We are looking for two motivated researchers to work on the following topics:

1) **control of individual spins in SiC**. The goal of the project is to demonstrate high fidelity quantum control of electronic and nuclear spins associated to defects in SiC, a semiconductor of wide use in micro-electronics. The use of a technologically-mature platform will facilitate the development of spin-based quantum technology. Previous experience on spin control, for example on nitrogen-vacancy centres in diamond, is appreciated.

Contact: Cristian Bonato ([c.bonato@hw.ac.uk](mailto:c.bonato@hw.ac.uk))

2) **quantum photonics with 2D materials**. The overall goal is to engineer a coherent spin-photon interface in a van der Waals heterostructure platform and integrate onto photonic chips. A significant aim is the pursuit of pristine 2D heterostructures with precise control of the rotation angle between layers and the investigation of this new degree of freedom.

Contact: Brian Gerardot ([b.d.gerardot@hw.ac.uk](mailto:b.d.gerardot@hw.ac.uk))