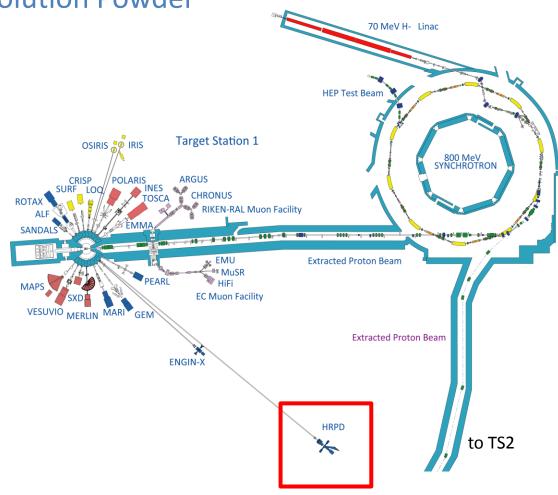
Since February 2016 an instrument scientist for HRPD (High Resolution Powder Diffractometer) at ISIS

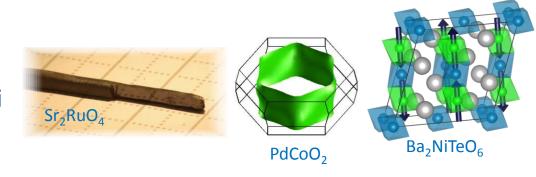
- Previously academic research in St Andrews (PhD), Tokyo and Stuttgart (postdoc)
- Working on structureproperty relationships in transition metal oxides

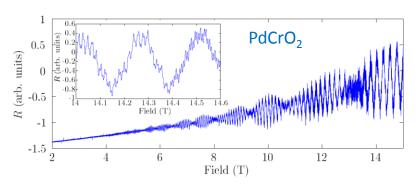


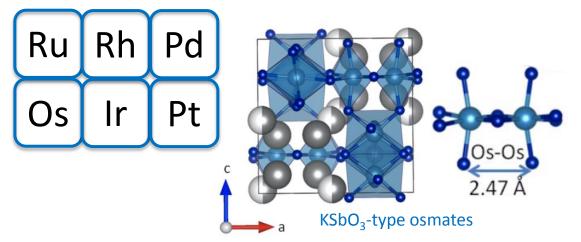
Scientific interests

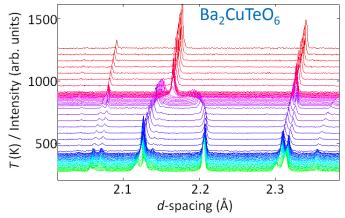
- Crystal growth (floating zone, flux growth), solid state synthesis
- Quantum oscillation studies of Fermi surfaces, resistivity, specific heat, magnetisation
- Neutron diffraction (high resolution, symmetry analysis of phase transitions)

Study of structure-property relationships in transition metal oxides, currently focusing in particular on those containing platinum group metals with strong spin-orbit coupling









HRPD upgrade







Upgrade to include:

- Increase in detector solid angle
- Better low-Q coverage
- Upgrade tank, collimation etc. to allow more flexibility in sample environment (e.g. magnets)

B1 B2 B3

Preliminary modelling has been performed but detailed designs and inclusion of new ideas yet to be undertaken