

Newsletter No1

September 2016

Dear Readers,

We are really proud to present the first issue of our AMaTUC newsletter with the latest information and news regarding our project activities and early results obtained so far.

The AMaTUC project aims at boosting the Technical University of Cluj-Napoca (TUCN) and twinning partners' scientific excellence, their innovation capacity in additive manufacturing as well as implementing a research and innovation strategy focusing on three sub-topics:

-  *Improve existing AM technologies;*
-  *Integrate the AM technologies with suitable Rapid Tooling methods;*
-  *Design for competitive manufacturing of personalised products and computer planning analysis and simulation.*

During the three-year project, the consortium partners will collaborate on various activities from short-term staff exchanges to the organisation of training events and participation to scientific conferences.

Please register to our mailing list on the [AMaTUC website](#) to receive the next newsletters as soon as released.

AMaTUC Team

Coordinator:



Partners:





Presentation of the project

The AMaTUC project has been funded under the ‘Spreading Excellence and Widening’ section of the Horizon 2020 Programme. The ***Twinning*** scheme aims to increase scientific excellence of a research institution located in a low-performing country (e.g. Romania) by developing links with internationally-leading counterparts.

AMaTUC project has been one of the few proposals selected for funding among the 552 submitted to the call, with an overall mark of 14.5 out of 15. This would have never been achieved without the outstanding scientific profile of the coordinator TUCN, the high socio-economic benefits of additive manufacturing for Europe and the complementarity of consortium partners (e.g. Loughborough University, FH Aachen and Intelligentsia Consultants).

Project Activities



Staff Exchanges

- ✦ Short-term travels from 1 week to 2 months from/to TUCN.
- ✦ Exchange of knowledge relevant to the 3 research topics.



Training

- ✦ Organisation of 6 training workshops, 3 summer schools and 1 international conference.
- ✦ Participation to additive manufacturing scientific events.



Promotion and Dissemination

- ✦ Promotion of AMaTUC project and AM technologies to the general public.
- ✦ Dissemination of project results to the scientific and industrial communities.



Consortium meetings

The project has only been active for eight months but the consortium partners have already organised three consortium meetings, taking advantage of any project events to meet and discuss the achievement of project's objectives and activities.

Kick-off meeting – January 2016

The project kick-off meeting was organised in Cluj-Napoca (Romania) the 11-12 January 2016. During the meeting the consortium partners discussed about the project objectives and agreed on a work plan over the next year.

The coordinator involved many people from TUCN in the AMaTUC kick-off meeting, from PhD students to representatives of the Faculty. TUCN also organised visits to several manufacturing workshops and laboratories in order to identify twinning opportunities with the partners.



2nd consortium meeting – May 2016

The consortium partners took advantage of the 1st AMaTUC workshop in Cluj-Napoca to organise a consortium meeting on the 28 May 2016. The objective was to discuss the advancement of project's activities and especially the staff exchanges.

3rd consortium meeting – August 2016



All the consortium partners met in the framework of the 1st AMaTUC summer school organised in Aachen (Germany) the 22-27 August 2016.



1st AMaTUC workshop in Romania

The 1st AMaTUC workshop was organised in Romania the 26-27 May 2016. The main objective of this event was to promote Additive Manufacturing research and applications to a targeted audience of scientists and industrial actors.

Day 1

The first part of the workshop was held by the Department of Manufacturing Engineering at TUCN, on the 26 May 2016. Several presentations were given by the AMaTUC partners to an audience of 20+ local participants, not only from the university but also from the industry sector:

- AM market research and technology
- Design for Additive Manufacturing
- FEM of new personalized products, to simulate their main functional requirements. Case study: creativity and problem-solving
- SLM process capabilities and applications
- The value of product personalisation through the use of AM
- Industrial applications of Selective Laser Melting

Day 2

The next day, the AMaTUC workshop was held at the DEMO METAL conference in Brasov (Romania). Thanks to this initiative from the coordinator, the AMaTUC project has considerably increased its national and international visibility.



Dr. Alexandru Popan from TUCN giving a presentation on "Water jet machining: case studies and perspectives."





1st AMaTUC summer school

Within the course of AMaTUC project, the consortium partners must organise three summer schools in different countries. FH Aachen decided to take the lead in organising the 1st edition of the AMaTUC summer school.

Already experienced in such events, FH Aachen prepared an excellent summer school from the 22-27 August 2016. The event was mainly targeting the consortium partners but FH Aachen opened the summer school to international students as well. All together, the summer school attracted more than 20 people, including 11 participants from TUCN, 4 from Loughborough University and 2 from Intelligentsia.

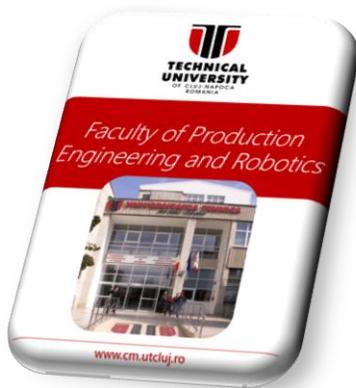
The programme consisted of several tutorials (e.g. Additive Manufacturing, CAD/CAM design and other relevant topics) as well as practical workshops where the participants learnt how to build a RepRap printer, improve its performances and print custom designs. FH Aachen also organised visits to Fraunhofer ILT, WZL Aachen GmbH and their famous FabBus also known as 'Wolfgang'.





Latest news

The AMaTUC coordinator, Prof. Nicolae Balci, has recently been promoted to the position of Dean of the Faculty of Production Engineering and Robotics. Despite his new responsibilities, Prof. Balci will still be involved in AMaTUC project activities.



The AMaTUC project has released several promotional materials on its website (e.g. leaflet, poster, project presentation). The latest document is a Promotion Guide about the Faculty of Production Engineering and Robotics at TUCN. This document will provide you with useful information on the Research and Innovation activities performed in the five departments of the Faculty. You can download all our documents on the [AMaTUC website](http://www.amatuc.com).

The next AMaTUC workshop will be organised in Brasov (Romania) from the 3-4 November 2016, in the framework of the international conference [COSME](http://www.cosme.ro). You are all invited in Romania to meet the project team.



Learn more on AMaTUC project activities and achievements by visiting frequently our website:

www.amatuc.com

Register now to our mailing list and receive the AMaTUC newsletters as soon as they are released.