



2018 Magnesium Symposium

Magnesium Curriculum Development for HEIs in Partnership with Industry

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Opportunities

Industry is finding it difficult to recruit graduate engineers with knowledge of magnesium alloys and associated design & production techniques, strategies and technologies.

There currently appear to be no specific courses in the use of magnesium in manufacturing offered by a UK-based university.

Recent attendance at Mg2018 supports this.

Objectives

1. Evaluate the requirements of industry training and CPD.
2. Prepare CPD courses for delivery to industry and within the academic community.
3. Consider extending into magnesium-focussed themes within Degree or Masters programmes.
4. Prepare case studies and academic papers for dissemination.

3 Stages

Evaluation of the training and educational requirements of industry.

Prepare CPD modules for delivery to industry. For example:

- Design for Magnesium Deployment.
- Strategies for Vehicle Lightweighting.
- Foundry 4.0 in High Pressure Die Casting.

Prepare and collate case studies and lessons learned from the project for wider dissemination.

Submitting papers for high impact journals and international conferences.

Holding a new Magnesium Symposium by the end of the project to announce the projects outputs, along with the IMA European Committee meeting.

A booklet showcasing lessons learned.

3 Tasks

Through liaison with the IMA and commercial organisations, evaluate the current and future training and educational requirements of the magnesium industry.

Based on the data collected above, and in continued contact with stakeholder institutions, develop curricula for CPD modules.

Collate material for wider dissemination, including Case Studies and Academic Papers.

Engineers – The New Wave

Up to Date

Technically Adept

Scientifically Literate

Cost-Aware

Ethical

Able to Communicate

Work in Multi-Functional Teams

Specialists

All-Rounders

Systems Thinkers



We need YOUR help!

- What does YOUR organisation need in terms of training and education?
- Do you have any other input which may be useful?
- Please help mould the curriculum!

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