

*we
make it
possible*

biotechnology

infrastructures

Z Robotics Labs

This company was born in 2004 to provide effective support and services to different sector companies:

Health Sciences

Biopharmacy

Research and Development in Nanotechnology

Food Industry

Hospitals

Aeronautics and aerospace

Our company executes projects, and also undertakes diagnostics and evaluations, clinical and research laboratory support, design and development to manufacturing.

The company works mainly in three different areas, related within:

ENGINEERING AND PROJECTS

LABOR ANALYSIS

BIOTECHNOLOGICAL RESEARCH AND DEVELOPMENT

CLIENT

**PROJECT
MANAGER**

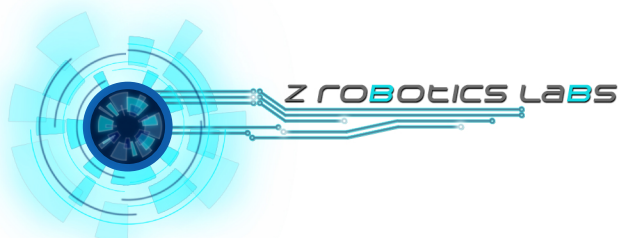
PROJECTS

WORKS

EQUIPMENT

SOFTWARE

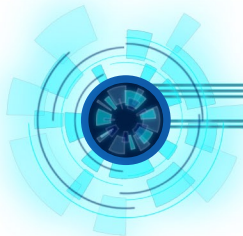
**ROBOTIC
SYSTEMS**



company



*Laboratory
Equipment
manufacturing,
modification
and repairs
as well as
maintenance*

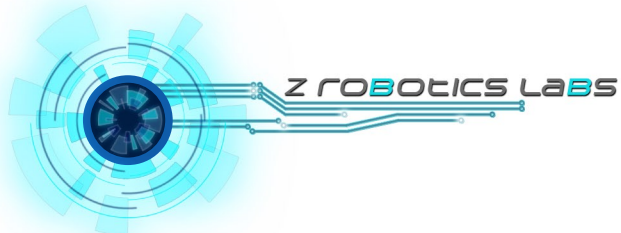


Z ROBOTICS LABS

instruments and new technologies

We carry out a large program of laboratory instruments including management, maintenance and repairs

- *Robotic systems*
- *Total maintenance*
- *Specific instruments*
- *Modification and fixing instruments for several uses*
- *Technical development apply to different areas*
- *Biomedical research equipment design and manufacturing*
- *Facility Management*
- *Ad Hoc solution finder*
- *Quality control and validation*



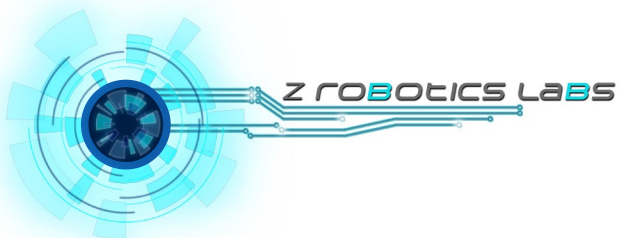
instruments and new technologies

ROBOTIC SYSTEMS
-
CELL CULTURES

- *Design and development*
- *Maintenance*
- *Repair*
- *Extensive experience in cell culture equipment:*

[*SelecT \(TAP BioSystem\)*](#)

- *Assures high cleanliness and sterility of all processed items.*



instruments and new technologies

PIPETTING STATIONS

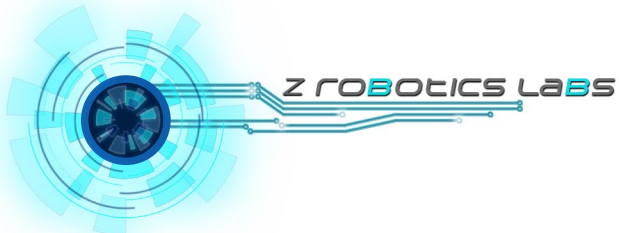
- Compressed air plunger systems
- Fluid syringe filling systems

- *Repair and maintenance:*

- Hubs
- Needles and syringes systems
- Hydraulic pumps (air and perfusion)
- Air compressors

- *Extensive experience:*

- PlateMate
- Quadra
- Biomek
- Flexdrop
- Multidrop
- Hamilton
- EP3



instruments and new technologies

ELECTROPHYSIOLOGY (PATCH CLAMP)

- *Assembly of equipment*
- *Electrical equipment analysis to correct noise and acoustics*

- *Systems manufacturing:*
 - *Electric anomalies detection*
 - *UPS*
 - *Noise reduction*
 - *Faraday cages*
 - *Perfusion systems*

- *Repair of antivibration tables and its components (Axopatch, Digidata...)*

READERS

- *Fluorescent reader systems with multichannel detectors*

- Xenon lamp systems, optical fiber, multi-applicators, fluorescence excitation and emission filters
- LED bulb systems, multi-applicators, excitation and emission filters

- *Multi- readers, fluorescence, absorbance and luminescence*

- *High Content Screening Instruments*

- *Maintenance and repair of optical systems and electronic components*

- *Extensive experience in instruments:*

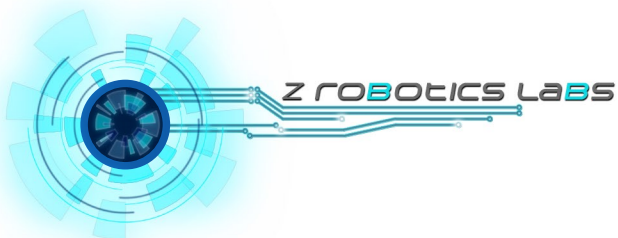
- VIPR (Aurora)
- FLIPR (Molecular Devices)
- Victor (Perkin Elmer)
- ArrayScan (Cellomics)



OTHER INSTRUMENTS

- *HPLC instruments*
- *Mass Spectrometer Systems*
- *Vacuum systems*
- *Nitrogen evaporation systems*
- *CO₂ incubators, heaters*
- *Cell counter instruments*
- *Compressors*

- *Experience with instruments as:*
 - *API 4000*
 - *QUATRO*
 - *CEDEX*



instruments and new technologies

AUTOMATED HARVESTER

Automated instrument to develop binding assays which allow simultaneous plate filtering.

PLATE REGENERATOR

Automated instrument for testing that require large and several washes per filtering plate.

R & D Z ROBOTICS

RFID

ZRL L.S. builds custom RFID solutions for industries such as logistics, fleet tracking, pharma, industry automation, access control and more. For any project where you need to uniquely identify an asset remotely we have a technology for you.

We work with a wide range of wireless technologies including NFC, Bluetooth and Wi-Fi, covering both active and passive tags. We develop low-cost, low-consumption integrated solutions (hardware/software) including interfaces to mobile devices and tablets.

We provide a full range of RFID modules from ultra small injectable and bendable passive tags to sensor based active tags. Custom sensors can be added to our active tags so you can get a report on remote asset conditions. Short range wireless communications can also be integrated to conform a sensor network.



GEOLOCATION

Do you need to track an asset worldwide (vehicle, container, etc)? We provide low-cost, , low-consumption solutions that can report location to a central server from all over the world. We provide impact resistant, water-proof solutions for harsh environments that can run on batteries for years.

Do you need custom software to track your assets? We can also provide convenient solutions for PC, mobile devices and tablets.

How about indoor location tracking? Our Wi-Fi tags can operate with environmental Wi-Fi signals to triangulate asset location.



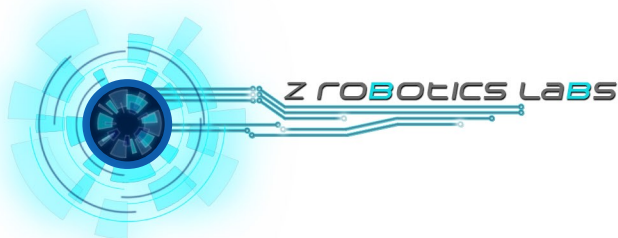
SPORTS

Sports in the 21st century demand a wide range of technologies to track the athletes progress. Either for competition or training we provide solutions to track the athlete's location, speed and performance in a non-invasive way. We provide both active and passive trackers using a wide variety of technologies such as Bluetooth, ANT+, GPS, 3G, NFC among others.



AUGMENTED REALITY

We provide mobile solutions for exploring 3D models for fields such as bioinformatics, sports, civil and industrial engineering, military applications and more. We use the mobile device camera and custom markers to allow to see and explore a 3D structure in real-time.



instruments and new technologies

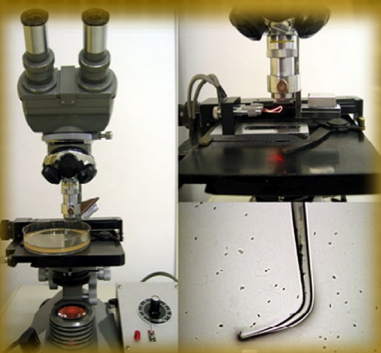
DUETZ SYSTEM STATIONERY PLATFORM FOR FERMENTATION



The Duetz system (www.enzyscreen.com) is a miniaturized growth and preservation system to be used in microtiter plates. This system was originally designed to grow aerobic bacterias. In recent times a protocol for filamentous fungal fermentations in microtiter plates has been developed from the Duetz systems. Stationary fermentations came from a variation from the original protocol. To increment the air flow inside the liquid media in the plates, the fungi were grown in a bent position.

We developed and manufactured a steel support to facilitate the fungi incubation in stable form.

MICROMANIPULATOR AND MICROFORGE



The micromanipulators are tools for the spores or cell individual isolation, hifae and filaments isolation from natural subtracts under a microscope. Most of the micromanipulators can be found in the market, but the Skerman micromanipulator is one of the most useful to the biologist at a reasonable cost and easy to use.

The Skerman micromanipulator was first developed for the bacterial cell isolation and later on was applied to fungi isolation and algae (VDV SKERMAN. 1969. Area type of micromanipulator and microforge. *Journal of General Microbiology* 54:287-297). Many microbiologists and phytologists have found this system indispensable to fungal and algae isolation, to cell manipulation and culture decontamination.

We have developed a new Kit-Micromanipulator Z Robotics, easy to use and compatible with most kind of microscopes.



DUAL FERMENTATION SYSTEM

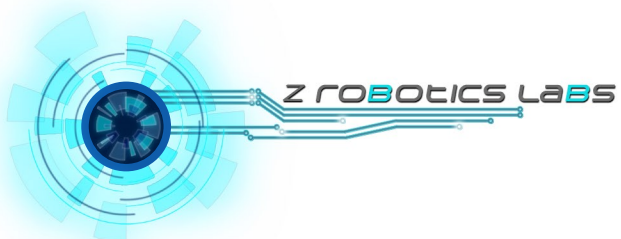
Bottle system for dual fermentation isolated by a dialysis membrane that allows small molecules communication and the possibility to couple to an incubator-agitator.

Our company carries out infrastructure projects understanding our client needs. Extensive studies are used to execute these projects

Our specialty is project design, supply and installation following rules and regulation applied to biotechnology, the pharmaceutical industry and hospitals.

We follow European and American SOPs:

- GMP (Good Manufacturing Practices for the pharmaceutical industry)*
- PICs (Pharmaceutical Inspector Convention Scheme)*
- Invima and MERCOSUR*



infrastructures



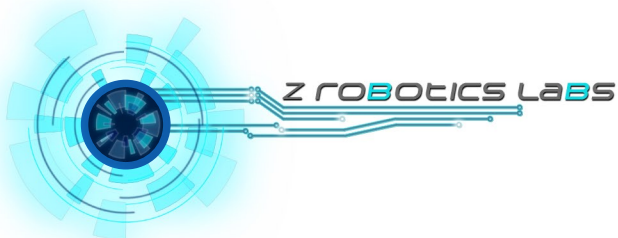
PROJECTS AND STUDIES IN PHARMACEUTICAL LABORATORIES AND HOSPITALS

- ENGINEERING
- STRUCTURAL ENGINEERING
- FIRE PROTECTION SYSTEMS
- ELECTRICITY
- MECHANICAL AND CLIMATIZATION INSTALLATIONS
- SECURITY SYSTEMS
- RADIOACTIVE INSTALLATIONS
- STERILE ROOMS
- SURGERY BLOCKS
- VACUUM RINGS
- COMPRESSED AIR RINGS
- SPECIAL GAS SYSTEMS
- PATCH CLAMP ROOMS AND ELECTROPHYSIOLOGY
- INMOTIC
- FOOD PRODUCTS QUALITY AND HYGIENE SYSTEMS DEVELOPMENT
- ENERGY MANAGEMENT

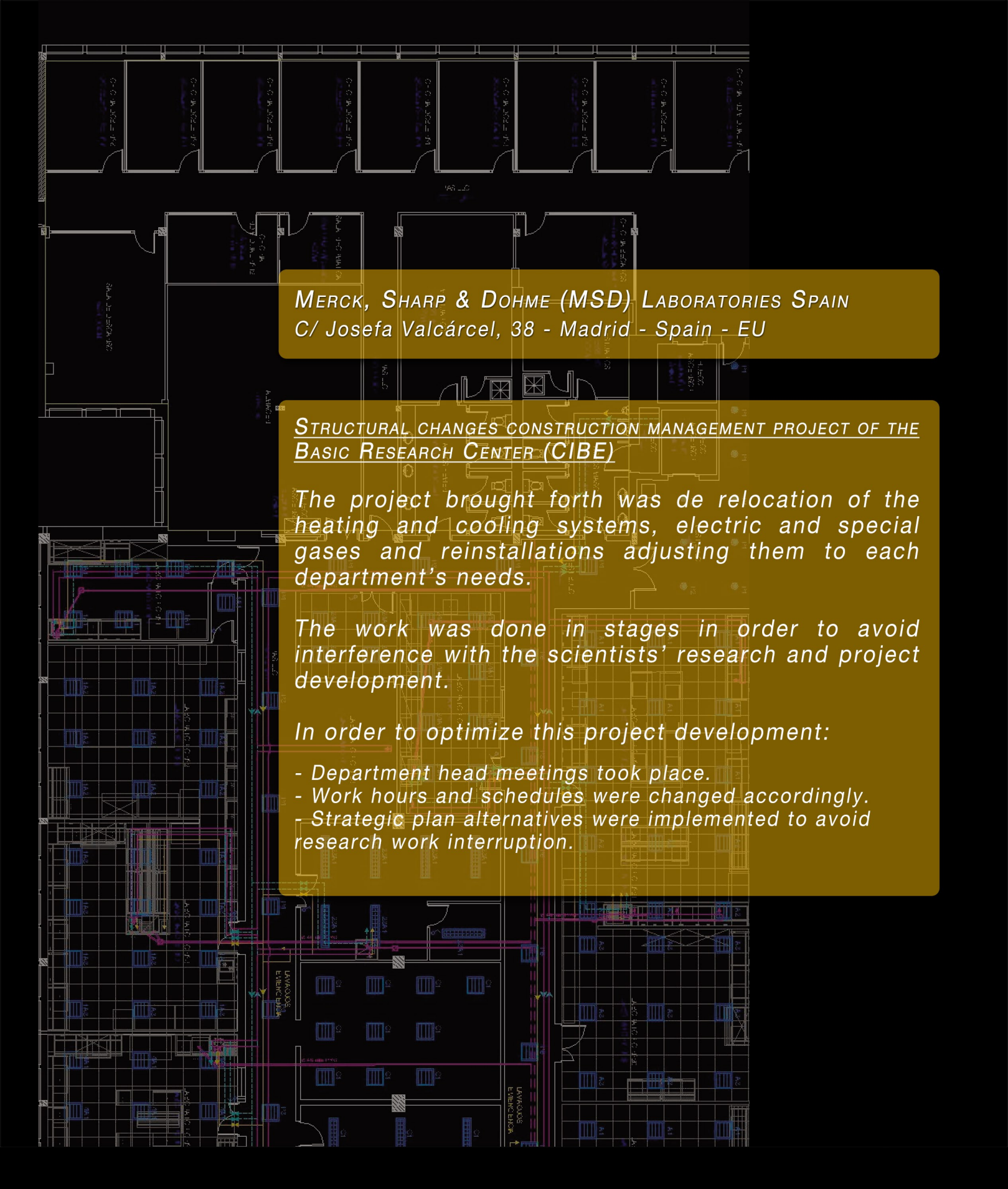


HOSPITAL AND PHARMACEUTICAL LABORATORIES STRUCTURAL CHANGES

- CLINICAL AND PHARMACEUTICAL LABORATORIES STRUCTURAL CHANGES WORK MANAGEMENT
- CLINICAL AND PHARMACEUTICAL LABORATORIES MOVING AND TRANSFERS
- INSTRUMENTS REINSTALLATION
- NEW INSTALLATIONS
- UPDATE OF EXISTING INSTALLATION



infrastructures



MERCK, SHARP & DOHME (MSD) LABORATORIES SPAIN
C/ Josefa Valcárcel, 38 - Madrid - Spain - EU

STRUCTURAL CHANGES CONSTRUCTION MANAGEMENT PROJECT OF THE BASIC RESEARCH CENTER (CIBE)

The project brought forth was de relocation of the heating and cooling systems, electric and special gases and reinstallations adjusting them to each department's needs.

The work was done in stages in order to avoid interference with the scientists' research and project development.

In order to optimize this project development:

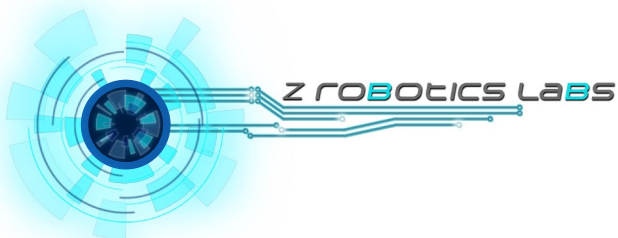
- Department head meetings took place.
- Work hours and schedules were changed accordingly.
- Strategic plan alternatives were implemented to avoid research work interruption.

*FUNDACIÓN MEDINA RESEARCH LABORATORIES
Avda. Conocimiento, 3 - Granada - Spain - EU*

*INFRASTRUCTURE PROJECT.
BUILDING FIXING TO MEDINA NEEDS.*

This project was developed in several stages:

- Dismantling the instruments from the CIBE laboratory*
- Preparation of instruments for transportation (packaging and pallets)*
- Infrastructure planning and reinstallation of the instruments and relocation in the new location*
- Project design*
- Directives assessment*
- Reinstallation / Supervision in MEDINA*



infrastructures

MOST RECENT PROJECTS

FUNDACIÓN CENTRO DE EXCELENCIA EN INVESTIGACIÓN DE MEDICAMENTOS INNOVADORES EN ANDALUCÍA (MEDINA)

- *Infrastructure Management Project*
- *Incident Control Management Project*
- *Access Control and Security System Solutions*

INSTITUTO CAJAL (CSIC)

- *Instrument users, incident control management and cost follow up.*

ACTEPARK.

CONSEJERÍA DE INNOVACIÓN. JUNTA DE ANDALUCÍA

- *Infrastructure planning and execution for NMR, MALDI-TOF and HPLC laboratories*
- *Nuclear Magnetic Resonance, Mass Spectrometer and High-Performance Liquid Chromatography.*

DEVELOPMENT PROJECTS

INFRASTRUCTURES

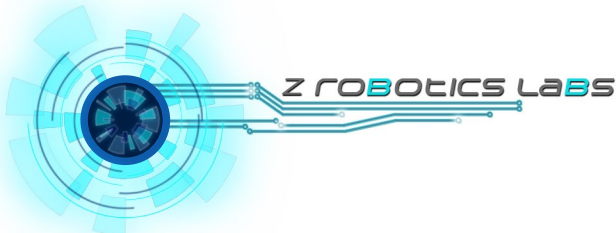
Hospital laboratories, clinical analysis and industrial kitchens

REPSOL

Plan for energy savings at service stations

WORK EXECUTED IN RECENT YEARS:

- *Moving complete laboratories*
- *Laboratory energy audits*
- *Design and implementation of new laboratories*
- *Analytical instrument development*
- *Robotic system development*
- *Nanotechnology*



projects



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