

## **Postdoctoral position in Development of quantum embedding techniques for electronic structure calculation on classical and quantum computers @ the University of Chicago**

A position is available in the group of Giulia Galli at the University of Chicago (<https://galligroup.uchicago.edu/>) for a postdoctoral scholar working on the development of quantum embedding methods for electronic structure calculations on classical and quantum computers, with focus on materials for quantum technologies.

The project will be under the direction of Prof. Giulia Galli and conducted in collaboration with Dr. Marco Govoni at Argonne National Laboratory and with the developers of the WEST code (<http://www.west-code.org/>), within the Midwest Integrated Center for Computational Materials (MICCoM: <http://miccom-center.org/>) headquartered at Argonne National Laboratory.

Excellent candidates with a background in condensed matter physics and/or materials science and electronic structure calculations are invited to apply. Major duties and responsibilities include the development and application of advanced electronic structure methods and quantum simulations both on classical and quantum computers.

### 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](mailto:gagalli@uchicago.edu), with "Postdoctoral application: QDET" 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.

Basic Qualifications: 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 science/chemistry, including density functional theory and many body perturbation theory and/or quantum chemistry.
- Previous experience with electronic structure calculations.
- Previous experience in using quantum simulators and quantum computers.
- Excellent verbal and written communication skills.

The position (initially for 1 year and renewable) will be hosted at the Pritzker School of Molecular Engineering (PME), at the University of Chicago, under the supervision of Prof. Giulia Galli. The PME offers a thriving intellectual environment, outstanding computational resources and facilities, and a very active and lively community of researchers in the area of quantum science and engineering (<https://pme.uchicago.edu/themes/quantum-engineering>).