

Tom Welton, Imperial College London, United Kingdom



Tom Welton is Professor of Sustainable Chemistry at Imperial College London, and Editor-in-Chief of RSC Sustainability. He has published over 150 papers and has received several awards, including various lectureships, was made a Fellow of the Royal Society of Chemistry (FRSC, 2007) and Officer in the Order of the British Empire (OBE, 2017).

From 2020 to 2022 he served as president of the Royal Society of Chemistry. He is a vocal champion of inclusion and diversity in the chemical sciences.

Tom's research focusses on Sustainable and Green Chemistry, aiming to make related industries more environmentally and economically sustainable. Throughout his career, his work has focused on the use of ionic liquids with uses in organic, inorganic, and physical chemistry.

He is interested in the fundamental properties of ionic liquids and how they can be used as alternative solvents or electrolytes. He also works on the clean synthesis and processing of biomass-derived polymers to replace petrochemical-based plastics and understands how ionic liquids can play a role in making these processes more sustainable.

<https://www.imperial.ac.uk/people/t.welton>

Francesca Kerton, Memorial University of Newfoundland, Canada, Canada



Francesca Kerton is a professor of Chemistry at Memorial University of Newfoundland and has a global reputation for her innovative research on sustainable chemistry related to the oceans.

She is a Fellow of the Royal Society of Chemistry and is a member of many scientific panels and committees worldwide. She currently chairs IUPAC's standing committee on Chemical Research Applied to World Needs and is chair of the 27th Annual Green Chemistry & Engineering Conference. She is an Advisory Board member for Reaction Chemistry & Engineering.

Francesca obtained her PhD in Chemistry at the University of Sussex and was a postdoctoral research associate at the University of British Columbia. In addition to authoring over 70 journal articles, she has contributed several books and book chapters on aspects of green chemistry including "Alternative Solvents for Green Chemistry".

Her current research group is focused on developing environmentally friendly ways to process bio-sourced molecules and materials, catalysis and sustainable polymers. She also performs research in the area of carbon dioxide utilization and is part of an NSERC-funded training

network “Centre for Innovation and Research on Carbon Dioxide Utilization in Industrial Technologies”. She received the Canadian Green Chemistry and Engineering Award in 2019.

<https://www.mun.ca/faculty/fkerton/>

Cristina Pozo-Gonzalo, Deakin University, Australia



Dr. Pozo-Gonzalo works as a Senior Research Fellow at the Institute for Frontier Materials (IFM), Deakin University in Melbourne (Australia). She attained her Bachelor of Science and honours at the University of Zaragoza (Spain). After graduating, she received her PhD degree in Chemistry from the University of Manchester (United Kingdom) on the electrochemical synthesis of Conducting Polymers.

In 2004, she joined the Centre for Electrochemical Technologies in San Sebastian (Spain) as the Head of the Electrooptical unit where she stayed for 7 years, managing a total of 23 projects. After moving to Australia, she has been working with Prof. Alan Bond at Monash University and in 2012 she joined Deakin University where she has been working in reversible metal-air batteries with advanced electrolytes,

ionic liquids funded by ARC Centre of Excellence for Electromaterials Science (ACES).

Currently, Cristina leads research activities in sustainable energy storage technologies covering the circular economy (CE) model from materials redesign up to critical metals recovery using solvometallurgy and electrochemistry with important benefits for the environment. She has led IFM's development of an energy research node on circular economy (CE) for energy storage and generation and designed the Institute's CE road map.

She is a board member for the journal Sustainable Chemistry, Review editor of Frontiers in Chemistry in the electrochemistry division and Associate Editor for RSC Sustainability. During her research career, she has published 97 publications, including 4 patents and 3 book chapters and managed 33 projects as chief investigator.

https://www.linkedin.com/in/cristina-pozo-gonzalo-9918b935/?locale=en_US

Martin Prechtel, University of Lisbon, Portugal



Martin Prechtel works at the Centro de Química Estrutural (CQE) at the Instituto Superior Técnico of the University of Lisbon (IST-UL, Portugal). There he completed the examination for the Portuguese Habilitation in 2021 and received the “Agregação” for Chemistry (Título do Agregado).

Previously he has been already an Associated Researcher at the CQE-IST-UL since 2017. Moreover, he acted as a Professor of Chemistry at Roskilde University (2018-2020, Denmark). And he has been working as Independent Group Leader at the University of Cologne (Germany) from 2010 to 2020, where he obtained the German Habilitation in 2015 and he holds the Venia Legendi in Inorganic Chemistry ("Privatdozent").

Martin works on the development of molecular and nanoscale catalyst materials for application in organic synthesis and hydrogen/energy storage, with a focus on selective hydrogenation and dehydrogenation reactions. This includes reactions in water, ionic liquids and multi-phase solvent systems. He gave numerous oral presentations (~140) at major (inter)national conferences and at prestigious research institutes and published >70 articles and book chapters. He received several awards and titles, among those the NRW Scientist Returnee Award 2009, the Ernst-Haage-Prize 2014 (Max-Planck Society), FRSC (2016) and Humboldtian (2007). He acted previously as Associate Editor for RSC Advances from 2016 to 2020.

<https://fenix.tecnico.ulisboa.pt/homepage/ist428147/short-cv>

Zhenyu Sun, Beijing University of Chemical Technology, China



Zhenyu Sun is a Professor of Chemical Engineering at the Beijing University of Chemical Technology (BUCT), China. He is the director of Department of Materials and Chemical Engineering of BUCT and has published over 160 papers.

He obtained his PhD in Physical Chemistry at the Institute of Chemistry, Chinese Academy of Sciences in 2006. Following this, he was a postdoctoral researcher at Trinity College, University of Dublin, Ireland for two years. He completed an Alexander Humboldt research fellowship at Ruhr University Bochum, Germany in 2013 working on "fancy carbon materials". From 2014 to 2015, he worked as a postdoctoral research fellow at the University of Oxford on metathesis reactions using heterogeneous

catalysts. His current research focuses on sustainable and green synthesis of hydrocarbons and oxygenates from CO₂ reduction reaction, and NH₃ from N₂ reduction reaction via photo-/electrocatalysis, including the design and synthesis of catalysts as well as an understanding of reaction mechanisms. His interests also include other reactions involved in renewable energy conversion and utilization.

<https://en-sie.buct.edu.cn/2022/0329/c4207a166695/page.htm>

Deirdre Black, Royal Society of Chemistry, UK



Deirdre Black is Head of Science and the Sustainability Strategy Lead at the Royal Society of Chemistry. She has variously led the RSC's policy, scientific programmes and international engagement teams. She is the sponsor of the RSC Sustainable Labs programme and has also led projects on related areas including AI and automation in R&D, as well as recognition and collaboration in science. She held postdoctoral positions in physics and in science education policy in the USA and UK before joining the RSC in 2011.

Agnieszka Brandt-Talbot, Imperial College London, United Kingdom



Dr Agi Brandt-Talbot is a Senior Lecturer in the Department of Chemistry at Imperial College London and leads the Sustainable Carbon Solutions research team. She has authored 36 scientific articles with more than 6000 citations and 5 patents. Dr Brandt-Talbot research interest is in creating bio-derived materials and chemicals from sustainable biomass, enabling a more sustainable use of carbon in our economy through the application of tailored solvents, while she enjoys teaching sustainable chemistry at the undergraduate and postgraduate level.

Dr Brandt-Talbot was awarded Imperial's President's Award of Excellence for Outstanding Early Career Researcher in 2015, the Department of Chemical Engineering's Sir William Wakeham Award in 2016, and a 2017 Imperial College Research Fellowship which she took up in the Department of Chemistry. She is a co-founder of start-up company Lixea.

Dr Brandt-Talbot received a BSc in Chemistry and Biochemistry and an MSc in Chemistry from Ludwig-Maximilians-University Munich, Germany. She joined Imperial College for her PhD studies in the Department of Chemistry and Life Sciences and was a Research Associate in the Department of Chemical Engineering. She is a Member of the Royal Society of Chemistry (MRSC) and the Honorary Treasurer of the RSC Molten Salts and Ionic Liquids Discussion Group.

Matthew Davies, Swansea University, United Kingdom



Professor Matthew Davies is the UNESCO Chair in Sustainable Energy Technologies, Head of the Applied Photochemistry Group and part of the Senior Management Team at the SPECIFIC IKC, and he is a member of both the Materials Science and Engineering Department, and Chemical Engineering Department at Swansea University.

He is President of the Royal Society of Chemistry Environment, Sustainability and Energy Community Council and an Honorary Professor at the University of KwaZulu-Natal in Durban, South Africa.

His research is focused upon the photochemistry of materials that are useful for low-cost photovoltaic applications, with the goal of improving stability, sustainability, light harvesting efficiency and performance. This mainly focusses on perovskite photovoltaics, and he is particularly interested in the characterisation of re-manufactured devices and developing materials and processes to enable re-use and re-manufacture within a circular economy. Prof. Davies strongly believes that access to sustainable and renewable energy is a necessary precondition to achieving many of the Sustainable Development Goals, extending far beyond the energy sector and that renewable energy technologies that operate within a circular economy have the potential to maximise social, health, educational and environmental benefits.

Gary Walker, Lubrizol, United Kingdom



Dr Gary Walker is a technical fellow working within the innovation team at Lubrizol. He started his career within the pharmaceutical sector working on hit to lead drug discovery projects before joining Lubrizol in 2006. A large slice of his career was leading a team of chemists as the R&D technology manager for detergents, before formally moving into his current role in 2020 focussing on sustainable chemistries across all of Lubrizol businesses. Gary has a PhD from the university of Nottingham and is both Chartered and Fellow of the Royal Society of Chemistry.

Michael Shaver, University of Manchester, United Kingdom



Professor Michael Shaver (FRSC, FIMMM) is the Professor of Polymer Science in the School of Natural Sciences at the University of Manchester where he leads initiatives in sustainable polymers, plastics and materials for the School and for the Henry Royce Institute, the UK's national advanced materials science centre. Following a PhD in his native Canada from the University of British Columbia and an NSERC Post-Doctoral Fellowship at Imperial College London, he began his independent research career at the University of Prince Edward Island before moving to Scotland in 2012 where he was a Chancellor's Fellow, Reader and finally Professor of Polymer Chemistry at

the University of Edinburgh.

He is now Director of Sustainable Futures, a pan-university initiative growing interdisciplinary research in sustainable solutions to environmental challenges. He is also Director of the Sustainable Materials Innovation Hub, in which his active research sits, developing sustainable plastics, polymers and composites and the systemic challenges that enable or disable their mechanical, chemical or enzymatic recycling. His work ranges from fundamental projects rooted in monomer design to translational projects in plastic packaging, waste management and circular systems. He was the inaugural Editor-in-Chief of the international journal *Green Materials* and Editor of the *European Polymer Journal*. He has published >100 papers and been recognised with >80 invited/plenary lectures, the MacroGroup Young Polymer Scientist award (2015), Young Academy of Scotland (2014-2018) and two Canada Foundation for Innovation Leadership Awards (2010, 2012) as well as Fellowships in both the Royal Society of Chemistry and Institute of Materials Minerals and Mining.