Rui Guo

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Date of Birth: 2nd Jan 1990; Nationality: Chinese

# Positions

2019.10-present **Shuimu Postdoctoral Research Fellow** Tsinghua University

# Education and Qualifications

2015-2019 **PhD in Earth Sciences** University of Cambridge

Investigating the structure and dissolution mechanisms of Mg-containing glasses for immobilising radioactive wastes from spent nuclear fuel reprocessing

2013-2014 **MPhil in Nuclear Energy (High Pass: 73%)** University of Cambridge

2011-2013 **BEng in Materials Science and Technology (Hons. 1st Class)** University of Birmingham

2009-2011 **BEng in Materials Science and Engineering** Central South University

# Publications and Presentations

**Guo, R.**, Brigden, C. T., Gin, S., Swanton, S. W. and Farnan, I (2018) ‘The effect of magnesium on the local structure and initial dissolution rate of simplified UK Magnox waste glasses’, *Journal of Non-Crystalline Solids*. 497, pp. 82–92. doi: 10.1016/J.JNONCRYSOL.2018.03.002.

Thomas L. Goût, Sambuddha Misra, Edward T. Tipper, Madeleine S. Bohlin, **Rui Guo** and Ian Farnan Diffusive processes in aqueous glass dissolution. *npj Mater Degrad* **3**, 39 (2019) doi:10.1038/s41529-019-0102-5

 **MRS Scientific Basis for Nuclear Waste Management Symposium XLI** (2017) Sydney, Australia: *Simplified UK Magnox waste glass alteration layer characterisation using 29Si, 17O and 25Mg NMR techniques* (Oral Presentation)

Sixth Annual Symposium of the 850 MHz Solid-State NMR Facility (2016) Warwick, England: *New Insight into the UK Magnox Waste Glasses: Structural Features and Alteration Mechanisms* (Oral Presentation)

**MRS Scientific Basis for Nuclear Waste Management Symposium XXXIX** (2015) Monepellier, France: *Towards a mechanistic understanding of UK Magnox waste glasses dissolution: An NMR approach for characterizing the altered surface* (Oral Presentation)

# Grants and Awards

2018 Lundgren Research Award (£2,000)

Cambridge Philosophical Society Research Studentship (£2,250)

2017 Selwyn College Graduate Students Travel Award (£500)

2015-2018 EPSRC PhD International Studentship and Cambridge International Scholarship (~£120,000)

2011-2013 University of Birmingham Exchange Programme Student Award (~£5,000 p.a.)