



SINFONET: Smart & Innovative Foundry Network

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1. Introduction

SINFONET (Smart and INovative FOUNdry NETwork) is the Innovative Network for the Foundry, officially acknowledged by Regione Veneto (L.R. 13/2014) in 2016 (Fig. 1).



Fig. 1. Logo of SINFONET

SINFONET is aimed at developing the “smart foundry of the future”, where innovation and integration generate education, jobs, competitiveness. SINFONET collects about 50 partners in the foundry supply chain (Fig. 2) with more than 4500 employees in Regione Veneto, and an overall turnover higher than 1.5 billion of €

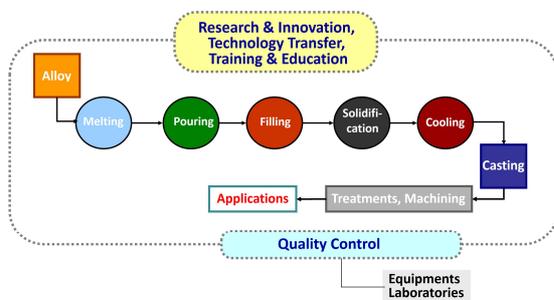


Fig. 2. Supply chain of Foundry

SINFONET is targeted at

- Designing, carrying out, coordinating a wide system of initiatives addressed to Foundry (ferrous and non-ferrous alloys) and Metalworking Companies,
- Building in Regione Veneto an Excellence Centre, collecting all the players in the supply chain: foundries, producers of raw materials and consumables, suppliers of engineering, services, technology, equipments, Research & Innovation Institutions, end-users.

SINFONET promotes multi-disciplinarity and integration, developing methods, products, procedure to support competitiveness (Fig. 3), based on

- Research, development, innovation and technology transfer (materials and processes, control systems, product and process standards, integrated design, energy and environmental management),
- Integration among foundries, suppliers (services, materials, technologies) and other metal-working companies,
- Education and qualification of human resources,
- Participation to Competitive Calls for funding,
- Scouting of new markets and internationalization.

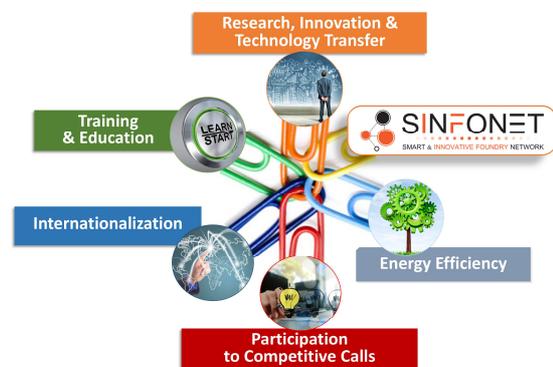


Fig. 3. Mission of SINFONET

2. SINFONET Projects

The activity of SINFONET has officially started during 2017, in the frame of various Research & Innovation and Internationalisation initiatives launched and supported by Regione Veneto (POR-FESR 2014-2020).

The main projects in which SINFONET and its Partners are involved will be presented. They are:

- GAP: Development of innovative foundry alloys and products, both in the field of ferrous (Austempered Ductile Iron, High

Silicon Ferritic Cast Iron) and non-ferrous (Aluminium) alloys;

- FORSAL: Introduction of automation and robot solutions for foundry operation, to be carried out on medium- and big-sized ferrous castings, aimed at improving health and safety of workers;
- SARR: Evaluation of innovative processes for recycling of slags produced by steel foundries;
- PreMANI: Introduction of new techniques for predictive manufacturing and maintenance in foundry
- INFOS: Supporting SMEs in internationalization and market development.

Acknowledgments

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