



PhD positions in Energy Materials and Next-Generation Semiconductor Materials and Devices

Applications are invited for PhD studentships in Energy Materials and Next-Generation Semiconductor Materials and Devices, spanning the departments of Physics, Chemistry and Chemical Engineering at the University of Cambridge.

Key to meeting the world's climate change goals is the development of new technologies for the generation, storage and efficient use of energy. This includes next-generation materials for photovoltaic devices, light-emitting diodes, computing platforms, thermoelectrics and batteries. Our groups are at the forefront of research in these areas. Recent highlights include major advances in the physics of organic semiconductors [1-4], perovskites semiconductors [5-6], hybrid organic-nanoparticle systems [7] and the application of advanced spectroscopies and microscopies to energy materials ranging from semiconductors to battery electrodes [8]. Further details on our research programme can via the links here.

We are looking for outstanding and enthusiastic students to join for PhDs commencing in October 2022. Successful candidates should have or expect to obtain a master's level degree in Physics, Chemistry, Engineering or a related area. We provide a highly collaborative, diverse, international and dynamic working environment, where we tackle some of the most interesting and challenging problems at the intersection of physics, chemistry, materials science and engineering. Our alumni have strong track records in moving on to lead research groups in academia and taking up leading roles in industry.

Funded PhD positions that cover tuition fees and living expenses are available via funding within the groups as well as via competitive scholarships offered by the University of Cambridge. We particularly welcome applications by candidates from backgrounds historically under-represented in STEM subjects.

If you are interested in a position, we strongly advise you to get in touch with us before making a formal application via the University website. Please send an email to ar525@cam.ac.uk with the subject "Energy Materials PhD application". Please enclose a copy of your CV, including grades at bachelors and master's level, and a statement detailing your research experience to date. You should get in touch with us as soon as possible and definitely before 24th November 2021.

References

1. Gillett et al., *Nature*, 2021, [DOI:10.1038/s41586-021-03840-5](https://doi.org/10.1038/s41586-021-03840-5)
2. Ai et al. *Nature*, 2018, [DOI: 10.1038/s41586-018-0695-9](https://doi.org/10.1038/s41586-018-0695-9)
3. Jin et al., *Science*, 2018, [DOI: 10.1126/science.aar8104](https://doi.org/10.1126/science.aar8104)
4. Fratini et al., *Nature Materials*, 2020, [DOI: 10.1038/s41563-020-0647-2](https://doi.org/10.1038/s41563-020-0647-2)
5. Doherty et al., *Nature*, 2020, [DOI: 10.1038/s41586-020-2184-1](https://doi.org/10.1038/s41586-020-2184-1)
6. Hassan et al., *Nature*, 2021, [DOI: 10.1038/s41586-021-03217-8](https://doi.org/10.1038/s41586-021-03217-8)
7. Han et al., *Nature*, 2020, [DOI: 10.1038/s41586-020-2932-2](https://doi.org/10.1038/s41586-020-2932-2)
8. Merryweather et al., *Nature*, 2021, [DOI: 10.1038/s41586-021-03584-2](https://doi.org/10.1038/s41586-021-03584-2)