

POSTDOCTORAL RESEARCH ASSOCIATE DESIGN, THIN FILM GROWTH AND PHYSICAL CHARACTERISATION ref 008868

You will be ambitious with a strong track record of excellence to work within an interdisciplinary team of researchers as part of the new Centre for Functional Materials Design funded by the Leverhulme Trust - one of only 4 such centres funded in the UK in this new scheme

You will be based in the Leverhulme Research Centre for Functional Materials Design to identify new materials with unusual electronic, magnetic and topological ground states, and carry out advanced physical measurements, including collaboration with external partners (e.g., Professor S.S.P. Parkin's group at the Max Planck Institute for Microstructure Physics in Halle). The programme will exploit our in-house single crystal growth platform comprising a four mirrors floating zone furnace, a purposely designed two zone furnace for chemical vapour transport, and a suite of furnaces for melt and flux growth to produce high quality bulk single crystals of the targeted materials. We have two Rigaku rotating anode diffractometers for detailed characterisation of the resulting materials. The identification of the materials will involve engagement with the extensive computational team in the Centre.

You will form part of a large collaborative team (reaching over 60 multidisciplinary researchers during the project) working across themes in computational and experimental design, automation and harnessing knowledge growth. You will have a PhD in Physics, Chemistry or Materials Science and will contribute at a high level to the project. Our initial preferences to synthesise the desired materials are in the area of single crystal growth of inorganic compounds (oxides, chalcogenides, pnictides or intermetallics), however those applicants with relevant skills to the project goals will be considered.

Direct supervision by and reporting to Professor M J Rosseinsky. You will work closely with Dr Jon Alaria on a day-to-day basis.

The post is available for 3 years and will additionally be supported by the Department of Chemistry and EPSRC Programme Grant: Integration of Computation and Experiment for Accelerated Materials Discovery.

Salary: Depending on qualifications and experience (Grade 7)

Range: £33,518 - £38,883 pa

Tenure: 3 years **Hours of work:** Full-Time

Closing date: 16-April-2018

For more information and to apply please [click here](#)

POSTDOCTORAL RESEARCH ASSOCIATE DESIGN, CRYSTAL GROWTH AND PHYSICAL CHARACTERISATION OF NEW MATERIALS ref 008871

You will be ambitious with a strong track record of excellence to work within an interdisciplinary team of researchers as part of the new Centre for Functional Materials Design funded by the Leverhulme Trust - one of only 4 such centres funded in the UK in this new scheme

You will be based in the Leverhulme Research Centre for Functional Materials Design to identify new materials with unusual electronic, magnetic and topological ground states, and carry out advanced physical measurements, including collaboration with external partners (e.g., Professor S.S.P. Parkin's group at the Max Planck Institute for Microstructure Physics in Halle). The programme will exploit our in-house single crystal growth platform comprising a four mirrors floating zone furnace, a purposely designed two zone furnace for chemical vapour transport, and a suite of furnaces for melt and flux growth to produce high quality bulk single crystals of the targeted materials. We have two Rigaku rotating anode diffractometers for detailed characterisation of the resulting materials. The identification of the materials will involve engagement with the extensive computational team in the Centre.

You will form part of a large collaborative team (reaching over 60 multidisciplinary researchers during the project) working across themes in computational and experimental design, automation and harnessing knowledge growth. You will have a PhD in Physics, Chemistry or Materials Science and will contribute at a high level to the project. Our initial preferences to synthesise the desired materials are in the area of single crystal growth of inorganic compounds (oxides, chalcogenides, pnictides or intermetallics), however those applicants with relevant skills to the project goals will be considered.

Direct supervision by and reporting to Professor M J Rosseinsky. You will work closely with Dr Jon Alaria on a day-to-day basis.

The post is available until 30 April 2020 and will additionally be supported by the Department of Chemistry and EPSRC Programme Grant: Integration of Computation and Experiment for Accelerated Materials Discovery.

Salary: Depending on qualifications and experience (Grade 7)

Range: £33,518 - £38,883 pa

Tenure: 3 years **Hours of work:** Full-Time

Closing date: 16-April-2018

For more information and to apply please [click here](#)