

# **PhD Candidate Profile**

### Name:

Rui S. Ribeiro

# **Research Group:**

N/A

#### **Research Centre:**

LCM - Laboratory of Catalysis and Materials, Associate Laboratory LSRE-LCM

# **Department/School(s):**

**Department of Chemical Engineering** 

### **College:**

Faculty of Engineering, University of Porto, Portugal

# **Supervisor(s):**

Joaquim L. Faria; Helder T. Gomes; Adrián M.T. Silva

## **Funding body:**

Fundação para a Ciência e a Tecnologia - FCT

# Area (field) of study:

Synthesis of nanostructured composites containing magnetic and carbon-based materials to serve as heterogeneous catalysts for catalytic wet peroxide oxidation of typically non-biodegradable pollutants

### **Thesis Title:**

Synthesis of hybrid magnetic carbon nanocomposites for catalytic wet peroxide oxidation

### **Abstract:**

N/A

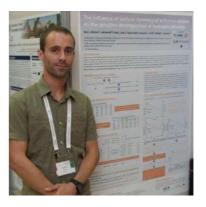
### **Collaborations:**

N/A

### **Publications:**

Rui S. Ribeiro, Adrián M.T. Silva, Luisa M. Pastrana-Martínez, José L. Figueiredo, Joaquim L. Faria, Helder T. Gomes, Graphene-based materials for the catalytic wet peroxide oxidation of highly concentrated 4-nitrophenol solutions, Catalysis Today, 249 (2015) 204–212

Rui S. Ribeiro, Adrián M.T. Silva, Maria T. Pinho, José L. Figueiredo, Joaquim L. Faria, Helder T. Gomes, Development of glycerol-based metal-free carbon materials for environmental catalytic applications, Catalysis Today, 240, Part A (2015) 61-66





# **PhD Candidate Profile**

Rui S. Ribeiro, Adrián M.T. Silva, José L. Figueiredo, Joaquim L. Faria, Helder T. Gomes, The influence of structure and surface chemistry of carbon materials on the decomposition of hydrogen peroxide, Carbon, 62 (2013) 97-108

Rui S. Ribeiro, Adrián M.T. Silva, José L. Figueiredo, Joaquim L. Faria, Helder T. Gomes, Removal of 2-Nitrophenol by catalytic wet peroxide oxidation using carbon materials with different morphological and chemical properties, Applied Catalysis B: Environmental, 140-141 (2013) 356-362

Rui S. Ribeiro, Nady A. Fathy, Amina A. Attia, Adrián M.T. Silva, Joaquim L. Faria, Helder T. Gomes, Activated carbon xerogels for the removal of the anionic azo dyes Orange II and Chromotrope 2R by adsorption and catalytic wet peroxide oxidation, Chemical Engineering Journal, 195-196 (2012) 112-121Type here

### **Presentations:**

### **Recent oral presentations**

Helder T. Gomes, Rui S. Ribeiro\*, Adrián M.T. Silva, Luisa M. Pastrana-Martínez, José L. Figueiredo, Joaquim L. Faria, The influence of carbon material properties in the efficiency of catalytic wet peroxide oxidation processes, in: Carbon 2015, 12th to 17th of July, 2015, Dresden, Germany

Rui S. Ribeiro\*, Adrián M.T. Silva, Luisa M. Pastrana-Martínez, José L. Figueiredo, Joaquim L. Faria, Helder T. Gomes, Key parameters when developing carbonaceous materials for catalytic wet peroxide oxidation, in: XX Encontro Luso-Galego de Química, 26th to 28th of November, 2014, Porto, Portugal

### **Recent poster presentations**

Rui S. Ribeiro\*, Adrián M.T. Silva, José L. Figueiredo, Joaquim L. Faria, Helder T. Gomes, Hybrid magnetic graphitic nanocomposites for catalytic wet peroxide oxidation applications, in: 4th European Conference on Environmental Applications of Advanced Oxidation Processes, 21st to 24th of October, 2015, Athens, Greece. Accepted

Rui S. Ribeiro\*, Maria Martin-Martinez, Bruno F. Machado, Philippe Serp, Sérgio Morales-Torres, Adrián M.T. Silva, José L. Figueiredo, Joaquim L. Faria, Helder T. Gomes, Carbon nanotubes as catalysts for wet Peroxide oxidation: structure-reactivity relationships, in: 4th European Conference on Environmental Applications of Advanced Oxidation Processes, 21st to 24th of October, 2015, Athens, Greece. Accepted

Rui S. Ribeiro, Adrián M.T. Silva, Joaquim L. Faria\*, Helder T. Gomes, Magnetic carbon xerogels for the catalytic wet peroxide oxidation of 4-nitrophenol solutions, in: 12th European Congress on Catalysis – EuropaCat-XII, 30th of August to 4th of September, 2015, Kazan, Russia. Accepted



# **PhD Candidate Profile**

Rui S. Ribeiro\*, Adrián M.T. Silva, José L. Figueiredo, Joaquim L. Faria, Helder T. Gomes, Development of magnetically recoverable carbon nanocomposites for the catalytic wet peroxide oxidation of 4-nitrophenol solutions, in: Carbon 2015, 12th to 17th of July, 2015, Dresden, Germany

\*Presenting Author