

CLUST-ER MECH

MECCATRONICA E MOTORISTICA



1ST CANADA - ITALY BUSINESS FORUM ON AI SPOTLIGHT ON EMILIA-ROMAGNA

Industry 4.0 Thematic Round Tables

Mariacristina Gherpelli – Chair of Mechatronic and Motoristic Clust-ER

The birth of the Emilia-Romagna Clust-ERs

From ER High Technology Network to European Smart Specialization Strategy



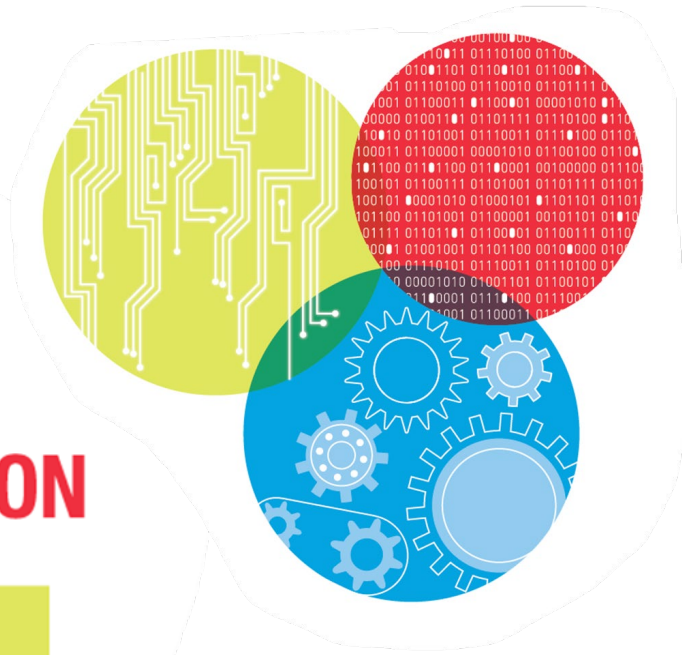
Clust-ERs are **Associations of public and private bodies founded in 2017**: companies, research laboratories, innovation centers and training institutions that share skills, ideas and resources to **support the competitiveness of their sectors**.

The Emilia-Romagna Region has found in the Clust-ERs the subjects capable of **multiplying innovation opportunities through a collaborative approach**, as they focus their activity in R&D strategic sectors.

Each Clust-ERs is composed of **Value Chains**, thematic work groups focused on the priorities defined by the European Smart Specialization Strategy (S3).

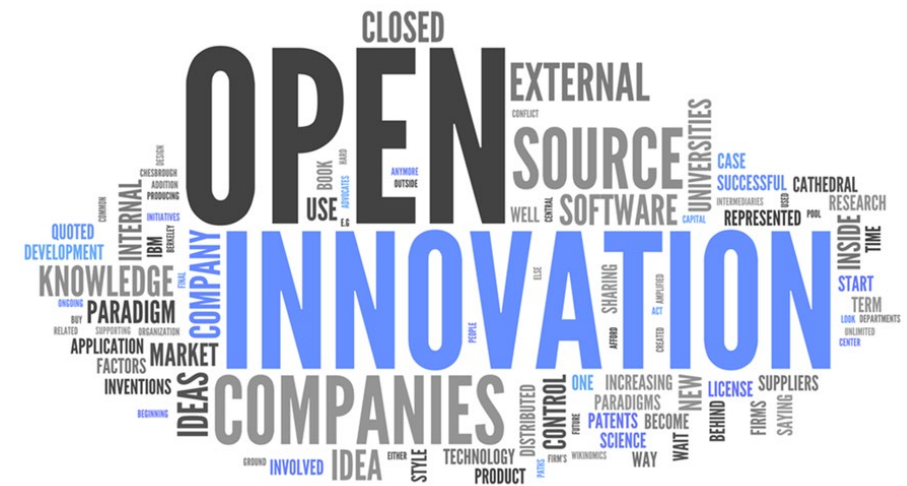
The MECH Clust-ER Value Proposition

“ NETWORKING BRINGS INDUSTRIAL INNOVATION THROUGH RESEARCH AND KNOWLEDGE ”



The MECH Clust-ER Strategic Goals

- **Create networking opportunities** among the Members aimed at strategic planning, with a high regional impact.
- Promote the development of innovative ideas on which to focus the interest on **new open and disruptive basic research lines**;
- Support Emilia-Romagna Region in the **definition of policies for research and innovation** in S3 domains.
- Share **training and high specialization needs** with industry stakeholders;
- **Strengthen networks and connections with public-private associations** active in similar areas at National and International level, while promoting the **Internationalization of Supply Chains**.



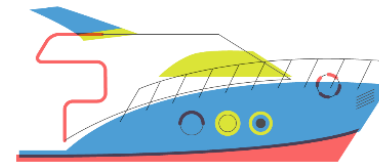
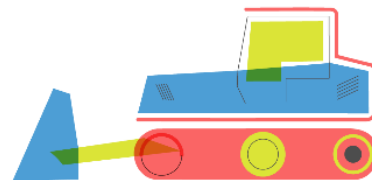
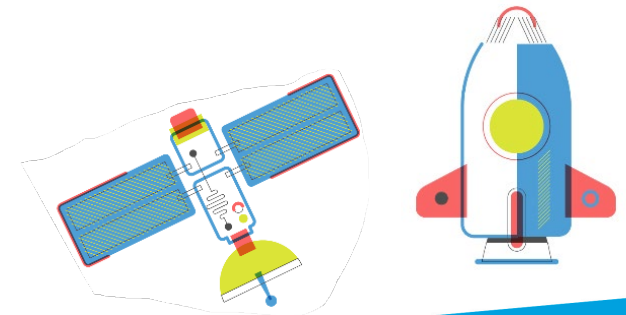
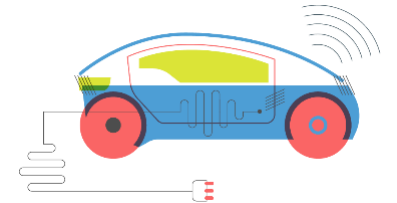
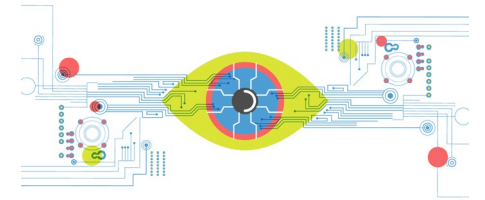
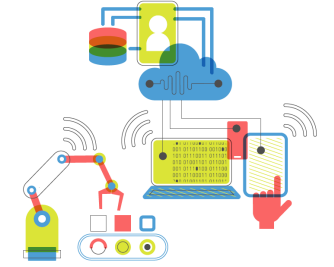
The MECH Clust-ER Value Chains

Seven highly specialized work groups

The Value Chains are thematic work groups focused on the priorities defined by the European Smart Specialization Strategy (S3).

Our specific competence areas are:

- **Digital and Advanced Manufacturing**
- **Automation and Robotics**
- **Safe, Efficient, Sustainable Engines and Vehicles**
- **Advanced Materials for Motoristics and Mechatronics**
- **Avionics and Aerospace**
- **Nautical**
- **Fluid Power**



MECH Clust-ER main projects and activities

National and International

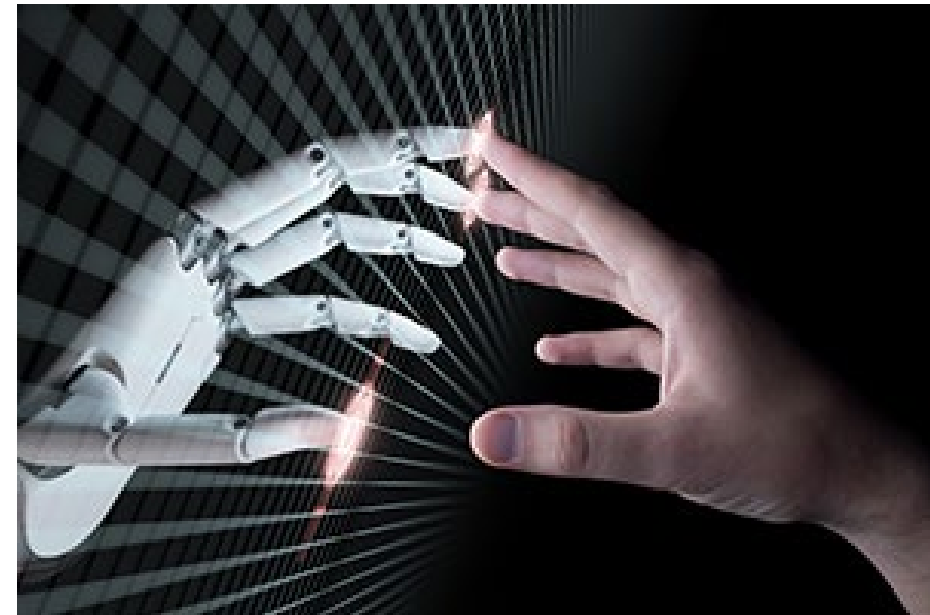
- **Networking events** to develop ideas for collaborative projects.
- **Value Chains workshop** for technical and scientific dissemination and sharing new advanced knowledge.
- **Work Tables** on topics proposed by the Members.
- Participation in **European Call** reserved for Clusters.
- Participation in **International Missions** together with the Regional system.
- Evaluation of **membership in consortia or institutions** of specific interest.
- Participation in **events and trade fairs** to present Clust-ER, Members and activities.
- Etc.



MECH Clust-ER and Artificial Intelligence

Some Value Chains are **operating significantly in application involving AI** and several collaborations are active to take up the challenges and opportunities arising from the application of the most advanced technologies in particular related to:

- **Digital Applications in Manufacturing.**
- **Next Generation Automation.**
- **Mobile, Intelligent and Collaborative Robotics.**
- **Connectivity and autonomous operation of vehicles for the design and production of intelligent mobility systems**



Thank you for your kind attention!

Mariacristina Gherpelli – Chair of the Clust-ER cristina.gherpelli@ghepi.com

Carlo Pignatari – Clust-ER Manager carlo.pignatari@mech.clust-er.it



Associazione Clust-ER Meccatronica e Motoristica

c/o Aster – CNR, Area della Ricerca di Bologna

Via Gobetti, 101 – 40129 Bologna

Tel. +39 051 6398099

Web: mech.clust-er.it