Postdoctoral Position in **Electrochemistry**

**Nanoparticles in Carbon Nanotubes** (ERC-StG project)

**FunNanoMatLab** group led by [Dr. Maria Gimenez](http://gimenezgroup.com) is seeking for 1 **Postdoctoral** **Research Fellow** with a strong background in **Electrochemistry** to join the team **@CiQUS**

The selected candidate will take part to the cutting-edge research project (**NANOCOMP**) funded by the European Commission ([ERC-Starting Grant](https://erc.europa.eu/funding-and-grants/funding-schemes/starting-grants)), having as a primary goal the development of a new model systems hybrid metal-carbon nanomaterials to study frontier concepts in energy-related applications. Understanding and controlling electrochemical responses of confined nanoscale species on carbon nanocontainers in conversion and energy-storage is the main vector of this project.

**DESCRIPTION**

The selected candidate will work on the preparation of energy-storage components (e.g. batteries) incorporating, exploring and optimizing novel hybrid carbon nanostructures functionalized with tailored-made redox active components.

**REQUIREMENTS**

We are seeking for an outstanding individual holding a PhD in Chemistry/Materials Science or a relevant subject area, capable to keep her/his own timely progress while supervising fellow PhDs and MSc students as a senior team member. The selected candidate will be a self-starter, creative and team-player, willing to work in a dynamic environment. Good knowledge of electrochemistry theory and characterization methods is required in the field of energy storage. Excellent communication skills and proficiency in written and spoken English are essential.

**REFERENCES**

“*Extremely Stable Platinum-Amorphous Carbon Electrocatalyst within Hollow Graphitized Carbon Nanofibers for the Oxygen Reduction Reaction”,* M.C. Gimenez-Lopez et al. [Adv. Mater., **2016**, 28, 41, 9103 – 9108.](http://onlinelibrary.wiley.com/doi/10.1002/adma.201602485/abstract)

*“Assembly and Magnetic Bistability of Mn3O4 Nanoparticles Encapsulated in Hollow Carbon Nanofibers”*, M.C. Gimenez-Lopez et al. [Angew. Chem. Int. Ed., **2013**, 52, 2051 –2054](http://onlinelibrary.wiley.com/doi/10.1002/anie.201207855/abstract).

*“Encapsulation of Single-molecule Magnets in Carbon Nanotubes“*, M.C. Gimenez-Lopez et al. [Nature Communications, **2011**, 2:47](http://www.nature.com/articles/ncomms1415)

**STARTING DATE AND TERM**

ASAP. Applications will be considered as received, >1 year contract with salary commensurate with experience and demonstrated skills.

**APPLICATIONS AND DEADLINE**

Applications should be addressed to Dr. Maria Gimenez-Lopez and sent via email in a single PDF file to maria.gimenez.lopez@usc.es including a motivation letter, CV with publications, a short description of previous research and the names and e-mail addresses of two academic references, indicating in the subject **NANOCOMP-CiQUS-POSTDOC-ENERGY-ELECTROCHEMISTRY/BATTERIES**.

Postdoctoral Position in **Electrocatalysis**

**Nanoparticles in Carbon Nanotubes** (ERC-StG project)

**FunNanoMatLab** group led by [Dr. Maria Gimenez](http://gimenezgroup.com) is seeking for 1 **Postdoctoral** **Research Fellow** with a strong background in **Electrocatalysis** to join the team **@CiQUS**

The selected candidate will take part to the cutting-edge research project (**NANOCOMP**) funded by the European Commission ([ERC-Starting Grant](https://erc.europa.eu/funding-and-grants/funding-schemes/starting-grants)), having as a primary goal the development of new model systems hybrid metal-carbon nanomaterials to study frontier concepts in energy-related applications. Understanding and controlling electrochemical responses of confined nanoscale species on carbon nanocontainers in electrocatalysis and energy-storage is the main vector of this project.

**DESCRIPTION**

The selected candidate will work on the preparation, functionalization and characterization of electrocatalysts through the development of novel hybrid carbon nanostructures for energy-storage applications.

**REQUIREMENTS**

We are seeking for an outstanding individual holding a PhD in Chemistry/Materials Science or a relevant subject area, capable to keep her/his own timely progress while supervising fellow PhDs and MSc students as a senior team member. The selected candidate will be a self-starter and creative team-player willing to work in a dynamic environment. Good knowledge of catalysis and materials is required. Excellent communication skills and proficiency in written and spoken English are essential.

**REFERENCES**

“*Extremely Stable Platinum-Amorphous Carbon Electrocatalyst within Hollow Graphitized Carbon Nanofibers for the Oxygen Reduction Reaction”,* M.C. Gimenez-Lopez et al. [Adv. Mater.,](http://onlinelibrary.wiley.com/doi/10.1002/adma.201602485/abstract) **[2016](http://onlinelibrary.wiley.com/doi/10.1002/adma.201602485/abstract)**[, 28, 41, 9103 – 9108.](http://onlinelibrary.wiley.com/doi/10.1002/adma.201602485/abstract)

*“Assembly and Magnetic Bistability of Mn3O4 Nanoparticles Encapsulated in Hollow Carbon Nanofibers”*, M.C. Gimenez-Lopez et al. [Angew. Chem. Int. Ed.,](http://onlinelibrary.wiley.com/doi/10.1002/anie.201207855/abstract) **[2013](http://onlinelibrary.wiley.com/doi/10.1002/anie.201207855/abstract)**[, 52, 2051 –2054](http://onlinelibrary.wiley.com/doi/10.1002/anie.201207855/abstract).

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