

## Postdoctoral position in *first principles modeling of quantum materials for energy efficient neuromorphic computing* @ 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 quantum materials for energy efficient neuromorphic computing. The DOE-funded project, which is part of the Energy Frontier Research Center QMEENC (<https://qmeenc.ucsd.edu/>), will be under the direction of Prof. Giulia Galli and will be in close collaboration with experimental colleagues at the University of California, San Diego and with other QMEENC participants. Further information on related research activities in the group is available at <https://galligroup.uchicago.edu/Research/quantum.php>

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 the properties of complex oxides.

### 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: Neurom.**” 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 chemistry, including density functional theory and many-body perturbation theory (required).
- Previous experience with first-principles materials simulation codes (preferably Quantum Espresso and Qbox) (preferred).
- 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 [Pritzker School of Molecular Engineering](#) (PME), at the University of Chicago, under the supervision of Prof. Giulia Galli (<http://galligroup.uchicago.edu>). The PME offers a thriving intellectual environment, outstanding computational resources and facilities, and a very active and lively community.