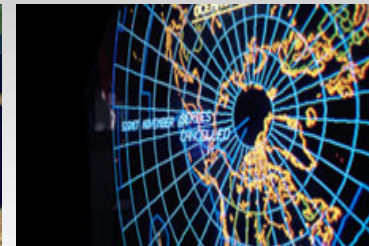
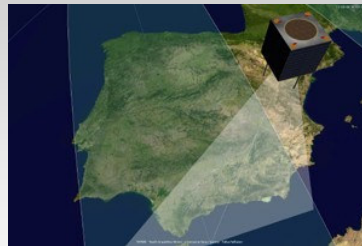


Companies in the Agrofood Sector in Castilla y León



ABRO BIOTEC



- **ABRO Biotec S.L. is a biotechnology company specialised in the development of active principles for the cosmetic, pharmaceutical and nutraceutical industries.**

- **Main services:**
 - **Consultancy services in R&D related to high value added natural extracts.**
 - **Study and commercialization of extracts and active principles based on antioxidant compounds derived from grapes.**
 - **Study and commercialization of grape concentrated aroma.**
 - **Design and commercialization of wine functional products without alcohol.**

- **Main Products:**
 - **EMINASIN: wine based drink without alcohol.**
 - **EMINAZERO: wine based drink with 0% alcohol and 0% calories.**
 - **EMINOL: polyphenic extracts made with the best grapes from the Duero area in the only polyphenic extracting plant in Spain.**

Webpage: www.abrobiotec.com



→ **Main R&D projects:**

- **HISTAMINES:** process development to improve wine healthy qualities.
- **FUNCTIONAL FOOD:** standardization of polyphenol concentrated liquid extracts with wine origin and development of the drying optimum parameters for its use as active ingredients in nutritional complexes, functional medicines and food additives.
- **ENRICHED COSMETICS:** design of an array of cosmetic products enriched with antioxidants derived from grapes.
- **FIRST TARGET:** healthy products obtained through the extraction of natural antioxidants and their inclusion in food matrixes.



BODEGAS MATARROMERA



- Bodega Matarromera S.L. mainly works in wine production, aging and bottling.
- The current company structure is composed by 6 wineries, located along the Duero river. Moreover, Duero Distilleries, unique in the Ribera del Duero, belongs to the group and also the only winery in all Castilla y León, that produces fortified wine.
- On the other hand, their activity also includes wine tourism, being the current leader in the sector. Their wide offer includes: the Restaurant la Espadaña de San Bernardo, the cottage Emina and other activities that are developed in their wineries.



- The R&D projects developed by the company can be classified in the following research themes:
 - Food and commercial traceability.
 - Polyphenols extraction from pomace, with application in the cosmetic, food and pharmaceutical sectors.
 - Processes automation and improvement.
 - Wine dealcoholization.
 - Biotechnological and biomedical areas.
 - Energy use and renewable energies.
 - Computer development and Information Technologies (IT).
 - Agronomic research.
 - Research and improvement in the olive oil sector.
 - Training area and human resources in R&D.

DULCES Y CONSERVAS HELIOS





- Dulces y Conservas Helios S.A. works in the production of marmalades, jams, quince jelly, prepared food, canned vegetables, confited fruit and tomato sauces.
- Main R&D projects:
 - EXTRANAT: Highly selective and environmentally friendly fruit extraction using supercritical fluids technology.
 - HIGEA: tools for research and development of new methodologies and technologies for prevention of chronic illnesses caused by food.

EMILIO ESTEBAN



- Emilio Esteban S.A. is specialized in the production of mill products: wheat flour for baking, barley, rye and rice special flours, environmentally friendly wheat flour, flour for children's food, whole-grain flour, oats, millet and sorghum temperature-treated flours, wheat semolina, wheat bran for human consumption, bran for animal consumption, and wheat germ.
- Main R&D projects:
 - Development of a new enzymatic complex with application in baking.
 - Development of a process to determine quickly the proteolysis caused by pentatonic insects in soft wheat for baking.
 - Development of new technologies for cereal treatment in order to stabilize and disseminate oats, millet and sorghum flakes and flour.
 - Temperature-treatment effects over cereal and flour functional properties.

GALLETAS GULLÓN



→ Galletas Gullón S.A. is specialized in the production and commercialization of cookies and crackers.

→ Main R&D projects:

HIGEA: the aim is to avoid the risk of suffering non transmissible chronic illnesses such as, obesity, diabetes and coronary diseases.

GRUPO SIRO



- Grupo Siro is specialized in the production of cookies, snacks, pasta, sandwich bread, pastries and baked goods.
- Main R&D projects:
 - Fresh and healthy baked goods that derive in products that get fresh to consumers.
 - Use of food subproducts.
 - Use of alternative natural raw materials to manufacture nutritionally healthier products.
 - Application of new production technologies for cookie factories.
- To sum up, Grupo Siro is betting on the development of innovative food products suitable for all consumers and other specific for celiac people and those that are diabetic.



HISPANAGAR



- Hispanagar S.A. is specialized in the extraction, processed and purification of hydrocolloids from seaweeds and obtaining by-products for their application in molecular biology, microbiology and food industry.
- **Products:**
 - Bacterial and food agars (E-406): used in the preparation of jelly, sweets, pastries, dairy derived products, etc.
 - Carragenates (E-407 y E-407a): usually used in the food industry.
 - Different varieties of agaroses and azarose resins: with higher quality properties (purity, DNA resolution capacity and temperature-treatment resistance).
- **Main R&D projects:**
 - Development of jelly deserts with vegetable origin.
 - Substitution of animal jellies in meat and fish products.
 - New coating development for vegetable seeds.



LABORATORIOS JIMÉNEZ





- ➔ **Laboratorios Jiménez S.A. works in research, development and analytical control in the precision, quality and training areas. They are focused on the agrofood and environmental sectors.**
- ➔ **Main services:**
 - ➔ **Laboratory for water and food analysis and implementation of quality systems, mainly in the agrofood sector.**
 - ➔ **Trial laboratory for food, vegetable products and water analytical trials and cleanliness verification through environmental, surface and handling analyses.**



→ Main R&D projects:

- Milk quality improvement in dairy industries.
- Native yeast strains obtaining and characterization for production of high quality wines in the Denomination of Origin Bierzo.
- Experimental design and development of a new food product and optimization of its productive process using the taguchi methodology.
- Determination of their own genetic markers presence in order to diagnose in elderly people Alzheimer's disease in an early stage.

LAS LAGUNAS DE SANCHONUÑO (HUERCASA)





- Huercasa is specialized in the production and distribution of healthy vegetable products (chicory, sweet corn, beets, legumes, potatoes, carrots, etc.).
- The company contributes with the maximum guarantee in food security and the innovative technology “FreshTaste”. This exclusive technology maintains the properties of all vegetable products: freshness, taste and texture.
- **Main R&D projects:**
 - Functional crops: obtaining food functionality and healthy properties in the growing/cultivation stage.
 - Processing technologies in 5th range products.
 - Packaging materials: multilayer plastics resistant to the temperature-treatments applied to products.



SEDA SOLUBLES



- Seda Solubles S.L. is specialized in the production of instant coffee and related products.
- They control all production processes, they make a great variety of green coffee mixes for the different markets they work in, as well as the different formats in which you can find their products.
- **Main R&D projects:**
 - Production of freeze-dried coffee.
 - Development of a new system with special recovery of fresh aromas.
 - Volatile enrichment methodology.
 - Coffee wastes use to produce stem.
 - Pet jar for instant coffee.
 - Development of a new flaky coffee format called “crystals”.



VERBIA NANO TECHNOLOGY



→ Verbia Nano Technology S.L. is specialized in the development of bio-environmental and bio-energetic technologies.

→ **Services:**

- Management services and development of R&D projects.
- Environmental and energetic technical consultancy and assistance.
- Development of processes and equipment for decontamination, fuel synthesis and wastes valorization with energetic purposes.

→ **Main R&D projects:**

- Bio-Fenton hybrid process development applied to soil decontamination.
- Technology development of hydrodynamic cavitation for bio-diesel synthesis.
- Dairy wastes use for bio-fuel synthesis.



BIO-INREN



- **Bio-InRen is a medical biotechnology company that works in the field of diagnostics and therapeutics of renal diseases, developing leading tools for revolutionary applications.**
- **Bio-InRen has developed optimal protocols for quick, easy and rigorous analysis of potential therapeutic application of products from the agrofood industry on specific diseases with human and socioeconomic repercussion, such as hypertension, diabetes, cancer, renal diseases and wound healing.**
- **They have developed a new application of extracts and molecules purified from diverse agrofood sources in the fight against a variety of diseases, including cancer, hypertension and many others.**

BIOMAR S.A.



→ **Biomar is a biotechnology company specialized in sea microbiology and natural product chemistry.**

→ **Main work areas:**

- **Human health: antitumorals, antibacterials, antifungals, antioxidants and antiangiogenics.**
- **Industrial applications: biofuels, aquaculture, biopesticides, food industry and cosmetics.**
- **Services: use of fermentation for the production of different compounds, active pharmaceutical ingredients, new research projects, chemical libraries for screening, production of microorganisms, analytical studies, structural determination and microbial taxonomy.**

→ **Main R&D projects related to the agrofood industry:**

- **Food Additives: their expertise is in the field of natural colorings and preservatives.**
- **Bacteriophages: treatments for problems caused by bacteria and with direct potential application in a big number of issues, such as food preservatives.**



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INZAMAC ASISTENCIAS TÉCNICAS S.A.



→ The agrofood department offers quality control and consultancy services through its specialized areas:

- Wine analysis laboratory.
- Water and environmental analysis laboratory.
- Quality analysis and food safety laboratory.
- Process and food products inspection and audit.

→ Main R&D projects:

- Accidental contamination of vineyards by the phytosanitaries used in adjacent crops.
- Characterization of residual presence of phytosanitaries in grapes and its transfer to grape juice and wines in Castilla y León.
- Organoleptic and physicochemical characterization of sensorial changes with microbe origin in wines and grape juices of Castilla y León and the development of fast genetic techniques for early detection of the microorganisms responsible.
- Analysis technique influence in Food Safety test analysis made with conventional methods vs. genetic techniques. Results comparison and selection of the optimum methods.

JAMÓN SALAMANCA S.A.



- **This company is specialized in livestock management and exploitation. They mainly raise Iberian pigs as well as manufacture and commercialize Iberian products.**
- **Products and services: they commercialize a large variety of Iberian products, such as Iberian ham, Iberian shoulders, cold meat (spiced salami, chorizo and loin), Iberian pâté, Iberian spiced pork belly, as well as a large variety of fresh products (sirloin steak, chops, ribs, tenderloin, etc.).**



→ Main R&D projects:

- Development of their own genetic line of pigs, under the Quality Iberian Pig Regulation.
- Design and development of new production management and stock control processes, based on microchip implantation and using RFID, in order to know the conditions of the raw material during shoulder and Iberian ham manufacture.
- Development of a better control during gelification processes.
- Increasing Iberian cold meat provisions from a food quality point of view.
- Applying new conservation technologies to obtain and manufacture safe and healthy agrofood products with higher nutritional and functional organoleptic characteristics.
- Productivity improvement in the Iberian pigs raising systems, as a way to increase the Iberian farming profitability.
- Improvement of housing and management mistakes that are more frequent in intensive or semi-extensive Iberian farming. Stock management optimization.

