

## AMITIE - Additive Manufacturing Initiative for Transnational Innovation in Europe MSCA-RISE

Additive manufacturing (AM) technologies and overall numerical fabrication methods have been recognized by stakeholders as the next industrial revolution bringing customers' needs and suppliers' offers closer. It cannot be dissociated to the present trends in increased virtualization, cloud approaches and collaborative developments (i.e. sharing of resources). AM is likely to be one good option paving the way to Europe re-industrialization and increased competitiveness. AMITIE will reinforce European capacities in the AM field applied to ceramic-based products.

Through its extensive programme of transnational and intersectoral secondments, AMITIE will promote fast technology transfer and enable as well training of AM experts from upstream research down to more technical issues. This will provide Europe with specialists of generic skills having a great potential of knowledge-based careers considering present growing needs for AM industry development. To do that, AMITIE brings together leading academic and industrial European players in the fields of materials science/processes, materials characterizations, AM technologies and associated numerical simulations, applied to the fabrication of functional and/or structural ceramic-based materials for energy/transport, and ICTs applications, as well as biomaterials. Those players will develop a new concept of smart factory for the future based on 3D AM technologies (i.e. powder bed methods, robocasting, inkjet printing, stereolithography, etc.) and their possible hybridization together or with subtractive technologies (e.g. laser machining). It will allow for the production of parts whose dimensions, shapes, functionality and assembly strategies may be tailored to address today's key technological issues of the fabrication of high added value objects following a fully-combinatorial route. This is expected to lead to a new paradigm for production of multiscale, multimaterial and multifunctional components and systems.

### UNIPD Team Leader: Paolo Colombo

Department: Industrial Engineering

Coordinator: Université de Limoges (France)

### **Other Participants:**

Institut National des Sciences Appliquées de Lyon (France)

Université de Valenciennes et du Hainaut-Cambrésis (France)

Friedrich-Alexander-Universität Erlangen Nürnberg (Germany)

Bundesanstalt für Materialforschung und – Prüfung (Germany)

Politecnico di Torino (Italy)

Imperial College of Science, Technology and Medicine (United Kingdom)

Universitat Politècnica de Catalunya (Spain)

Centre de Recherches de l'Industrie Belge de la Ceramique-ASBL (Belgium)



# 3dCERAM(France)

Centre de Recherches et d'études Européen de Saint-Gobain(France)

NORAKER(France)

Anthogyr Sas (France)

Robert Bosch Gmbh (Germany)

H.C. Starck Ceramics Gmbh (Germany)

Desamanera Srl (Italy)

Università degli Studi di Padova (Italy)

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Find out more: <u>http://cordis.europa.eu/project/rcn/205653\_it.html</u>