



September 2017

NUCLEI PROJECT NEWSLETTER

NUCLEi - Network of Technology Transfer Nodes for Enhanced Open Innovation in the Central Europe advanced manufacturing and processing industry

The European Union's most important automation and mechatronic industries are located in central European regions. While their business dimension is intercontinental, their innovation-related services often remain local, thus slowing the transfer of research and development results from regions of Central Europe to industry. As a result, tech-transfer is an expensive process that often duplicates efforts and does not respond to the time-to-market requirements. The challenge is to improve the innovation-related services, scaling-up regional efforts and to accelerate the transposition of key enabling technologies (KET) from relevant EU-funded research & central European labs and projects into new end-user components and apps for the advanced manufacturing industries.

NUCLEI aims to change the obsolete innovation management model from a "local-based" technology scouting approach to a transnational pool of knowledge that supports advanced manufacturing innovation beyond regional borders.

It will particularly increase economic interdependences among seven Central European regions (Modena, Veneto, Emilia-Romagna, Upper Austria, Bavaria, Eastern and Central Slovakia, Lower Silesia) and encourage more effective transnational value chains in automotive, electrical industry, IT sector, robotic and mechanic automation. Such joint

knowledge sourcing approach will help the 7 NUCLEI industrial clusters and its endbeneficiaries (corporations, SMEs, R&D performers) to generate new consortia/business deals for executing bold technological, product, and market projects. The creation of a broad and collaborative environment, initially tested by 100 companies from 7 regions, is expected to:

- Increase linkages with innovators outside the project regions by 40-50 percent;
- Accelerate the time-to-market of R&D concepts (from EU-funded research & central European labs to companies) by 15-20 percent;
- Increase R&D expenditure and patent applications of participating companies by 2-3 percent of mid-term turnover.

NUCLEI@KETGATE Kick-off

The NUCLEI project and approach for ecosystem development was presented at the KET-GATE kick-off meeting in Stuttgart on 25th July 2017. In the future, the projects will try to cooperate where possible and exchange best practices. KET-Gate is also funded by Interreg CE and will deliver the tools and network structures to install a transnational key enabling technologies (KETs) innovation ecosystem allowing SME a CE-wide access to newest high quality KET infrastructures for testing. The project focuses on the following KETs - *advanced materials, photonics and micro- and*





nano-engineering and will support the application of game-changing technologies to compete with the global competition in the areas of food, transport and health.

Upcoming Events

International Engineering Fair in Brno (MSV) 2017

The NUCLEI will present results of industry cooperation as well as research and student projects during the International Engineering Fair in Brno from 9th to 13th October 2017.

The new unique machine for hybrid manufacturing - WeldPrint 5X, from the company Kovosvit MAS, will be shown in pavilion P. NUCLEI present results of this technology, which combines metal cutting operations and metal deposition.

Students projects, for example 3D printed robots, will be presented in pavilion Z at the booth of the Czech Technical University in Prague.

Please follow this [link](#) for more information about the event.

Customer-centered digital business models and processes open seminar in Nuremberg on 10th October 2017

Digitalization is on the march and is about to form our societies drastically in the years to come. Especially users of digitalized solutions in manufacturing and trade are increasingly affected by this dynamic. Many

fear to miss out on this trend and lose their economic basis.

While in Germany the focus is set primarily on the technology itself, US companies for example tend to combine the use of new technologies with new potential business models that can be developed in consequence. While the world becomes more and more connected, it is evermore important to observe the international activities and particular approaches of global players when tackling current issues of digitalization.

In the present open seminar series that is funded by the NUCLEI project of the European Union, we offer the possibility to bring in international points of view when discussing specific topics of digitalization. At the same time we want to present best-practice-solutions for a successful digital transformation of traditional business models. The seminar is open to decision makers, software developers and project leaders.

The event will take place at New Elements GmbH, Thurn-und-Taxis-Straße 10, Nuremberg on 10th October. Participation is free of charge, the number of participants is however limited. Registrations are open until 5th October via www.cluster-ma.de/veranstaltungskalender or be sent via email directly to Cluster Manager Alexander Schäferling alexander.schaeferling@cluster-ma.de (Fax: +49 821 569797-50).

