

CURRICULUM VITAE

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Education

- Oct. 2017 – Mar. 2021 **DPhil (Inorganic Chemistry), University of Oxford**
Thesis title: Structural analogues of complex magnetic phases
- Oct. 2013 – Sept. 2017 **MChem, University of Oxford, Chemistry (First Class)**
Thesis title: Emergence of Polarisation in Disordered Systems

Research experience

- Mar. 2021 – present **Postdoctoral Research Associate, Imperial College London**
Based in Prof. Kim Jelfs' group in the Department of Chemistry
- Sept. – Dec. 2019 **Researcher, Chimie Paris Tech, PSL Research University (Paris, France)**
I spent four months in Paris as part of my DPhil to learn DFT calculations and *ab initio* molecular dynamics simulations.
- June – Aug. 2015 **Summer project student, University of Oxford**
Based in Prof. Andrew Goodwin's group in the Inorganic Chemistry Department

Awards and Honours

- RSC Researcher Development and Travel Grant £500 (April 2023)
- Awarded over 18,000 compute hours, worth £3780
- MaThCryst IUCr travel award €300 (2019)
- Poster prize – Physical Crystallography Group & Structural Condensed Matter Physics (2018)
- Hertford College Graduate Scholarship (2017 – 2020)
- Part II Thesis Prize (Inorganic Chemistry) – Best thesis (2017)
- New College Academic Scholarship (2015 – 2017)

Journal Publications (¥ = equal contribution, * = corresponding author)

11. The effect of [*n*]-helicene length on crystal packing
JA Schmidt¥, **EH Wolpert**¥, GM Sparrow, ER Johnson, KE Jelfs Under first revision at *Cryst. Growth & Des.* (2023) [Link to article](#)
10. Systematic exploration of accessible topologies of cage molecules via minimalistic models
A Tarzia, **EH Wolpert**, KE Jelfs, GM Pavan, Accepted at *Chem. Sci.* (2023) [Link to article](#)
9. On the polytypism of layered MX₂ materials
EH Wolpert, SJ Cassidy, AL Goodwin, *Phys. Rev. Mater.* **7**, 093605 (2023). [Link to article](#)
8. The effect of disorder in multicomponent covalent organic frameworks
EH Wolpert*, A. Tarzia, KE Jelfs* *Chem. Commun.* **59**, 6909-6912 (2023). [Link to article](#)
7. Observation of Rare Tri6Di9 Imine Cages Using Highly Fluorinated Building Blocks
T Fleck-Kunde, **EH Wolpert**, L zur Horst, R Oestreich, C Janiak, KE Jelfs, BM Schmidt *Organic Materials* **4**, 255-260 (2022). [Link to article](#)
6. Coarse-grained modelling for predicting the packing of porous organic cages
EH Wolpert* and KE Jelfs* *Chem. Sci.* **13**, 13588-13599 (2022). [Link to article](#)
5. 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, *Chem. Mater.* **34**, 9042-9054 (2022). [Link to article](#)
4. 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.* **144**, 18730-18743 (2022). [Link to article](#)
3. 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, ER Johnson, J Nelson, T Mori, KE Jelfs, S Heutz, MJ Fuchter *Nature Chem.* **14**, 1383-1389 (2022). [Link to article](#)

2. 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). [Link to article](#)

1. 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). [Link to article](#)

Additional submitted papers

2. Structure and dynamics of the negative thermal expansion material Cd(CN)₂ under pressure
CS Coates, M Baise, JM Bulled, **EH Wolpert**, JW Makepeace, HC Walker, AS Gibbs, DA Fortes, B Slater, AL Goodwin DOI: 10.48550/arXiv.2302.09963 [Link to article](#)

1. Skyrmion lattices in chiral metal-organic frameworks
EH Wolpert, FX Coudert, AL Goodwin, DOI: 10.26434/chemrxiv.12515594.v1 [Link to article](#)

Oral Presentations

Invited

April 2019 British Crystallographic Association Spring Meeting (Nottingham)

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

International

Feb 2020 Correlated Disorder workshop (Herzberg, Switzerland)

Jul 2021 FEZA 2021 (Virtual)

Aug 2021 IUCr 2021 (Hybrid conference, Prague, Czech Republic)

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

July 2023 MC16 (Dublin, Ireland)

July 2023 CECAM Crystal structure prediction in materials discovery (Liverpool, UK)

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)

June 2022 UKPormat (Glasgow)

Dec 2022 Molecular and Supramolecular Chemistry (MASC) (Nottingham)

Sep 2023 Recent appointees in Materials Science (RAMS) (Lincoln)

Seminars

Oct 2022 Imperial College London (UK)

Apr 2023 UC Riverside (USA)

Apr 2023 UC Berkeley (USA)

June 2023 Warwick University (UK)

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 2018 European 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 2019	MaThCryst satellite meeting (Vienna, Austria)

Teaching Experience

2023	Tutor in Inorganic Chemistry, Imperial College London
2020	Non Stipendiary Lecturer in Inorganic chemistry, St. Catherine's College, University of Oxford
2018-2019	Non Stipendiary Lecturer in maths for chemistry, St. Catherine's 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	Graduate Teaching Assistant physical chemistry, New College, University of Oxford
2017-2018	Junior Demonstrator Inorganic Chemistry Laboratory, University of Oxford
2017-2018	Graduate Tutor maths for chemistry, Jesus College, University of Oxford

Professional Activities

2022	Co-organised the "Design, synthesis and application of next-generation organic semiconductors" conference (London, England)
2022-	Reviewer for Journal of American Chemistry Society (2022-), Crystal Growth & Design (2022-), and Chemistry of Materials (2023-)
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
2018-2020	I have conducted undergraduate interviews at three different colleges at the University of Oxford: (i) St. Anne's College (2018), (ii) Oriel College (2018), and (iii) Corpus Christi College (2019,2020)
2019-	Presently supervising 1 MRes, previously supervised 2 UROP students (2019,2023) and 2 master students, (2020-2021 and 2021-2022)