

EuroHPC Summit Week 2021 including PRACEdays21

Tuesday 23 March 2021, 10:00 – 10:45 Industrial keynote

Glenn Jones, Johnson Matthey Technology Centre

Title: Computational Materials Chemistry: From Industrial Application to HPC

Abstract

This talk will introduce R&D within Johnson Matthey and set the scene of how materials modelling is delivering value within the industrial setting. With a particular focus on the atomic-scale modelling and its deployment in materials product development.

The talk will then highlight some case studies around catalysis and materials development, where hpc has been key to delivery of new insight and predictive models for materials development.

As our research groups deliver value, raise in profile and ultimately grow, it becomes important to support the capability growth with resource development. The final part of the talk will look to our HPC in the future as we begin our journey to the cloud for HPC provision, and start some long-range projects looking at the potential of quantum computing.

Bio



Glenn Jones obtained his PhD from the University of Cambridge in the surface science group of Prof. Sir David King FRS, working with Prof. Stephen Jenkins on the application of DFT to surface science problems.

He then moved to the Technical University of Denmark in 2006 to work in the group of Prof. Jens Norskov where he got his first taste of industrial collaboration and application of theoretical methods to materials design.

After joining Johnson Matthey Technology Centre in 2008 was awarded a Royal Society Industrial Fellowship in 2010, which he held jointly between UCL Chemistry Department and Johnson Matthey Technology Centre in the UK.

He moved to Pretoria in 2013 to initiate Johnson Matthey Technology Centre's new modelling laboratory in South Africa, where he was Research Manager until he returned to the UK (2017) to a broader role managing JMTC physical and chemical, core-science modelling effort.

For from his academic and industrial contributions, he is also a Fellow of the Royal Society of Chemistry.