry in addition to presentation of new results, ideas and methods in the field of photo- and electrochemical properties of novel materials.

### Topics:

- *In situ and in operando electrochemistry-surface science techniques and methods.*
- *Energy conversion from photon and chemical energy to electrical energy.*
- *Electrocatalysts for water splitting and CO<sub>2</sub> reduction.*
- *Local active sites on solid surfaces: reactivity of defects.*
- *Chemical engineering and synthesis of photoelectrochemical systems.*
- *Novel materials for electrochemical energy storage.*
- *Electrochemical biosensors.*
- *Theoretical modeling of electrochemical interfaces.*

### Organizing committee

- Sara Barja, Centro de Física de Materiales (CSIC-UPV/EHU), DIPC (chair)
- Celia Rogero, CFM-CSIC-UPV/EHU, DIPC
- Olaf Magnussen, Kiel University
- Doris Grumelli, MPI-FKF, INIFTA – CONICET

### Objectives

PECAS 2019 scopes the integration of electrochemistry and surface science research areas towards the understanding of the nature of the electrode-solution interface at an atomic level. Leading experts across the different disciplines will present the latest experimental and theoretical efforts in the field of photo- and electrochemistry on surfaces, promoting in depth discussions between students and scientific community from both fields.

The seminars will be delivered at the postgraduate level in the fields of surface science and electrochemistry, but three introductory lectures -surface science, electrochemistry and theoretical methods- will be specially addressed to introduce master and graduate students from Chemistry and/or Physics in each topic covered in PECAS 2019.

### Course specific contributors



**BihurCrystal**

## Directed by



**Sara Barja Martínez**

UPV/EHU - DIPC

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Sara Barja is currently a Ikerbasque Research Associate at the University of the Basque Country (UPV/EHU) and the Centro de Física de Materiales (CFM). Her work seeks to understand the existing relationships between structure and reactivity in electrocatalysis processes. With a PhD in Physics, she has developed her research career between Spain, the United States, and Germany. She currently coordinates an ERC-StG project that aims to produce H<sub>2</sub> from seawater. For this, she combines the study of catalysts using scanning probe microscopies with atomic resolution and X-ray photoemission spectroscopy under near real operating conditions. Her career has been recognized with the Hypatia 2019 and Ikerbasque 2023 awards. She has participated in various dissemination events such as Naukas, Jakin-mina, or Qué sabemos de...?

## Registration fees

REGISTRATION FEES	UNTIL 27-08-2019
INVITED SPEAKER / ORGANIZERS	0 EUR
STUDENT	200,00 EUR
REGULAR ATTENDANT	300,00 EUR

## **Place**

### **Miramar Palace**

Pº de Miraconcha nº 48. Donostia / San Sebastián

Gipuzkoa