

# The STEM-Valorisation Synthesis Report





## The Valorisation Synthesis Training Investigation Report

#### The Project Consortium









#### **University Industry Innovation Network**

An international leader on university-industry engagement, entrepreneurial & engaged universities and knowledge transfer. They conduct research, organise events and provide training and consultancy services to their community of 80+ organisational and 500+ individual members.

#### Munster Technological University

A multi-campus technological university, contributing to the region through the provision of academic programmes that support student development and opportunities, education and research. MTU has an extensive and impressive regional footprint with six campuses across the South-West region in Cork and Kerry, and a student body of 18,000.

#### Institut Mines-Télécom Business School

One of France's major educational and research establishments. IMTBS has a strong connection to a local network of SMEs in both research and education to support SME innovation and providing education for future employees.

#### Istanbul Technical University

With a historical background tracing almost 250 years, Istanbul Technical University is an institution that plays a leading role in science, technology, arts and sports. İTÜ aims to be the centre of science, which connects the past to the present by producing projects for the future.

#### Authors

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### **Executive summary**

The term valorisation is becoming more utilized and coincides with an increase of requirements for universities to deliver more on their "third mission", to provide service to the community. Valorisation of Science, Technology, Engineering and Mathematics (STEM) research can be understood as a process of interaction between different actors with an aim of creating social benefits from knowledge. Valorisation starts when the research-based data are disseminated to society and practically applied to improve or to develop new products, processes, and services in order to create evident, measurable or observable impact beyond the academic context.

This Valorisation Synthesis Training Investigation Report aims at providing a comprehensive understanding of the need for valorisation and research-driven entrepreneurship training for first stage Science, Technology, Engineering and Mathematics (STEM) researchers. Specifically, the report identifies what is valorisation of research results including defining the term and distinction from similar terms, describing the valorisation process, stakeholders involved in the process, the general barriers and drivers for valorisation and the mechanisms to support valorisation. The report describes the activities that are part of STEM valorisation, and methods or pathways that are part of valorisation process. It examines STEM research valorisation processes compared to other disciplines, such as social sciences and humanities (SSH). The specific barriers and drivers for STEM valorisation and support needed for STEM research valorisation are also discussed.

Moreover, the report expands and develop understanding of valorisation, researchdriven entrepreneurship skills and the knowledge needed for first stage STEM researchers to valorise their research. This includes skill deficiencies / needs of STEM researchers for research valorisation. It also illuminates the existing learning frameworks for valorisation of STEM research knowledge, including training offerings and concepts, curricula, and extracurricular programs, for valorisation and entrepreneurship. The report provides a short overview of STEM valorisation in the regional context through the partner institutions' review. These regional overviews specifically identify the unique barriers and drivers as well as other factors effecting STEM valorisation.

Finally, the report provides recommendations for the successful trainings in valorisation of research that serves as starting point for development of the learning framework and content of the modules that will be implemented as part of the STEM Valorise project.



# www.stemvalorise.eu

