



The Parma Technopole: innovating your business has never been easier

The Parma Technopole is a facility of the University of Parma¹, housing its interdepartmental Centers for industrial research and operating as the point of access to the regional ecosystem for innovation.



¹<https://www.unipr.it/en>

House of industrial innovation



We can help you to design your innovation project through cutting-edge technical-scientific skills, equipment and services in the following fields:

- Food safety and technologies;
- Packaging and logistic;
- Industrial automation;
- Urban regeneration and buildings;
- Energy and environment;
- Life sciences;
- Translational medicine.

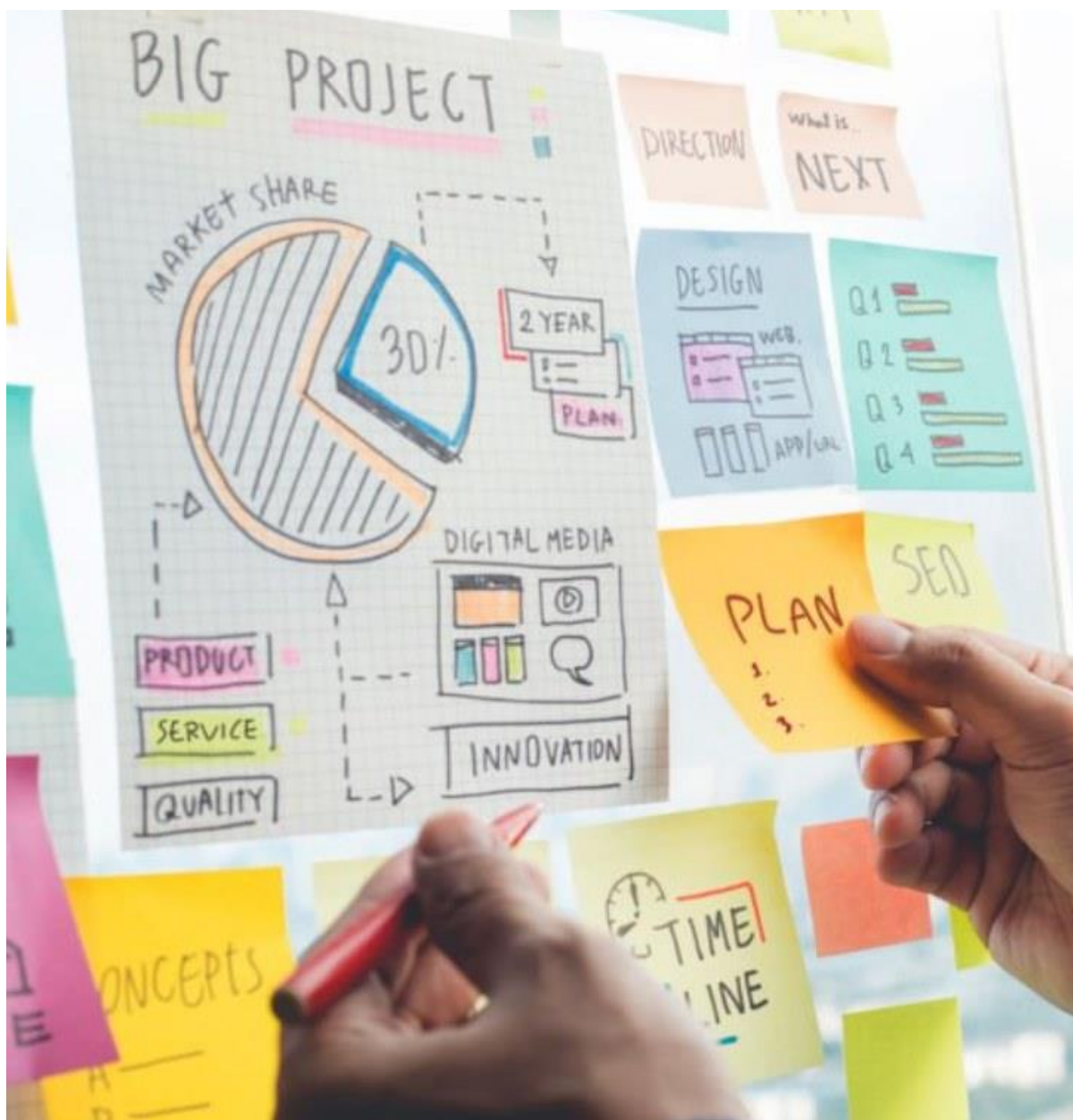
Let's keep in touch!

Visit the Parma Technopole web site² or send an e-mail³.

²<https://www.centritecnopolo.unipr.it/en/>

³<mailto:tecnopolopr@unipr.it>

From ideas to innovation projects: our services



Through the Parma Technopole, you can use a wide range of specialist services, including:

- Analysis of the need for innovation;
- Accompaniment in the construction of the R&D project;
- Guidance on contracts, IP and subsidised finance;
- Access to the High-Technology Network of Emilia-Romagna;
- Hosting of events and territorial networking.

Take a look at our Interdepartmental Research Centers



Biopharmanet-TEC



Interdepartmental Research Center for Innovation of Health Products

Director: Prof. Fabio Sonvico

E-mail: fabio.sonvico@unipr.it⁴

Web site: <http://www.centritecnopolo.unipr.it/biopharmanet-tec>



BIOPHARMANET-TEC

Centro Interdipartimentale di Ricerca
per l'Innovazione dei Prodotti per la Salute



The BIOPHARMANET-TEC Center is composed of researchers from five departments in the technical-scientific and biomedical fields. Its mission is to promote, manage, and participate in:

- Industrial research projects;
- Specialized training services, including those focused on technology transfer.

The Center's technological areas include Industrial Research and Technology Transfer, framed within the Life Sciences Platform, with a focus on:

- Pharmaceutical Technology and Drug Delivery;
- Pharmaceutical Chemistry and Drug Discovery;
- Drug Development;
- Pharmacology and Experimental Toxicology;
- Pharmaceutical Engineering and Process Technology;
- Biochemistry, Molecular Biology, and Recombinant DNA Technology.

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CICCREI



Interdepartmental Research Center for Construction, Conservation and Regeneration of Buildings and Infrastructures

Director: Prof.ssa Eva Coisson

E-mail: eva.coisson@unipr.it⁵

Web site: <https://www.centritecnopolo.unipr.it/ciccrei/>



CICCREI

Centro Interdipartimentale di Ricerca per la Costruzione,
la Conservazione e la Rigenerazione di Edifici e Infrastrutture



⁵<mailto:eva.coisson@unipr.it>

CICCREI is a research institution of public nature established to bring together the multiple competences belonging to different departments of the University of Parma in the field of construction and infrastructures.

In addition to the more strictly architectural and engineering disciplines, the Center includes researchers focusing on economic, legal geology, chemistry and physics of materials to cover the diversified applied research needs of the territory on these topics.

The Center's mission is to promote, coordinate and integrate activities of basic research, applied research, technology transfer relating the application and development of innovative technologies for construction, conservation and regeneration of buildings and infrastructures, with particular reference to:

- conservation and enhancement of the built heritage with historical/artistic or urban/environmental value;
- reduction of vulnerabilities of existing buildings, including civil works;
- infrastructures;
- energy efficiency of buildings for environmental and economic sustainability;
- regeneration of urbanised and built-up territory; improvement of comfort and urban and building quality in a smart city perspective.

The Center's activities are mainly aimed at public bodies and companies and include:

- industrial, experimental and applied research activities;
- product and process innovation support activities;
- technology transfer activities (including refresher and vocational training).

CIDEA



Interdepartmental Center for Energy and Environment

Director: Prof. Agostino Gambarotta

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Web site: <https://www.centritecnopolo.unipr.it/cidea/en/>



CIDEA

Centro Interdipartimentale
per l'Energia e l'Ambiente



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CIDEA provides consultancy and support to public and private entities in the following fields:

⁶<mailto:agostino.gambarotta@unipr.it>

- Energy: Analysis and optimisation of Energy Systems/Networks and supply chains; energy generation, conversion and utilisation; energy storage; sources of renewable energy sources; impacts on the Environment; energy harvesting materials;
- Smart Energy Systems;
- Integration and management of Energy Networks;
- Environment: Analysis of the impact of emissions on the environment and organisms and its mitigation. Study of the exploitation potential of water resources water resources and hydrogeological risk;
- Biodiversity;
- Solutions for sustainability;
- Biological conversion and purification processes;
- Economics: Analysis and evaluation of energy chains with particular regard to agro-energy chains and policies for the development and promotion of energy from renewable sources;
- Environmental and economic costs of energy supply chains;
- LCA and cost-benefit analysis;
- Green Marketing;
- Sustainable development of productive activities and rural areas;
- Water: Integrated water cycle;
- Water resource management and combating hydrogeological crises;
- Precision agriculture;
- Climate change;
- Flood Risk Management;
- Flood Control Systems;
- Data: Methods and solutions for data definition, acquisition and management energy and environmental data;
- Development of Internet-of-Things (IoT) solutions;
- External and internal environmental monitoring.

CIPACK



Interdepartmental Center for Packaging

Director: Prof. Roberto Montanari

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Web site: <https://www.centritecnopolo.unipr.it/cipack/en/>



CIPACK

Centro Interdipartimentale
per il Packaging



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DI PARMA

⁷<mailto:roberto.montanari@unipr.it>

Cipack was established in 2019 to promote and coordinate basic and applied research activities related to the world of packaging and bottling, in particular for the agrifood and pharmaceutical sectors.

Cipack carries out R&D activities to:

- Develop research in the field of food packaging, of natural mineral waters, beverages and pharmaceutical products;
- Develop research in packaging-related areas such as product design product design, distribution logistics and marketing of packaged products;
- Delving into issues related to the manufacture and/or processing of containers for food and pharmaceutical products; carry out research projects for and with the collaboration of public and private organisations, companies and Institutions;
- Acting as a driving force for scientific research in the sector at the departmental structures of the University;
- Organising meetings, conferences and exhibitions to disseminate the results of the of the Centre's research activities;
- Promote synergy between the various scientific and technical skills of the participants in order to achieve a level of excellence in the field;
- Promote the Centre's scientific activity and image to industries in the sector.

The services offered are:

- Design, realisation and characterisation of new sustainable materials for packaging (recyclable, biodegradable and compostable);
- Packaging trials (study of packaging-product interactions, diffusion and set-off inks, new materials);
- Migration and speciation analyses;
- Microbiological analyses and Shelf-Life studies;
- Engineering and Environmental Impact (LCA analysis, product and packaging process optimisation, lean manufacturing system design);
- Quality and Hygiene in Packaging (sensory evaluations, detection contamination);
- Scenario analysis and state of the art;
- Quanti-qualitative packaging disassembly analysis (environmental and functional/communicative) and comparative;

- Analysis and definition of design trends, definition of people, users and related guidelines and design strategies;
- Design of products, services, processes and communication;
- Digital Twin of Technological processes;
- Production systems;
- Logistics systems and supply chain;
- Smart Labels, Process Automation and Control, Traceability.

COMT



Center for Molecular and Translational Oncology

Director. Prof. Roberto Perris

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⁸<mailto:roberto.perris@unipr.it>



COMT

Centro Interdipartimentale di Ricerca
di Oncologia Molecolare Translazionale



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The Center, founded in 2009, is part of the High Technology Network of the Emilia-Romagna Region and participates in Activity I.1.1 - Creation of Technopoles as an integral part of the Technopole of the University of Parma.

The Center aims to create a solid link between basic research groups and applied and clinical research groups operating at the University of Parma in the field of oncology and cancer prevention. A further objective is to act as a promoter for the interaction of these groups with public and private bodies, as well as with the pharmaceutical and biomedical industry.

The COMT intends to promote the design and conduct of research lines multidisciplinary and translational research lines through which laboratory discoveries can be rapidly transferred from the laboratory to the cancer patient. In addition, COMT is also active in the field of mutagenic/carcinogenic risk assessment from exposure to genotoxic substances present in food or in the living and working environment.

Services:

- Production, characterisation and labelling of monoclonal and polyclonal antibodies;
- Immunochemical, histological, proteomic and microbiology/applied virology;
- Functional genomics, postgenomics and toxicology;
- Ultrastructural and cellular analyses in vitro and in vivo, cell line deposition;
- Design and engineering of nano-compounds and nano-sensors for anti-tumour drug delivery and non-invasive ablation of neoplastic cells;
- Development and clinical validation of new radiopharmaceuticals;
- Scientific and technical consulting.

Future Technology Lab



Competence center on industry 4.0 enabling technologies

Director: Prof. Gianluigi Ferrari

E-mail: gianluigi.ferrari@unipr.it⁹

Web site: <https://www.centritecnopolo.unipr.it/futuretechnologylab/en/>



FUTURE TECHNOLOGY LAB

Competence centre nell'ambito
delle tecnologie abilitanti dell'industria 4.0



Future Technology Lab aims to be a competence center for the development of enabling technologies in Industry 4.0 such as:

- Augmented Reality;
- Radiofrequency & Identification;
- IOT;

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- Cyber Physical Systems;
- Big Data & Analytics;
- Simulation;
- Horizontal/Vertical Integration;

The Center works closely with the Digital Innovation Hub SMILE (Smart Manufacturing Innovation Lean Excellence centre)¹⁰ and with the network of Italian Digital Innovation Hubs.

Through the expertise of its 5 operating units, the Centre carries out applied research for the development of Industry 4.0 technologies and creates prototypes to be used as demonstrators for companies operating in the supply-chain of consumer goods, textiles and clothing, and for public administrations wishing to take advantage of RFID and machine vision technologies.

SITEIA.PARMA



Interdepartmental Center on Safety, Technologies and Agri-food Innovation

¹⁰<https://www.smile-dih.eu/?lang=en>

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SITEIA.PARMA

Centro Interdipartimentale sulla Sicurezza,
Tecnologie e Innovazione Agroalimentare



SITEIA.PARMA is a laboratory of ideas, projects and analyses for innovation, competitiveness and technology transfer of the agri-food and mechano-food industry.

The Center was created by the Emilia-Romagna Region and is part of the Emilia-Romagna High Technology Network. The Center carries out activities in three areas:

- Safety and Quality
 - Development of new methods and strategies to assess nutritional quality, physical and chemical-physical quality, stability, safety and traceability of raw materials and finished products for the integrity of agri-food chains;
 - Evaluation of health aspects of functional foods and of the relationship food-health relationship, also in the context of the valorisation of typical products;
 - Development of tools for the protection of typical local food products and evaluation of economic and environmental spin-offs.
- Products and Processes
 - Development of new food products with nutritional and for personalised nutrition;
 - Technological functionalisation of semi-finished and finished products for their qualitative improvement;
 - Product and process design for the agri-food chain Innovative food processes and optimisation of performance with reduction of environmental and economic impacts;
 - Innovation in agricultural production processes to increase the product availability and environmental, economic and social sustainability of supply

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chains with a focus on the regional territory (sustainable intensification, regenerative agriculture, climate smart agriculture, precision agriculture);

- Process innovation for the valorisation of agro-food chain residues in view of circular economy and end-of-waste.
- Machines and Plants
 - Advanced mechanical design and use of innovative materials conception and design of test systems for machines and plants;
 - Conception and design of technological test benches for improving of hygiene and sanitation of machinery and plants;
 - Simulation of machine and plant operation also in relation to the products handled; of new applications aimed at the management logistics of complete lines with particular reference to traceability of product and TPM techniques;
 - Diagnostics implementing predictive maintenance methods aimed at the maintenance over time of machine functionality and consequently the quality of the processed product, using non-invasive test methods and remote diagnostics.



1 - Profilo Instagram¹²

¹²https://www.instagram.com/tecnopolodiparma_unipr/



2 - Profilo Facebook ¹³



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the European Union



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¹³<https://www.facebook.com/tecnopoloparmaunipr/>

¹⁴<https://fesr.regione.emilia-romagna.it/>