Postdoctoral position in *first principles modeling of materials for solar water splitting* @ the University of Chicago

A position is available in the group of Giulia Galli at the University of Chicago for a postdoctoral scholar focusing on the study of multi-component systems for the generation of sustainable fuels through solar water splitting. The NSF-funded project will be under the direction of Prof. Giulia Galli and will be in close collaboration with experimental colleagues at the University of Wisconsin-Madison and Brookhaven National Laboratory. Further information on related research activities in the group is available here.

Excellent candidates with a background in solid-state chemistry/physics and first-principles simulations of materials are invited to apply. Major duties and responsibilities include the use of advanced electronic structure methods and quantum simulations to model optoelectronic and transport properties of aqueous interfaces involving photoactive materials.

Application Materials:

Candidates should submit:

- 1) A full CV, including list of publications and contacts for at least two references.
- 2) A cover letter of intent to Giulia Galli at gagalli@uchicago.edu, with "Postdoctoral application: PEC" in the subject line (PDF attachments only).

Shortlisted candidates will be contacted individually for interviews, usually over videoconferencing.

Academic Title: Postdoctoral Scholar

Salary: Commensurate with experience and qualifications.

<u>Basic Qualifications</u>: Ph.D in physics, chemistry, materials science, or a related field of research

Availability: Immediate

Skills and experience:

- Strong background in computational condensed matter physics and/or materials chemistry, including density functional theory and first principles molecular dynamics (required).
- Previous experience with first-principles materials simulation codes (preferably Quantum Espresso and Qbox) (required).
- Previous collaborations with experimental groups (preferred).
- Excellent verbal and written communication skills (required).

The position (initially for 1 year and renewable) will be hosted at the <u>Pritzker School of Molecular Engineering</u> (PME), at the University of Chicago, under the supervision of Prof. Giulia Galli (http://galligroup.uchicago). The PME offers a thriving intellectual environment, outstanding computational resources and facilities, and a very active and lively community.