

## Institute of Corrosion Yorkshire and Humber Branch Relaunch Event



**Venue:** Bragg Centre for Materials Research, University of Leeds  
**Date:** Thursday 20<sup>th</sup> November, 12:00-17:00  
**Theme:** Corrosion challenges in additively manufactured metals  
**Description:** In-person technical event, branch AGM and complimentary lunch  
**Registration:** [Click here](#) (limited to 50 places. **In-person only**)

### Agenda

<b>12:00</b>	<b>Arrival</b>
<b>12:00 – 13:00</b>	<b>Lunch</b> Lunch will be provided free for all registered attendees
<b>13:00</b>	<b>Introduction to the Yorkshire and Humber branch</b> Joshua Owen, University of Leeds
<b>13:10</b>	<b>Introduction to the Young ICorr</b> Kathy Purnell, Young ICorr Chair
<b>13:20</b>	<b>Corrosion challenges in additively manufactured metals</b> Joshua Owen, Sumia Manzoor, University of Leeds
<b>13:40</b>	<b>ICorr Summer Internship: Corrosion of additively manufactured 316L stainless steel and experiences at Intertek and LBBC</b> Luke Ansell, University of Leeds
<b>13:50</b>	<b>Material Degradation Challenges and Novel Manufacturing Techniques in Flow Machinery</b> Yogiraj Pardhi, Sulzer, Leeds
<b>14:20</b>	<b>Flash presentations from members in the region</b>
<b>15:00 – 15:30</b>	<b>Coffee/Tea Break</b>
<b>15:30</b>	<b>Tours of University facilities</b> Corrosion labs, Bragg Centre for Materials Research
<b>16:30</b>	<b>Branch AGM</b>
<b>17:00</b>	End of event

## Speaker Bios

### Dr Yogi Pardhi

Global Lead for Additive Manufacturing for Sulzer Services, Dr. Yogi Pardhi is a respected Fellow of The Institute of Materials, Minerals, and Mining with over 12 years' aerospace and turbomachinery industry experience. He holds a first degree in Mechanical Engineering and a Ph.D. in Materials Science, specializing in high-temperature and high-performance materials alongside additive manufacturing. Dr Pardhi's global outlook drives Sulzer's successful qualification strategy for additive manufacturing techniques. He has also overseen the manufacture and repair of industrial gas turbines and turbomachinery parts. As AM Lead for Materials at Rolls-Royce Plc., his expertise helped introduction of AM parts in aeroengines and establish a landmark single crystal turbine blade facility.



### Luke Ansell



I am a Mechanical Engineering student at the University of Leeds and recently concluded my summer internship with ICorr. During the internship, I built knowledge on the corrosion behaviours of additively manufactured stainless steel and on the principles of electrochemistry - knowledge which guided research I had the opportunity to conduct. Complimenting this, I gained experience in failure investigation at Intertek CAPCIS, where I saw firsthand the impacts of corrosion in industry. I look forward to applying the knowledge and experience I gained during the internship to my future academic and professional career.

### Sumia Manzoor

Sumia is a Marie Skłodowska-Curie doctoral researcher at the Institute of Functional Surfaces, University of Leeds, working on the MISSION-CCS European Doctoral Network. Her research focuses on understanding the complex behaviour of impurities within carbon capture and storage (CCS) infrastructure and how these impurities influence the corrosion processes of additively manufactured metals. By investigating this complex interaction, her work aims to develop a robust methodology for material selection in impure supercritical CO<sub>2</sub> environments and identify how additive manufacturing technologies can be leveraged to improve material performance, reliability, and design flexibility in CCS applications.

Prior to this, Sumia earned an applied degree in Chemical Engineering and an MSc in Sustainable Energy and worked in a corrosion research centre investigating hydrogen embrittlement of additively manufactured materials.

This experience has shaped her interest in developing sustainable materials solutions for the energy transition. Through her PhD, she aims to contribute to improving the durability and safety of emerging low-carbon technologies.

