



DIGITALMETAL-CDT Newsletter

EPSRC Centre for Doctoral Training in Digital Transformation of Metals Industry

Edition 1. October 2025

DIGITALMETAL-CDT Induction Day | Welcome to Cohort 1

We were delighted to host the first Cohort meeting on 26th September at the University of Leicester, bringing together students and academic teams from five partner universities. Highlights included:

- **Directors' Welcome:** Sharing the DigitalMetal CDT vision and goals.
- **Partner Presentations:** Showcasing research strengths and training expertise.
- **CDT Overview:** Introducing the Year 1 training, support, and development structure.
- **Workshop:** The Doctoral College led an engaging session on communicating research to non-specialists.

A huge thank you to everyone who joined and a warm welcome to our Cohort 1.



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Inside the Cohort | Commencing this Autumn



Paul Till, BEng Mechanical & Manufacturing Engineering (University of Portsmouth) MSc Space Engineering (University of Birmingham)
Host University & Supervisor: University of Loughborough, Prof. Moataz Attallah
PhD Project: Novel Process Control for Defect Mitigation in Additively Manufactured Aluminium Alloys industrially sponsored by MTC.



Joseph Bradbury, BSc Chemistry MPhil Chemistry (University of Leicester)
Host University & Supervisor: University of Warwick, Prof. Greg Gibbons
PhD Project: Manufacturing Pipeline Development for Aluminium Heatsinks Via Vat Polymerisation 3D Printing industrially sponsored by AM CoE



Noel Raison, MChem Chemistry (University of Leeds)
Host University & Supervisor: University of Birmingham, Prof. Sandy Knowles
PhD Project: High-Throughput Combinatorial Discovery & Demonstration of Novel Fusion Alloys industrially sponsored by UKAEA



Ansel Ong, BSc Computer Science (University of Leicester)
Host University & Supervisor: University of Leicester, Dr Daniel Hao
PhD Project: Domain Adapted World Models for Metal Manufacturing



Adedayo Ogunnoiki, BEng Mechanical Engineering (Carleton University, US) MSc Digital Manufacturing of Advanced Materials (UCL)
Host University & Supervisor: University of Warwick, Prof. Darek Ceglarek
PhD Project: Smart Quality Control for High-Throughput Can Manufacturing Processes sponsored by AMP

Cohort 1 Phase 2 will welcome a further set of studentships commencing January 2026

Monthly Highlights | September



DigitalMetal CDT at UK Metals Expo

Over two inspiring days at the UK Metals Expo, we:

- Connected with colleagues and industry partners across the metals supply chain
- Showcased how DigitalMetal CDT is driving research, innovation, and talent development
- Heard Prof. Hongbiao Dong speak at the Mentoring & Careers Day, presenting the CDT's vision for training future digital leaders in the metals industry



MENTORING & CAREERS DAY

Training, Upskilling & Research Pathways

Internships, industrial placements, graduate programmes, CPD courses, short courses, and micro-credentials, with insights from universities and Centres of Excellence

A panel discussion - personal journeys, the choices they made, and why metals and materials proved the right path, and advice for considering the sector including the most exciting opportunities on the horizon



Monthly Highlights | October



Profile raising of DigitalMetal-CDT & our PhD opportunities at the University of Leicester Autumn Graduate Careers Fair & STEM Fair, alongside presentations to Year 3 & 4 School of Engineering students.



Thanks to the Formulation Engineering CDT, University of Birmingham for a warm welcome at their annual Oktoberfest Event. A fantastic opportunity to meet Deputy Director Dr Richard Greenwood, the CDT Team & this year's newest Cohort who the DigitalMetal-CDT will be collaborating with at the Spring Retreat in May. We also caught up with Duncan Yellowlees at the Event Session on Presenting Skills.

[SciComm Toolkit Podcast- How to nail any presentation](#)

CDT NewsBites | Round Up

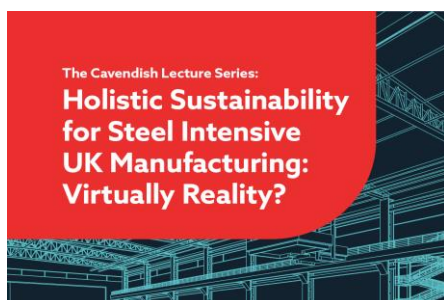
Our CDT Manager Dr Maryam Khaksar Ghalati and Cohort 1 students attended the October Intellegens Alchemite User Group Meeting. The online session provided an introduction to the software & enabled the cohort to learn from the experiences of other users through case study presentations.

Dr Gareth Conduit (Intellegens) will be providing a comprehensive foundation module to the Cohort in Semester 1. The Module will provide a solid footing in modern machine learning methods and their application to industrial & scientific data, equipping the Cohort with both theoretical understanding & hands-on skills for developing, evaluating, and deploying AI models.





Upcoming Events | We are looking forward to....



IOM3 Cavendish Lecture Series: Holistic Sustainability for Steel Intensive UK Manufacturing – Virtually Reality?

Prof. Cameron Pleydell-Pearce will delve into the challenges and opportunities of holistic sustainability in UK manufacturing.

Date: 12 noon, Wednesday 22nd October

More info and registration:

[FIND OUT MORE](#)



IOM3 Conference “Materials, Minerals & Mining for People, Places, Planet” (M3P3)

Date: 11th & 12th November 2025 at Millennium Point in Birmingham.

Visit the website to find out more about the conference programme+ IOM3 memberships

[FIND OUT MORE](#)

The Alan Turing Institute

Alan Turing Event

Phi-ML meets Engineering - Machine learning dissipative dynamics via Statistical-Physics-Informed Neural Networks,

Date: 30 October 2025, 13:00 - 14:00

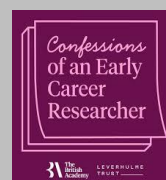
This bi-monthly seminar series explores real-world applications of physics-informed machine learning (Φ -ML) methods to the engineering practice. They cover a wide range of topics, offering a cross-sectional view of the state of the art on Φ -ML research, worldwide.

Participants have the opportunity to hear from leading researchers and learn about the latest developments in this emerging field. These seminars also offer the chance to identify and spark collaboration opportunities.

[FIND OUT MORE.](#)

AUTUMN PODCAST SPOTLIGHT

Podcast Link



WELFARE SPOTLIGHT

Reading Link



Opportunities | 2026

We are now open to receive applications for students to start their PhD studies in September 2026

For more information on how to apply and the five thematic areas of research within the DigitalMetal-CDT see our website digitalmetal-cdt.ac.uk