

CV of Jun Cheng

Born in 1980, I studied in Shanghai Jiao Tong University, and obtained Bachelor degree in 2002 and Master degree in 2005. I carried out my PhD study at Queen's University Belfast, UK under the supervision of Prof. Peijun Hu. I received the PhD degree in 2008 and my doctoral work was simulating surface catalysis using density functional theory.

I then moved to the University of Cambridge, first as a postdoc in the group of Prof. Michel Sprik for two years developing ab initio molecular dynamics method for calculation of redox potentials and acidity constants. In 2010-2013, I was awarded a junior research fellowship by Emmanuel College at Cambridge, which granted me freedom to pursue my interest in interfacial electrochemistry. Towards the end of my stay at Cambridge, I spent some time in the group of Prof. Clare Grey, allowing me to study NMR and energy storage materials. I became a university lecturer at the University of Aberdeen, UK in 2013, and was soon rewarded a major national start-up program fund and took up a full professorship in Xiamen University, China.

Over years, my research has shifted from computational surface science and heterogeneous catalysis, to method development in aqueous redox and acid-base chemistry, and to ab initio electrochemistry. Recently, my group have been developing computational methods combining electronic structure theory, machine learning potential and molecular dynamics to simulate electrochemical interfaces and catalyst dynamics at realistic conditions, as well as the spectra of complex chemical systems to bridge the gap with reality.

I received the National Science Fund for Distinguished Young Scholars in China, and the Alexander Kuznetsov Prize for Theoretical Electrochemistry of the International Society of Electrochemistry.