



The University of Texas at Austin
**Oden Institute for Computational
Engineering and Sciences**

201 East 24th Street, Room 4.102, Stop C0200 · Austin Texas 78712-1229

Post-doctoral positions in the Giustino research group

Job Summary

Applications are invited for two Postdoctoral Research Fellowships in the Giustino research group at the Oden Institute for Computational and Engineering Sciences, University of Texas at Austin.

We are looking for two candidates to work in the following areas, respectively:

1. *Ab initio* design of perovskites for photovoltaics and optoelectronics;
2. Theory of electron-phonon interactions, polarons, and electron transport.

Our recent work in these areas can be consulted at

<http://giustino.materials.ox.ac.uk/index.php/Site/Publications>

Both positions are for *up to three years, with a start date preferably in September.*

The successful candidate will have a solid knowledge of electronic structure methods and condensed matter theory, and will be familiar with density-functional theory codes.

For position (1) on perovskites, previous experience with GW/BSE calculations is desirable. For position (2) on electron-phonon physics, previous experience with lattice dynamics is required, and familiarity with Fortran/MPI programming and many-body Green's function methods is desirable.

The appointed candidates will join the Giustino group within the Oden Institute at UT, a leading center for computational science and engineering, and will have access to cutting-edge high performance computing technology provided by the Texas Advanced Computing Center (TACC) at Austin. TACC is currently building Frontera, the fastest supercomputer at any U.S. university and one of the most powerful supercomputers in the world.

For more information on the projects, please feel free to contact:

Feliciano Giustino, Ph.D.

W. A "Tex" Moncrief, Jr. Chair in Quantum Materials Engineering,

Oden Institute for Computational Engineering & Sciences

Professor of Physics, The University of Texas at Austin

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Qualifications

Applicants must have a Ph.D. in physics, chemistry, or materials science, with a strong background in electronic structure calculations based on density-functional theory and beyond.

How to Apply

Interested applicants should send a cover letter, a curriculum vitae, and the names of three referees who are willing to provide references upon request. These documents should be combined in a single PDF file and sent to Kay Brown: kay@oden.utexas.edu.

Review of applications will begin **June 3**, and will continue until the positions are filled. Unsuccessful candidates will be notified via email.



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General Notes

Each position is initially for one year, renewable for up to three years based upon availability of funding, work performance, and progress toward research goals.

Background Checks

A criminal history background check will be required for finalist(s) under consideration for this position.

Employment Eligibility Verification

If hired, you will be required to complete the federal Employment Eligibility Verification I-9 form. You will be required to present acceptable and original [documents](#) to prove your identity and authorization to work in the United States. Documents need to be presented no later than the third day of employment. Failure to do so will result in loss of employment at the university.

Equal Opportunities

The University of Texas at Austin, as an equal opportunity/affirmative action employer, complies with all applicable federal and state laws regarding nondiscrimination and affirmative action. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, national origin, age, marital status, sex, sexual orientation, gender identity, gender expression, disability, religion, or veteran status in employment, educational programs and activities, and admissions.