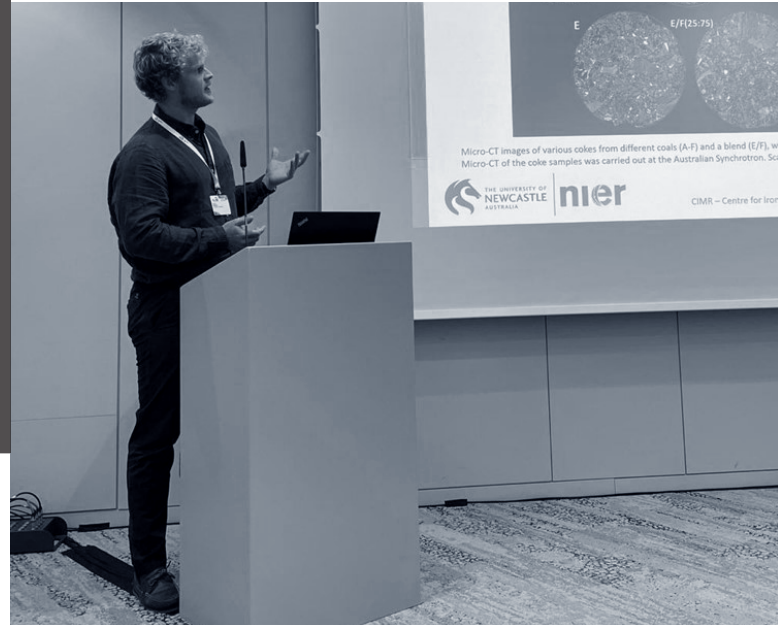


EDWARD BISSAKER

BHP PhD scholarship recipient,
Centre for Ironmaking
Materials Research (CIMR)
University of Newcastle



RESEARCH FOCUS

Edward utilises advanced mathematics and computational tools to classify metallurgical coke microstructure formations and develop models to optimise the coke mechanical properties.

RESEARCH VISION

Edward is working to contribute to the sector's understanding of the importance of microstructure for coke quality and provide a quantitative basis to explore new avenues for coal blending and preparation, which may not be otherwise utilised. He also plans to utilise the tools he has developed in his research to explore blending of renewable additives in cokemaking, in particular focusing on the changes in coke microstructural features and implications on coke strength.

“Ironmaking is an exciting space to work in, and the industry is rapidly evolving. Research to optimise the current manufacturing processes and develop future techniques will further improve the efficiency and sustainability of this vital, high-tech global sector. The current focus on decarbonising iron and steelmaking through new technologies is expected to alter the raw material requirements in these processes. Research and development will be key to support this transition.”

“Research to optimise the current manufacturing processes and develop future techniques will further improve the efficiency and sustainability of this vital, high-tech global sector.” Edward Bissaker