

Academic Introduction f

Kathleen Purnell is a Research Fellow at the University of Leeds, specializing in corrosion science with a focus on corrosion mechanisms in steel pipelines, carbon capture and storage (CCS) systems, and protective coatings. She holds a PhD in Metallurgy and Corrosion from the University of Manchester, where her research explored the role of organophosphates in corrosion inhibition within polyurethane coil coating systems. Prior to her doctoral studies, she earned a Master's degree in Chemistry, concentrating on density functional theory (DFT) to predict adhesion reactions at material interfaces.

With over five years of industrial experience as Technical Manager at Teal & Mackrill, Kathleen has developed a strong foundation in applied coatings technology and product development. Her work bridges fundamental research and industrial application, contributing to advancements in corrosion protection strategies.

Kathleen is actively engaged in the professional corrosion community. She currently chairs the Young Institute of Corrosion (ICorr), serves on the ICorr Council, and is a member of both the Yorkshire and North West branches of the Institute of Corrosion. She is also the incoming Co-Chair of Young European Federation of Corrosion (EFC), reflecting her commitment to fostering early-career engagement and international collaboration in the field of corrosion science.