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CURRICULUM VITAE

Emma Helen Wolpert

Postdoctoral Research Associate Faculty of Natural Sciences Department of Chemistry Imperial College London London, United Kingdom

Education

- 2013 2017 MChem, University of Oxford, Chemistry (First Class) MChem Project: Emergence of Polarisation in Disordered Systems Supervisor: Prof. Andrew Goodwin
- 2017 2021 **DPhil (Inorganic Chemistry), University of Oxford** Project: Structural analogues of complex magnetic phases Supervisor: Prof. Andrew Goodwin

Research experience

 2019 Chimie Paris Tech, PSL Research University (Paris, France) Supervisor: F. X. Coudert I spent four months in Paris as part of my DPhil to learn DFT calculations and *ab initio* molecular dynamics simulations.
2021 - Postdoctoral Research Associate Imperial College London

2021 - **Postdoctoral Research Associate, Imperial College London** Supervisor: Dr. Kim Jelfs

Academic Honours

2015 - 2017	New College Academic Scholarship
2017	Part II Thesis Prize (Inorganic Chemistry) – Best thesis
2018	Poster prize – Physical Crystallography Group & Structural
	Condensed Matter Physics
2017 - 2020	Hertford College Graduate Scholarship
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Journal Publications

Hybrid local-order mechanism for inversion symmetry breaking

EH Wolpert, AR Overy, PMM. Thygesen, A Simonov, MS Senn, AL Goodwin, *Phys. Rev. B* **97**, 134106 (2018).

Function from configurational degeneracy in disordered framework materials EM Reynolds, **EH Wolpert**, AR Overy, L Mizzi, A Simonov, JN Grima, S Kaskel, AL Goodwin *Faraday Discuss.* **225**, 241-254 (2021).

Controlling anisotropic properties by manipulating the orientation of chiral small molecules J Wade, F Salerno, RC Kilbride, DK Kim, JA Schmidt, JA Smith, L LeBlanc, **EH Wolpert**, A Adeleke, E Johnson, J Nelson, T Mori, KE Jelfs, S Heutz, MJ Fuchter *Nature Chem.* **2022**, in press.

Into the unknown: how computation can help explore uncharted materials space AM Mroz, V Posligua, A Tarzia, **EH Wolpert**, KE Jelfs *J. Am. Chem. Soc.* **2022**, in press.

Coarse-grained modelling for predicting the packing of porous organic cages **EH Wolpert** and KE Jelfs, *https://doi.org/10.26434/chemrxiv-2022-33x98* reviewed at Chemical Science (minor revisions requested).

Modelling the effect of defects and disorder in amorphous metal–organic frameworks I Bechis, AF Sapnik, A Tarzia, **EH Wolpert**, MA Addicoat, DA Keen, TD Bennett, KE. Jelfs, *https://doi.org/10.26434/chemrxiv-2022-fs1kk* reviewed at Chemistry of Materials (minor revisions requested).

Skyrmion lattices in chiral metal-organic frameworks **EH Wolpert**, FX Coudert, AL Goodwin, *https://doi.org/10.26434/chemrxiv.12515594.v1*

Oral Presentations

Invited

April 2019	British Crystallographic Association Spring Meeting (Nottingham)

Aug 2022 American Chemical Society Fall meeting (Chicago, USA)

International

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Feb 2020	Correlated Disorder workshop (Herzberg, Switzerland)
Jul 2021	FEZA 2021 (Virtual)
Aug 2021	IUCr 2021 (Hybrid conference, Prague, Czech Republic)
Aug 2021	IUCr 2021 (Hybrid conference, Prague, Czech Republic)
Aug 2022	American Chemical Society Fall meeting (Chicago, USA)
National	
Nov 2017	Physical Crystallography Group & Structural Condensed Matter Physics (Abingdon)
Mar 2018	British Crystallographic Association Spring Meeting (Warwick)
Jan 2020	Frontiers in Condensed Matter Physics Conference (Bristol)
Dec 2021	RSC Solid State Chemistry Christmas Meeting (Virtual)
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June 2022 UKPormat (Glasgow)

Poster Presentations

- Nov 2016 Physical Crystallography Group & Structural Condensed Matter Physics (Abingdon, England)
- May 2018 European Doctoral Symposium on Metal-Organic Frameworks (Raitenhaslach, Germany)
- Aug 2018European Crystallography Meeting (Oviedo, Spain)
- July 2018 Aperiodic 2018 (Des Moines, Iowa, USA)
- Nov 2018 Physical Crystallography Group & Structural Condensed Matter Physics (Abingdon, England)
- Apr 2019 Conference on Analysis of Diffraction Data in Real Space (Grenoble, France)
- Aug 2019 European Crystallography Meeting (Vienna, Austria)
- Oct 2019 CZ-UK Workshop on Nanomaterials (Prague, Czech Republic)
- Jul 2021 FEZA 2021 (Virtual)
- Aug 2021 IUCr 2021 (Hybrid conference, Prague, Czech Republic)
- June 2022 GRC crystal engineering (Maine, USA)
- Sept 2022 Design, synthesis and application of next-generation organic semiconductors (London, England)
- Sept 2022 Leverhulme Research Centre Symposium (Liverpool, England)

Summer Schools

- July 2018 PCG Intensive School in Physical Crystallography
- Aug 2018 Physics by the Lake Summer School (Windsor, UK)
- Aug 2019MaThCryst satellite meeting (Vienna, Austria)

Teaching Experience

- 2017-2018 Junior Demonstrator Inorganic Chemistry Laboratory, University of Oxford
- 2017-2018 Graduate Tutor maths for chemistry, Jesus College, University of Oxford
- 2018 **Graduate Teaching Assistant** physical chemistry, New College, University of Oxford
- 2018-2019 **Non Stipendiary Lecturer** in maths for chemistry, St. Anne's College, University of Oxford
- 2018-2019 **Non Stipendiary Lecturer** in maths for chemistry, Oriel College, University of Oxford
- 2018-2019 **Non Stipendiary Lecturer** in maths for chemistry, St. Catherine's College, University of Oxford
- 2020 **Non Stipendiary Lecturer** in Inorganic chemistry, St. Catherine's College, University of Oxford

Supervision

2019- Supervised a summer project student, two masters student and a PhD student.

Professional Activities

- 2022 Co-organised the "Design, synthesis and application of next-generation organic semiconductors" conference (London, England)
- 2022- Reviewer for Crystal Growth & Design
- 2022- Member of the American Chemical Society
- 2021- Member of the Royal Society of Chemistry
- 2019-2021 Committee Member of the Young Crystallographers' Group
- 2017-2021 Member of the British Crystallographic Association
- 2018-2021 Member of the European Crystallographic Association