

## Anke Neumann

*Senior Lecturer in Environmental Engineering*

Newcastle University, School of Engineering · Newcastle upon Tyne, NE1 7RU, United Kingdom  
Phone: +441912086406; Email: anke.neumann@ncl.ac.uk; Website: www.staff.ncl.ac.uk/anke.neumann

### Appointments

- 2022–date **Humboldt Foundation Senior Research Fellow**  
GFZ German Research Centre for Geosciences, Potsdam, Germany · Section 3.5 Interface Geochemistry
- 2021 **Visiting Researcher** (Research Sabbatical)  
GFZ German Research Centre for Geosciences, Potsdam, Germany · Section 3.5 Interface Geochemistry
- 2020–date **Senior Lecturer** (equivalent to Associate Professor, permanent position)  
Newcastle University, UK · School of Engineering
- 2014–2020 **Lecturer** (equivalent to Assistant Professor, permanent position)  
Newcastle University, UK · School of Engineering
- 2011–2013 **Postdoctoral Research Scholar**  
University of Iowa, USA · Department of Civil and Environmental Engineering
- 2011 **Postdoctoral Research Scientist**  
Swiss Federal Institute of Aquatic Science and Technology (Eawag), Switzerland · Department Water Resources and Drinking Water
- 2009–2011 **Independent Postdoctoral Research Scientist** (*part-time: 50% FTE*)  
Bangladesh; in cooperation with: Eawag, Switzerland; George Mason University, USA; SONO Technology and Research Ltd., Bangladesh
- 2008–2009 **Postdoctoral Research Scientist**  
Swiss Federal Institute of Technology (ETH Zürich), Switzerland · Department of Environmental Sciences

### Education

- 2004–2008 Doctor of Sciences (Dr. sc. ETHZ)  
ETH Zürich, Switzerland · Department of Environmental Sciences, Institute of Biogeochemistry and Pollutant Dynamics
- 2001–2004 Master in Chemistry (Dipl. Chem. ETHZ)  
ETH Zürich, Switzerland · Department of Chemistry and Applied Biosciences

### Career Breaks

- 2013 Maternity leave, 5 months
- 2014 Illness, 6 months
- 2020 Caring responsibilities, 6 months (50% FTE)

### Awards and Recognition

- 2022–2023 Humboldt Research Fellowship for Experienced Researchers from the Alexander von Humboldt Foundation
- 2020 nominated as *Research Supervisor of the Year* at Newcastle University's Student Union's (NUSU) The Education Awards (TEAs)
- 2019 shortlisted as *Research Supervisor of the Year* at NUSU's TEAs
- 2018 SERDP Cleanup Project of the Year Award for SERDP Project ER-2532 (Co-I)

- 2016 Newcastle Teaching Award  
2015–2017 EPSRC Bright IDEAS Award  
2015 Associate Fellow of the Higher Education Academy in the UK  
2011–2013 Swiss National Science Foundation (SNSF) and German Research Foundation (DFG) Postdoctoral Fellowships

## Publications

22 publications in peer-reviewed journals, including **1 invited manuscript**, and **1 invited book chapter**, which have attracted >1480 citations (h-index: 18) to date (23 February 2023). Two papers were invited to feature on the **journal's cover page**, one manuscript was included in the journal's **Emerging Investigator Series**, one manuscript was selected by the handling Editor as a **'HOT' article**, as one of the top 10% of papers published in the journal, and one article was selected as **Editor's Choice**.

## Manuscripts in peer-reviewed journals

- Vasilopanagos, C.; Carteret, C.; Hillier, S.; **Neumann, A.**; Brooksbank, H. J. L.; Greenwell, H. C. Effect of Structural Fe Reduction on Water Sorption by Swelling and Non-Swelling Clay Minerals. *Minerals*, **2022**, *12*, 453. **Editor's Choice article**
- Stagg, O.; Morris, K.; Lam, A.; Navrotsky, A.; Velázquez, J. M.; Schacherl, B.; Vitova, T.; Rothe, J.; Galanzew, J.; **Neumann, A.**; Lythgoe, P.; Abrahamsen-Mills, L.; Shaw, S. Fe(II) Induced Reduction of Incorporated U(VI) to U(V) in Goethite. *Environ. Sci. Technol.*, **2021**, *55*, 16445–16454.
- Cheng, D.; **Neumann, A.**; Yuan, S. H.; Liao, W. J.; Qian, A. Oxidative Degradation of Organic Contaminants by FeS in the Presence of O<sub>2</sub>. *Environ. Sci. Technol.*, **2020**, *54*, 4091–4101.
- Wang, J.; Tsai, M.-C.; Lu, Z.; Li, Y.; Huang, G.; Wang, H.; Liu, H.; Liao, X.-Y.; Hwang, B.-J.; **Neumann, A.**; Yang, X. pH-dependent structure-activity relationship of Polyaniline-intercalated FeOCl for heterogeneous Fenton reactions. *ACS Omega*, **2019**, *4*, 21945–21953.
- Entwistle, J.; Latta, D. E.; Scherer, M. M.; **Neumann, A.** Abiotic Degradation of Chlorinated Solvents by Clay Minerals and Fe(II): Evidence for Reactive Mineral Intermediates. *Environ. Sci. Technol.*, **2019**, *53*, 14308–14318.
- Notini, L.; Latta, D. E.; **Neumann, A.**; Pearce, C.; Sassi, M.; N'Diaye, A.; Rosso K. M.; Scherer, M. M. A Closer Look at Fe(II) Passivation of Goethite. *ACS Earth Space Chem.*, **2019**, *3*, 2717–2725.
- Culpepper, J. D.; Scherer, M. M.; Robinson, T. C.; **Neumann, A.**; Cwiertny, D.; Latta, D. E. Reduction of PCE and TCE by Magnetite Revisited. *Environ. Sci. Process. Impact*, **2018**, *20*, 1340–1349. **HOT paper; featured on issue cover**
- Notini, L.; Latta, D. E.; **Neumann, A.**; Pearce, C.; Sassi, M.; N'Diaye, A.; Rosso K. M.; Scherer, M. M. The Role of Defects in Fe(II)-Goethite Electron Transfer. *Environ. Sci. Technol.*, **2018**, *52*, 2751–2759.
- Huhmann, B. L.\*; **Neumann, A.\***; Boyanov, M. I.; Kemner, K. M.; Scherer, M. M. As(V) in Magnetite: Incorporation and Redistribution. *Environ. Sci. Process. Impact*, **2017**, *19*, 1208–1219. **featured on issue cover and in Emerging Investigator Series** \*equal contributions
- Qafoku, O.; Pearce, C.; **Neumann, A.**; Kovarik, L.; Zhu, M.; Ilton, E.; Bowden, M.; Resch, C.; Arey, B.; Arenholz, E.; Felmy, A.; Rosso, K. Tc(VII) and Cr(VI) Interaction with a Naturally Reduced Ferruginous Smectite from a Redox Transition Zone. *Environ. Sci. Technol.*, **2017**, *51*, 9042–9052.

- Latta, D. E.; **Neumann, A.**; Premaratne, WAPJ; Scherer, M. M. Fe(II)–Fe(III) electron transfer in a clay mineral with low Fe content. *ACS Earth Space Chem.*, **2017**, *1*, 197–208.
- Neumann, A.**; Wu, L.; Li, W.; Beard, B. L.; Johnson, C. M.; Rosso, K. M.; Frierdich, A. J.; Scherer, M. M. Atom exchange between aqueous Fe(II) and structural Fe in clay minerals. *Environ. Sci. Technol.*, **2015**, *49*, 2786–2795.
- Handler, R. M.; Frierdich, A. J.; Johnson, C. M.; Rosso, K. M.; Beard, B. L.; Wang, C.; Latta, D. E.; **Neumann, A.**, Pasakarnis, T.; Premaratne, W. A. P. J.; Scherer, M. M. Fe(II)-Catalyzed Recrystallization of Goethite Revisited. *Environ. Sci. Technol.*, **2014**, *48*, 11302–1131.
- Neumann, A.**; Kaegi, R.; Voegelin, A.; Hussam, A.; Munir, A.K.M.; Hug, S. J. Arsenic removal with composite iron matrix filters in Bangladesh: a field and laboratory study. *Environ. Sci. Technol.*, **2013**, *47*, 4544–4554.
- Neumann, A.**; Olson, T. L.; Scherer, M. M. Spectroscopic evidence for Fe(II)–Fe(III) electron transfer at clay mineral edge and basal sites. *Environ. Sci. Technol.*, **2013**, *47*, 6969–6977.
- Invited paper**
- Alexandrov, V.; **Neumann, A.**; Scherer, M.; Rosso, K. Electron exchange and conduction in nontronite from first-principles. *J. Phys. Chem. C*, **2013**, *117*, 2032–2040.
- Neumann, A.**; Petit, S.; Hofstetter, T. B. Evaluation of redox-active iron sites in smectites using middle and near infrared spectroscopy. *Geochim. Cosmochim. Acta*, **2011**, *75*, 2336–2355.
- Neumann, A.**; Hofstetter, T. B.; Skarpeli-Liati, M.; Schwarzenbach, R. P. Reduction of polychlorinated ethanes and carbon tetrachloride by structural Fe(II) in smectites. *Environ. Sci. Technol.*, **2009**, *43*, 4082–4089.
- Neumann, A.**; Hofstetter, T. B.; Lüssi, M.; Cirpka, O. A.; Petit, S.; Schwarzenbach, R. P. Assessing the redox reactivity of structural iron in smectites using nitroaromatic compounds as kinetic probes. *Environ. Sci. Technol.*, **2008**, *42*, 8381–8387.
- Hofstetter, T. B.; **Neumann, A.**; Arnold, W. A.; Hartenbach, A. E.; Bolotin, J.; Cramer, C. J.; Schwarzenbach, R. P. Substituent effects on nitrogen isotope fractionation during abiotic reduction of nitroaromatic compounds. *Environ. Sci. Technol.*, **2008**, *42*, 1997–2003.
- Hofstetter, T. B.; **Neumann, A.**; Schwarzenbach, R. P. Reduction of nitroaromatic compounds by Fe(II) species associated with iron-rich smectites. *Environ. Sci. Technol.*, **2006**, *40*, 235–242.

### Book chapters

- Neumann, A.**; Sander, M.; Hofstetter, T. B. Redox Processes of structural Fe in Smectite Clay Minerals. Chapter 17 in *ACS Symposium Series: Aquatic Redox Chemistry*, Tratnyek, P.; Grundl, T.; Haderlein, S. Eds. 2011; pp 361–379. **Invited chapter**

### Oral Presentations

Delivered, or co-authored, >80 oral presentations at international conferences, including **2 Keynote Lectures** at the Euroclay Conference (2023, to be delivered) and at the Mineralogical Society's Meeting on Redox Active Minerals in Natural Systems (2017), and **9 Invited Presentations** at the invitation-only Iron Biogeochemistry Workshop (2018, 2016, 2014 (declined), 2012), ACS National Meeting (2018, 2016), Clay Minerals Society Meeting (2018), Goldschmidt Conference (2015), and the Surface Redox Reactions (SURF2R) Workshop (2022).

**Invited research seminars** at Durham University, UK (2022), the University of Berne, Switzerland (2021), Eawag, Switzerland (2021), the GFZ German Research Centre for Geosciences

(2020); IIT Gandhinagar, India (2019); University of Leeds, UK (2019); ETH Zürich, Switzerland (2019); Northeastern University, USA (2018); McGill University, Canada (2017); Colorado School of Mines, USA (2016); the University of Stirling, UK (2015); the University of Glasgow, UK (2015); Technical University Munich, Germany (2013); the University of Tübingen, Germany (2013); EPFL, Switzerland (2013); and the University of California Berkeley, USA (2013, 2016).

### Grants and Fellowships

Attracted grants from national funders (UK Research and Innovation), local government (e.g., North of Tyne Combine Authority), and international funders (e.g., Alexander von Humboldt Foundation, US Strategic Environmental Research and Development Program). Funding for projects with academic, industry, and government partners totals >EUR 6.9 million since 2009.

- 2023–2024 *Towards a rational design of mineral-based solutions for sustainable water and wastewater*; **PI**  
funder: Engineering and Physical Science Council (EPSRC), Overseas Travel Grant; GBP 48,700
- 2022–2023 *The curious case of clay minerals – how these overlooked minerals control redox reactions on Earth*; **PI**  
funder: Alexander von Humboldt Foundation, Humboldt Research Fellowship for Experienced Researchers; EUR 50,200
- 2022–2025 *Cataclastic hydrogen and oxidant production in the deep biosphere: uncovering the ancient role of microbial antioxidant enzymes (CERBERUS)*; **Co-I**  
PI: Jon Telling (Newcastle University); Co-Is: Neil Gray (Newcastle University), Jan Kaiser (University of East Anglia)  
funder: Natural Environment Research Council (NERC); GBP 642,356
- 2022–2024 *Novel clay mineral-based technologies for the treatment of per- and polyfluoroalkyl substances-impacted matrices*; **Collaborator; grant co-written**  
PI: Jinxia Liu (McGill University); Collaborators: Stefano Marconetto (WSP Global Inc.), Michael Donovan (CETCO, Minerals Technologies Inc.)  
funder: Natural Sciences and Engineering Research Council of Canada (NSERC), Alliance Grant; CAD 259,688
- 2021–2025 *Understanding Arsenic removal processes: passive treatment systems as proxies for natural environments*; **PI**  
Co-Is: Adam Jarvis (Newcastle University), Cindy Smith (University of Glasgow)  
funder: NERC, IAPETUS Doctoral Training Programme (DTP); CASE partner Coal Authority / Environment Agency; GBP 76,382
- 2020–2023 *Developing a quantitative framework for predicting abiotic attenuation under natural and transitional site management scenarios*; **Co-I**  
PI: Paul Tratnyek (Oregon Health & Science University (OHSU)); collaborators: Richard Johnson (OHSU), Michelle Scherer, Timothy Mattes, Drew Latta (University of Iowa)  
funder: Strategic Environmental Research and Development Program (SERDP); USD 1,334,414
- 2020–2022 *Advancing Circular Economy (ACE) Research and Development Demonstrator project*; **Co-I**

- PI: Robert Edwards (Newcastle University); collaborating academic institutions and industry partners: Proctor & Gamble's Newcastle Innovation Centre, Northumbria University, Proxomix Ltd., the Centre for Process Innovation, Innovation SuperNetwork  
 funder: North of Tyne Combined Authority, Proctor & Gamble (P&G); GBP 2,700,000
- 2020–2021 *Enhancing analytical capabilities in soils for low-carbon technologies*; **Partner**  
 PI: Alastair Marsh (University of Leeds); all team members: <https://bit.ly/2LLVcAI>  
 funder: White Rose Collaboration Fund; GBP 11,840
- 2019 *Antibacterial Clay Therapy*; **grant co-written**  
 PIs: Gary J. Sharples, Kim Jamie (Durham University); all team members: [www.dur.ac.uk/ias/1920projects/sharples](http://www.dur.ac.uk/ias/1920projects/sharples)  
 funder: Institute of Advanced Study, Durham University; GBP 3,500
- 2019–2023 *Harnessing microbially mediated redox processes for sustainable water treatment*; **PI**  
 Co-I: James Kitson (Newcastle University)  
 funder: EPSRC, DTP; GBP 94,164
- 2019–2021 *Providing the last piece of the puzzle: Completing our understanding of the unusual redox buffer behavior of clay minerals*; **grant co-written**  
 PI: Thomas Hofstetter (Eawag); collaborators: Andreas Voegelin (Eawag), Michael Sander (ETH Zürich), Fabien Baron, Eric Ferrage, Sabine Petit (University of Poitiers), Carolyn Pearce (PNNL)  
 funder: Eawag Discretionary Funds; CHF 60,000
- 2018–2022 *Quantifying the importance of different sources of diffuse pollution in mining-impacted rivers*; **Co-I**  
 PI: Adam Jarvis; collaborator: Barbara Palumbo-Roe (British Geological Service, BGS)  
 funder: NERC, IAPETUS DTP; CASE partners BGS and Environment Agency; GBP 86,155
- 2018–2022 *Clay minerals and sandstone reservoirs: implications for fines migration and EOR*; **Co-I**  
 PI: Chris Greenwell (Durham University); collaborators: Kislou Voitchovsky (Durham University), Ian Collins (British Petroleum, BP)  
 funder: NERC, Centre for Doctoral Training in Oil and Gas; GBP 77,600
- 2017–2021 *Assessing the sustainability of Fe-bearing clay mineral redox reactions for application in engineered systems*; **PI**  
 Co-I: Neil Gray (Newcastle University)  
 funder: EPSRC, DTP; GBP 54,159
- 2017–2021 *Understanding the Enhanced Oil Recovery (EOR) in UK reservoirs*; **Co-I**  
 PI: Chris Greenwell (Durham University); collaborators: Kislou Voitchovsky (Durham University), Ian Collins (BP)  
 funder: NERC, Centre for Doctoral Training in Oil and Gas; GBP 77,600
- 2015–2019 *Biologically Mediated Abiotic Degradation of Chlorinated Ethenes: A New Conceptual Framework*; **Co-I**

- PI: Michelle Scherer; collaborators: David Cwiertny, Drew Latta (University of Iowa), Rula Deeb (Geosyntec Consulting)  
 funder: SERDP; USD 885,060  
**SERDP 2018 Project of the Year**; <https://tinyurl.com/8ksbxh88>
- 2015–2017 *Cleaning water with mud: clay minerals producing reactive oxidizing species*; **PI**  
 funder: EPSRC; Bright IDEAS Award; GBP 224,484
- 2015 *Smart reactive sorbents for the removal of emerging contaminants*; **PI**  
 collaborators: Wojciech Mroziak, Margaret White (Newcastle University, UK)  
 funder: Newcastle University; Seed Corn Funding; GBP 9,950
- 2011–2013 *Fe(II)–Fe(III) Electron Transfer at Fe-containing Clay Minerals and its Effect on Hg(II) and Cr(VI) Transformation*; **PI**  
 funder: German Research Foundation (DFG), Postdoctoral Fellowship; EUR 42,448  
 funder: Swiss National Science Foundation (SNSF), Postdoctoral Fellowship; USD 55,000
- 2011 *Arsenic removal with composite iron matrix filters from Bangladesh*; **grant co-written**  
 PI: Stephan Hug (Eawag); collaborators: Ralph Kaegi, Andreas Voegelin (Eawag)  
 funder: Eawag Discretionary Funds; CHF 36,000
- 2009–2011 *Factors affecting arsenic removal with SONO filters*; **PI**  
 collaborators: Stephan Hug (Eawag), Abul Hussam (George Mason University), AKM Munir (SONO Technology and Research Ltd., Bangladesh)  
 funder: Commission for Research Partnerships with Developing Countries (KFPE), Jeunes Chercheur program; CHF 19,300  
 funder: Cooperation Office in Bangladesh, Swiss Agency for Development and Cooperation (SDC); BDT 899,000

## Supervision of graduate students and Postdocs

### Postdocs

- 2021–2022 Dr Alina Udall; *Advancing Circular Economy (ACE) Research and Development Demonstrator project*, Demonstrator 2: Innovation for Water Scarcity
- 2021 Dr James Entwistle; *Advancing Circular Economy (ACE) Research and Development Demonstrator project*, Demonstrator 2: Innovation for Water Scarcity
- 2015–2016 Dr Wojciech Mroziak; *Smart reactive sorbents for the removal of emerging contaminants*
- 2015–2017 Dr Khalid Zakaria; *Cleaning water with mud: clay minerals producing reactive oxidizing species*

### PhD students

- 2022–date Malvika Patial; *Quantifying the role of Fe-bearing clay minerals for abiotic natural attenuation of halogenated contaminants*; second supervisor: Dr Shannon Flynn
- 2021–date Andrew Oroke; *Understanding Arsenic removal processes: passive treatment systems as proxies for natural environments*; second supervisors: Prof Adam Jarvis; Prof Cindy Smith (University of Glasgow)

- 2019–date Maggie L. White; *Harnessing microbially mediated redox processes for sustainable water treatment*; second supervisor: Dr James Kitson
- 2019–date Katie Robins; *Characterising the sources and drivers of environmental resistomes over UK landscapes and assessing mitigation under different hydrological regimes*; main supervisor: Prof David Graham
- 2018–date Katherine Neate; *Quantifying the importance of different sources of diffuse pollution in mining-impacted rivers*; main supervisor: Prof Adam Jarvis
- 2018–2021 Christos Vasilopanagos; *Clay minerals and sandstone reservoirs: implications for fines migration and EOR*; main supervisor: Prof Chris Greenwell (Durham University (DU))  
now: Consultant at Strategic Allies Ltd, UK
- 2017–2022 Harry L. Brooksbank; *Assessing the sustainability of Fe-bearing clay mineral redox reactions for application in engineered systems*; second supervisor: Prof Neil Gray  
now: Hydrogeologist at Wardell Armstrong LLP, UK
- 2017–2021 Nikolaos Apeiranthitis (visiting PhD student); *Understanding the Enhanced Oil Recovery (EOR) in UK reservoirs*; main supervisor: Prof Chris Greenwell (DU)  
now: Application Scientist at Origin Analytical, UK
- 2016–2017 Dong Cheng (visiting PhD student); *The production of hydroxyl radicals during the oxygenation of mackinawite nanoparticles and its oxidizing impact*; main supervisor: Prof Songhu Yuan (China University of Geosciences; State Key Lab of Biogeology and Environmental Geology, China)  
now: Lecturer at Zhejiang University of Technology, China
- 2016–2020 Panagiota Adamou; *Assessing Tertiary Treatment Technologies for Reducing Antibiotic Resistance Genes Abundance and Diversity in Domestic Wastewater Treatment Effluents*; main supervisor: Prof David Graham  
now: Field Based Application Scientist at Newcells Biotech Ltd, UK
- 2015–2021 James Entwistle; *Degradation of chlorinated contaminants by Fe(II)-reduced clay minerals*; second supervisor: Prof David Werner
- 2014–2019 Katherine A. Rothwell; *From the lab to the real world: Fe redox reactions in complex biogeochemical environments*. second supervisor: Prof David Graham  
now: Lecturer at the University of Bristol, UK

### MSc students

- 2022 Didar Islam, Guiyu Chen, Pauline Tolentino, Yusuf Khambhati, Zhi Zhang; Newcastle University  
Award for the Best MSc dissertation 2022 to Didar Islam  
Award for the Best Overall Student in the MSc Environmental Engineering 2022 to Yusuf Khambhati
- 2021 Liewen Liu, Tong Wang; Newcastle University
- 2020 Jinlu Cao, Kasim Musa, Ming Qi, Supassorn Tantiphoolphol; Newcastle University
- 2019 Jin Han, Shaikha Almesbah, Tianqi Feng; Newcastle University
- 2018 Daniel Koh, Miriam Reedy, Pengtao Wu; Newcastle University
- 2017 Chuan He, David Mains, Lening Chen, Samuel Gladstone, Yang Ding; Newcastle University

- Award for the Best MSc dissertation 2017 to David Mains
- 2016 Cheuk Ang, Jiangsen Shi, Xiaobin Lou, Zheng Zhou; Newcastle University
- 2015 David Benjamin, Shamsuddeen Mohammed, Xiao Wang, Yarui Chen; Newcastle University
- 2011–2013 Tyler L. Olson; University of Iowa
- 2011–2013 Brittany L. Huhmann; University of Iowa  
awarded a PhD from MIT, USA; 2018

## Professional Activities and Service

### Conference Organization

- 2022-2023 Member of the **Scientific Committee** of the Euroclay 2023 Conference, Bari, Italy
- 2021 **Co-convenor**, Minerals in the Natural and Built Environment, Online  
a joint research meeting of the Clay Minerals Group and the Environmental Mineralogy Group of the Mineralogical Society
- 2020 **Session co-convenor**, Annual Meeting of the Clay Minerals Society (Online)  
*Redox reactions of clays and clay minerals in natural and engineered systems*
- 2019 **Co-convenor**, Clay minerals in the natural and built environment: formation, chemistry & applications, Newcastle, UK  
a joint research meeting of the Clay Minerals Group of the Mineralogical Society and the Environmental Chemistry Group of the Royal Society of Chemistry
- 2017 **Session co-convenor**, Goldschmidt Conference, Paris, France  
*Tracking carbon from source to sink in modern and ancient environments: The carbon cycle in coastal environments, stable carbon isotope systematics, and the role of photochemical reactions*
- 2015 **Session co-convenor**, EuroClay 2015 Conference, Edinburgh, UK  
*Clay and fine particle based materials for environmental technologies and clean up*

### Guest editor

- 2015–2016 Special issue related to EuroClay 2015 Conference session in *Applied Clay Science*, published December 2016 (Vol 134, Part 2)

### Reviewer

- Journals** *Environmental Science and Technology, Geochimica et Cosmochimica Acta, Chemical Geology, Chemosphere, Clays and Clay Minerals*
- Proposals** Swiss National Science Foundation (SNSF), German Research Foundation (DFG), British Council (Newton Fund), US National Science Foundation (NSF)

### Professional Societies

- 2022–2023 **Vice President** of the Mineralogical Society of the UK and Ireland
- 2020–2023 **Chair** of the Clay Minerals Group of the the Mineralogical Society
- 2018–2021 **Councilor** of the Clay Minerals Society
- 2018–2021 **Member** of the Clay Minerals Society's Council Nominations Committee
- 2017–date **Committee Member** of the Clay Minerals Group of the the Mineralogical Society
- member:** Clay Minerals Society (since 2016), Mineralogical Society (since 2014), American Chemical Society (since 2014), Geochemical Society (since 2010)