



Conditions Extrêmes et  
Matériaux :  
Haute Température et Irradiation  
CEMHTI UPR3079



Orléans, 21<sup>st</sup> Sept 2018

## Post-Doctoral Vacancy at CEMHTI CNRS (UPR 3079) Orléans, France

### Photochemistry in nanoporous materials

#### Context

POR2E is a multidisciplinary group settled at CEMHTI (CNRS, UPR 2079) in Orléans (France). Our research activities are supported by the European Research Council through an ERC-Consolidator Grant ([www.cemhti.cnrs-orleans.fr/Poles/default.aspx?theme=Ania](http://www.cemhti.cnrs-orleans.fr/Poles/default.aspx?theme=Ania)). Our research interests focus on the synthesis, characterization and testing of spatially organized photoactive nanoporous materials with ad-hoc characteristics tailored at two levels (nanopore architectures and surface functionalization) applied to various technological processes for gas sensing, energy conversion and environmental protection.

Ongoing projects focus on the use of nanoporous catalysts for enhanced solar energy conversion, exploring the potentialities of materials with high electron mobility and multimodal pore systems. Specific attention will be drawn on boosting the integration of photoassisted reactions in confined spaces for improved solar energy conversion through various energetic vectors (e.g., water, O<sub>2</sub>, H<sub>2</sub>, CO<sub>2</sub>) and chemical compounds of strategic interest in the manufacturing of fine chemicals.

The candidate will have the opportunity to work in a world-leading research group and to attend many career development workshops, seminar and conferences as a part of his/her activities.

The position is open for a period of 1 year. Extension for another year would be possible depending on performance.

#### The candidate is expected to:

Produce independent and original research in the area

Be capable of working highly autonomous

Interact with other members of the group

Participate in dissemination activities (workshops, conferences and publications)

Preparing and follow up of European and other collaboration projects

Applications which do not meet these criteria will not be considered.

#### The candidate should have:

A PhD in physics, chemistry, chemical engineering or any closely related discipline.

Strong skills in materials science, adsorption, catalysis and photochemistry.

Excellent communication skills in English (knowledge on other language will be appreciated).

At least 5 published papers in peer-reviewed international journals.

**Salary:** Calculated from CNRS salary grids based on the experience of the candidate (estimation ca. 2000 €/ month).

#### Contact

Submit your application package (motivation letter, full CV including 2-3 referees contact and/or recommendation letter/s) to Dr. Conchi Ania ([conchi.ania@cnrs-orleans.fr](mailto:conchi.ania@cnrs-orleans.fr)). An oral interview will be arranged for those candidates that fulfill the requirements.

Closing date: 15 October 2018

Recruitment is foreseen in December 2018

Dr. Conchi Ania

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