Professor Sai Gu is leading one of the largest energy research teams in the UK, covering a wide range of biofuel and clean energy research. His team has won numerous awards for the quality of their research and publications including the UK Scopus Young Researcher Award in Engineering and the Felix Weinberg Prize from the Institute of Physics Combustion conference.

Current activities include:

- Biomass thermochemical conversions including fast pyrolysis, gasification and combustion.
- Integrated biorefinery for biofuel, energy and chemicals.
- Carbon capture technologies including pre and post combustion capture.
- General aspects of carbon capture and storage.
- Algae research including harvesting and extraction.
- Thermal spraying and surface coatings.
- Nanomaterial synthesis CFD modelling for complex flows.

My interest in the **PROVIDA Consortium** is to develop computational models to solve complex multiphase and multiscale problems in the areas of material manufacturing and processing, energy conversions and thermal management