RETECNA
NAVARRA TECHNOLOGICAL NETWORK

R&D TECHNOLOGIES AND SERVICES

	METALMECHANICS	MATERIALS	ENERGY	ENVIRONMENT	ELECTRONICS	FOOD	HEALTH	AUTOMOTION
Waste water: Analysis, characterization and consultancy				●				
Food, beverages and containers: analytical control (physical-chemical, microbiological), process control and prediction of working life, characterization and traceability GMOs, etc				●		●		
High Pressure						●	●	
Bioclimatic architecture		●	●	●	●			●
Biodiesel (characterization and development)			●					●
Biofactories in plants						●	●	
Bioinsecticides				●		●	●	
Biogasification			●	●				●
Molecular Biology - Typing and Identification				●		●	●	
BioNano: functionalisation of nanosurfaces for sensing and catalysis. Design and manufacture of vectors for drug delivery				●		●	●	
Bioprocesses: obtaining biopolymers, colouring agents, etc.				●		●		
Structural calculation and simulation of components and systems	●							●
Cardiovascular science							●	
Kinematics and Dynamics	●							●
Chromatography				●		●	●	
Development of ECUs								●
Electronic product development	●	●	●	●	●			
Development of containers and food films (active, smart)						●	●	
Development and construction of "á la carte" recombinant bacteria				●		●	●	
Determination of gaseous emissions				●		●	●	
Determination of emissions and discharges				●				
Determination of stable isotopes 13C and 15N				●		●	●	
Structural and thermal-structural design and analysis	●							●
Durability and fatigue	●	●						●
Biomass Energy (biomass assessment, life cycle analysis, biodiesel, bioethanol plant design). Biorefining processes			●					●
Wind Power (MEASNET certification tests, wind and power prediction models, blade design, monitoring of structural deformations).			●					●
Solar Photovoltaic Energy: Technical Assistance in PV installations, components, processes and technologies, design and due diligence of installations, trouble-shooting, resource calculation, production calculation, PV process and material characterisation, certification of PV modules, inverter testing.			●					
Solar Thermal Energy: Technical assistance, feasibility studies, energy production analysis, modelling, simulation, solar resoruce characterisation, solar prediction, component and system characterisation (solar collectors and systems, pyranometers, tubes, mirrors).			●					
EMC tests and consultancy	●		●	●	●			
Expression of bacteria recombinant proteins				●		●	●	
Supercritical fluids: compound/active principle extraction						●	●	
Hepatology							●	
Livestock infections, diagnosis and vaccines						●		
Advanced engineering for the surfaces of materials	●	●			●		●	●
Design engineering and virtual simulation	●	●	●					●
Bacterial biofilm bioengineering				●		●	●	
Integrated Engineering for plants and production processes	●		●		●	●		●
Food/functional ingredients and additives						●	●	
INKJET	●	●	●		●	●		
Dsitributed generation integration, management and control			●					
Predictive and preventive maintenance (noise, vibation, etc.)	●		●		●	●		●
Metallic materials	●	●	●	●				●
Polymers and composites	●	●	●	●				●
Advanced materials:intelligent, with sensors, biodegradable		●		●				
Mecatronics	●	●			●			●
Carbohydrate metabolisms - energy crops			●	●				
Metabolism of nitrogen				●				
Micro/nanoencapsulation: food additives, active principles.						●	●	
Microwaves/radiofrequencies: food hygienisation						●		
Modelling and analysis of electrical grids			●					
Nanomanufacture: submicrometer lithography -200nm- of large areas -several cm-; functionalised nanostructures; thin films		●	●	●	●		●	
Nanocomposites		●	●	●	●	●	●	
Nanoparticles (minerals, ceramics and metal)	●	●	●			●	●	●
Neurosciences (Alzheimer and Parkinson)		●					●	
New waste management techniques		●	●	●				●
New technologies for the conservation of food and beverages		●				●		
NVH	●		●					●
Oncology (lung, blood cells, prostate gland, breast and colon)							●	
Optimisation of energy systems			●					
Probiotics						●		
Microbial biofilms			●					●
High voltage electrical impulses: extraction of compounds/active principles/food hygienisation						●	●	
Noise and vibration (design of parts)	●		●					●
Optimization services: parametric, shapes, topology, stochastic calculations								●
Static, dynamic and thermal simulation services								●
Early storm detection systems for wind farms			●					
Security and control	●	●	●	●	●	●		●
Fluid-thermal systems	●		●	●		●		●
Energy storage technologies			●					
Hydrogen generation, storage, management and reconversion technologies			●					
Gene theraphy							●	
Thermography	●		●		●			
Strategic surveillance	●	●	●	●	●	●	●	●