

# 1. CURRICULUM VITAE

Clare P. Grey

---

Yusuf Hamied Department of Chemistry  
University of Cambridge  
Lensfield Road, Cambridge, CB2 1EW, UK

Email cpg27@cam.ac.uk  
Phone +44(0)1223 336509  
Fax +44(0)1223 336017  
Web <http://www.ch.cam.ac.uk/staff/cpg.html>

---

## EDUCATION:

---

- D.Phil. in Chemistry, University of Oxford (1991)  
Title: A <sup>199</sup>Sn and <sup>89</sup>Y MAS NMR study of Rare-Earth Pyrochlores. Advisor: Prof. A. K. Cheetham
- B.A. in Chemistry, *First Class Honours*, University of Oxford, (1987)

## PROFESSIONAL EXPERIENCE:

---

- Cofounder and Chief Scientist, Nyobolt, a battery fast charging company (2019 – present)
- Member, Expert Panel, the Faraday Institution (2018 – present)
- Royal Society Research Professor (2018 – present)
- Director, the Centre for Advanced Materials for Integrated Energy Systems (CAM-IES), (2016 – present)
- Adjunct Professor, Department of Chemistry, Stony Brook University (May 2015 – present)
- Fellow Pembroke College Cambridge (2011 – present)
- Head, Materials Research Interest Group (2010 – 2015) and Inorganic Sector (2009 – 2010) Cambridge University
- Associate Director (2011 – 2015), Director and PI (2009 – 2011), Northeastern Chemical Energy Storage Center, a Department of Energy Frontier Center, Stony Brook University
- Geoffrey Moorhouse Gibson Professor in Materials Chemistry, University of Cambridge, UK, (July 2009 – present)
- Visiting Professor, Université de Picardie Jules Vernes, Amiens, (July 2006 and Aug. 2007)
- Associate Director, NSF Center for Environmental Molecular Sciences, (2002 – 2009)
- Professor, Department of Chemistry, State University of New York at Stony Brook (Sept. 2001 – 2015)
- Visiting Professor, Université Louis Pasteur, Strasbourg, (2000)
- Associate Professor, (Sept. 1997-Aug. 2001), Assistant Professor, (Jan. 1994 – Aug. 1997), Department of Chemistry, State University of New York at Stony Brook
- Visiting Scientist at DuPont CR&D (Feb. 1992 – Jan. 1994)
- Royal Society Post-doctoral Fellow in the laboratory of Prof. W.S. Veeman, University of Nijmegen (Jan. 1991 – Feb. 1992)
- Research Fellow, Balliol College, University of Oxford (Sept. 1990 – Jan. 1991)

## AWARDS:

---

- Hughes Medal, Royal Society (2020)
- Richard R. Ernst Prize in Magnetic Resonance (2020)

- John B. Goodenough Award, Royal Society of Chemistry (2019)
- Charles Hatchett Award, Institute of Materials, Minerals and Mining (2019)
- British Crystallographic Association (BCA) Prize Lecture (2019)
- Eastern Analytical Symposium Award for Outstanding Achievements in Magnetic Resonance (2018)
- Sacconi Medal from the Italian Chemical Society (2018)
- Royal Society Research Professorship (2018)
- Member Academia Europa (2017 – present)
- Société Chimique de France, French-British Prize (2017)
- Foreign member of the American Academy of Arts and Sciences (2017)
- Fellow of the Electrochemical Society (2017)
- International Solid-State Ionics Galvani-Nernst-Wagner Mid-Career Award (2017)
- Arfvedson-Schlenk-Preis from the German Chemical Society (2015)
- Davy Medal from the Royal Society (2014)
- Honorary Fellowship, Balliol College Oxford (2014)
- Honorary PhD Degree from Lancaster University (2013)
- Laukien Award from the Experimental NMR Conference (2013)
- Research Award, International Battery Association (2013)
- Honorary PhD Degree “Docteur Honoris Causa” from the University of Orleans (2012)
- Royal Society Kavli Medal and Lecture (2011)
- Fellow of the Royal Society (2011)
- Fellow of the International Society of Magnetic Resonance (2011)
- RSC John Jeyes Award (2010)
- AMPERE Award (2010)
- Vaughan Lecturer (2008)
- NYSTAR Award (2007)
- Research Award of the Battery Division of the Electrochemical Society (2007)
- NSF POWRE Award (2000)
- Camille and Henry Dreyfus Teacher-Scholar Award (1998)
- Alfred P. Sloan Foundation Research Fellow (1998)
- Cottrell Scholar (1997)
- DuPont Young Professor Award (1997)
- NSF National Young Investigator (1994)
- Royal Society European Postdoctoral Fellowship (1991)
- Junior Research Fellowship, Balliol College, University of Oxford (1990)
- S.E.R.C. Quota Award (1987 – 1990)
- Senior Scholarship, Christ Church, University of Oxford (1988)
- Dixon Scholarship, Christ Church, University of Oxford (1987)
- Open Scholarship, Christ Church, University of Oxford (1983)

#### **TEACHING:**

---

- Stony Brook (US): Inorganic chemistry (for undergraduate majors + 1<sup>st</sup> semester graduate level); Designed and ran inorganic (and solid-state) chemistry laboratory course for chemistry

majors; Freshman (1<sup>st</sup> year) chemistry laboratory; Solid-state chemistry, crystallography, NMR and group theory (graduate level)

- University of Picardie, Amiens (FR): European Masters Course on Energy: Applications of NMR to Batteries and Fuel Cells.
- Cambridge: 3<sup>rd</sup> year (Part II) “Characterisation methods for inorganic chemistry” – ESR and magnetism. 4<sup>th</sup> year (Part III) “Inorganic Magnets” – magnetism, solid chemistry, crystallography.

#### **ENGAGEMENT AND COMMUNICATIONS (LAST 10 YEARS):**

---

- Presented to House of Lords Science and Technology Committee in seminar on Decarbonization, February 2021
- Podcast with cosmologist Professor Lord Martin Rees discussing support and fostering of scientific innovation, particularly in the area of energy storage, Centre for Science and Policy, University of Cambridge, <http://www.csap.cam.ac.uk/news/article-energy-storage-innovation/> December 2020
- “Taller tecnico NMR” Workshop to the Yacimientos de Litio Bolivianos (YLB), on the use of NMR spectroscopy in battery science (2020)
- Panelist, Chemical Society of Nigeria, Women in Chemistry, Webinar, September, 2020
- Global Young Academy Webinar to launch new the GYA Energy Initiative (<https://globalyoungacademy.net/first-gyaenergy-webinar/>), June 2020
- BBC World Service “Click” (<https://www.bbc.co.uk/programmes/w3cswhdm>) (August, 2018) on fast charging of batteries;
- “The Life Scientific” Radio 4 Programme on “The Big Battery Challenge” (<https://www.bbc.co.uk/sounds/play/b09tdr0r>) March 2018 and in book “The Life Scientific: Explorers” by Anna Buckley, 2018, Orion Publishers.
- Opened the New Chemistry Building at Lancaster University, October 2016
- Presentation to an All-Party Parliamentary Climate Change Group event, ‘Energy storage and the transition to a low carbon economy’, (<http://www.policyconnect.org.uk/appccg/news/energy-storage-and-transition-low-carbon-economy-summary>) Houses of Parliament, London, July 2016
- “Putting Science to Work” BBC Radio 4 Programme on Mitigating Air Pollution in Cities, Dec 2015
- Panelist, BBC World Service, “The future of renewable energy” for the programme, “the Forum”, (<http://www.bbc.co.uk/programmes/p01g94yj>), September 2013.
- Member of the Emerging Technologies Panel for the World Economic Forum (2012 – 2015). Helped write “Energy Harnessing: New Solutions for Sustainability and Growing Demand” (Oct 2013, <http://www.weforum.org/reports/energy-harnessing-new-solutions-sustainability-and-growing-demand>).
- Royal Society of Chemistry Roadmap Champion for Energy Conversion and Storage (2011 – 2014)
- Presentation to the Department of Energy and Climate Change (DECC) “Strategy Coffee Morning”: “Challenges in Using Lithium Ion Batteries in Road Transportation”, London, July 2011
- RSC Public Lecture, Burlington House, London, September: “Recharging the Planet: The Prospects and Chemical Challenges of using Batteries to Power a Low Carbon Economy” ([http://thereaction.net/events/y2011/Recharging\\_our\\_future.aspx](http://thereaction.net/events/y2011/Recharging_our_future.aspx))

- Kavli Public Lecture, The Royal Society, London, October: “Following function in real time: Towards the Next Generation of Batteries for Supercapacitors for Transport and Grid Storage” (<http://royalsociety.org/events/Following-function-in-real-time/>)

#### **EDITORIAL BOARD MEMBERSHIP:**

---

- Editorial Board, ACS Central Science, Jan 2021 – present
- Editorial Board, ACS Energy Letters, Jan 2021 – present
- Editorial Board, Chemistry of Materials, Jan. 2005 – Jan. 2010, Jan 2018 – present
- Editorial Board, Accounts of Chemical Research, 2015 – present
- Editorial Board, Journal of the American Chemical Society, 2011 – 2017, 2021 – present
- Editorial Board, Journal of Materials Chemistry, July 2009 – 2010
- Editorial Board, Solid State Sciences, Jan 2002 – present
- Editorial Board, Journal of Magnetic Resonance, Jan 1999 – present

#### **ADVISORY BOARD/COMMITTEE MEMBERSHIP:**

---

- Royal Society, Net Zero panel, 2019 – present
- Cambridge Global Challenges (CGC) Steering Group, 2019 – present
- Commonwealth Science Conference Committee, 2019 – present
- Royal Society/NAS Science Forum on Energy Storage, Steering Group, 2019 – present
- FLAIR (Future Leaders – African Independent Research) Fellowships (<https://royalsociety.org/grants-schemes-awards/grants/flair/>) (a joint Royal Society/African Academy of Sciences programme) Member, Steering Committee (2018 – present); Member, interview panel (2018 – present)
- Cambridge Energy, Transitions Steering group, 2011 – present
- Advisory Board, Winton Programme for the Physics of Sustainability, Cambridge University, 2011 – 2019
- Advisory Board, Max Planck Institute for Polymer Physics, 2009 – 2015
- Advisory Board, Center for Functional Nanomaterials (CFN), Brookhaven National Laboratory, 2006 – 2012.
- NY State Advanced Energy Center, Member, Research Committee (2006 – 2009)
- Advisory Board, Penn. State, Center for Environmental Kinetics Analysis (NSF EMSI), Dec. 2005 – 2010
- Member of the Stony Brook University “Status of Women Faculty” Taskforce (representative for the physical sciences) (1999 – 2009)
- Member of the Stony Brook Women in Science and Engineering (WISE) Advisory Working Group (1994 – 2009)

