



Identification Data of Pilot Plant

Name:

Pilot Plant

Description:

To collaborate, advise and give service to the research groups in all activities related to processing and transformation technologies of foods at a pilot plant scale.

Technical director:

Adolfo Martí Vidagany

Scientific director:

Lorenzo Zacarías García

Service type:

Mantenimiento y Técnicos

Keywords:

Pilot plant, food technology, equipments and facilities, transformation, preservation and food processing.

Intervention scope:

Interno

New creation or emergent?:

NO

May the users communicate in english?:

No

Full electronic management?:

NO

Integrated quality programs?:

NO

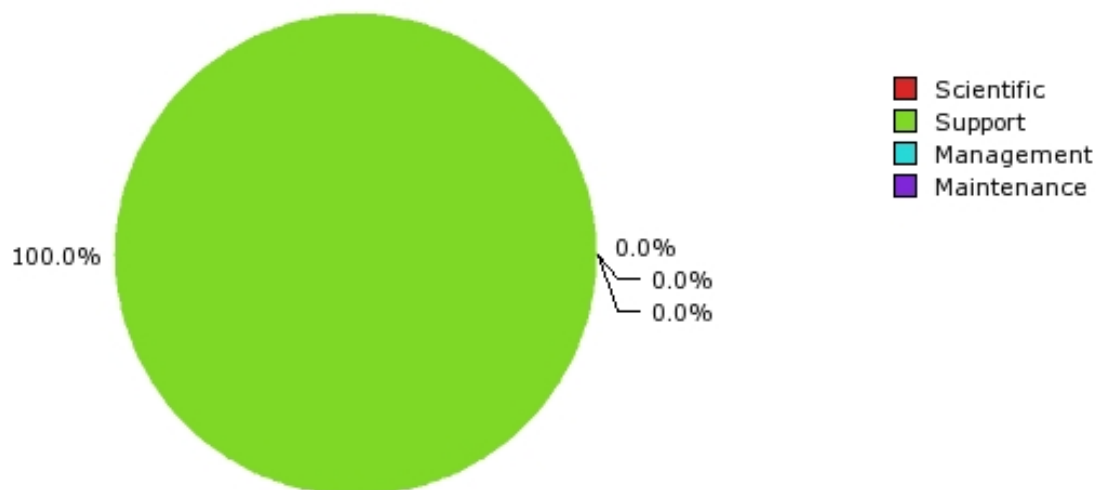
Has it ISO certifications?:

NO

ISO Certifications:



Staff



| | Male | Female | TOTAL |
|--------------|----------------|----------------|-----------------|
| Scientific | 0 | 0 | 0 |
| Support | 2 (67%) | 1 (33%) | 3 (100%) |
| Management | 0 | 0 | 0 |
| Maintenance | 0 | 0 | 0 |
| TOTAL | 2 (67%) | 1 (33%) | 3 (100%) |

Scientific personnel by type

| | | Male | Female | TOTAL |
|------------------------------------|---------------------------|--------------|----------|----------|
| Scientific Civil Servant | Research Professor | 0 - % | 0 | 0 |
| | Research Scientist | 0 - % | 0 | 0 |
| | Tenured Scientist | 0 - % | 0 | 0 |
| | Full University Professor | 0 - % | 0 | 0 |
| | University Professor | 0 - % | 0 | 0 |
| | Other | 0 - % | 0 | 0 |
| Scientific Hired | Ramón y Cajal | 0 - % | 0 | 0 |
| | JAEDOC | 0 - % | 0 | 0 |
| | Other | 0 - % | 0 | 0 |
| Scientific Training | JAEPREDOC | 0 - % | 0 | 0 |
| | Other | 0 - % | 0 | 0 |
| Scientific personnel | | 0 - % | 0 | 0 |



Facilities/services

Features offered

- Research support
- **Internal fare:** 0 **External fare:** 0 **SU:** 141
- **Description:** Collaboration with technical support to the research lines of the institute, as well as to the research projects with the industries of the sector.

- Formation
- **Internal fare:** 0 **External fare:** 0 **SU:** 58
- **Description:** External teaching to secondary schools and universities on food technology, transformation and preservation, dietetic and nutrition.



Economic Data

| Costs | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------|-------|-------|-------|-------|-------|
| Staff | 59 | 61 | 66 | 71 | 79 |
| Execution | 9.61 | 9.09 | 9.79 | 8.65 | 11.32 |
| Maintenance | 0 | 0 | 0 | 0 | 0 |
| Total | 68.61 | 70.09 | 75.79 | 79.65 | 90.32 |

| Income | 2003 | 2004 | 2005 | 2006 | 2007 |
|-----------------|------|------|------|------|------|
| Fares(Internal) | 0 | 0 | 0 | 0 | 0 |
| Fares(External) | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |

| Subsidies | 2003 | 2004 | 2005 | 2006 | 2007 |
|--------------------|------|------|------|------|------|
| Centre | 0 | 0 | 0 | 0 | 0 |
| CSIC | 0 | 0 | 0 | 0 | 0 |
| Other institutions | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 |

Usage Data

| | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------|------|------|------|------|------|
| Internal users | 32 | 34 | 33 | 38 | 38 |
| External users | 0 | 0 | 0 | 0 | 0 |
| Total | 32 | 34 | 33 | 38 | 38 |

| | 2003 | 2004 | 2005 | 2006 | 2007 |
|--------------------|------|------|------|------|------|
| Internal services | 3250 | 3808 | 3859 | 4127 | 4711 |
| External services | 0 | 0 | 0 | 0 | 0 |
| Total | 3250 | 3808 | 3859 | 4127 | 4711 |
| Efficiency level** | 0 | 0 | 0 | 0 | 0 |

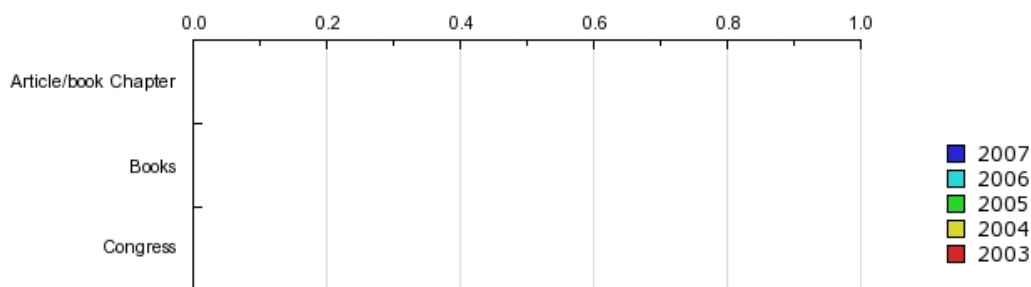
* Facilities SUs computed using the data registered in the Service facilities table

** The efficiency level is the ratio between the total of the Service SUs units and the total cost in k€



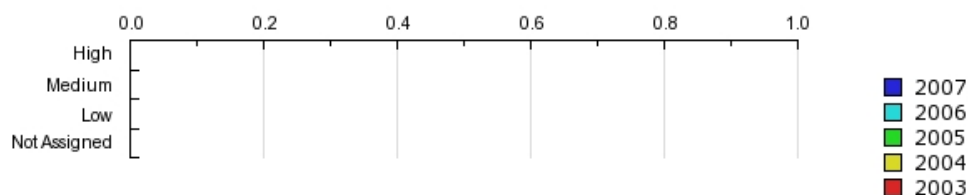
Publications by type

| Article / Book chapters by impact | | | | | | |
|-----------------------------------|------|------|------|------|------|-------|
| Type | 2003 | 2004 | 2005 | 2006 | 2007 | Total |
| Article/Book chapter | 0 | 0 | 0 | 0 | 0 | 0 |
| Books | 0 | 0 | 0 | 0 | 0 | 0 |
| Congress | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |

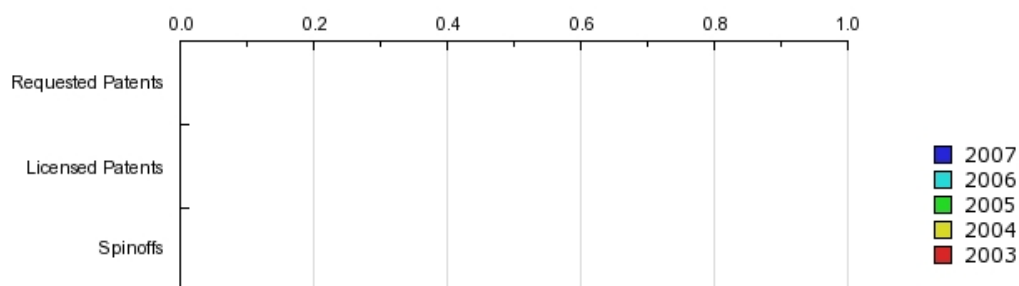


Article / Book chapters by impact

| Article / Book chapters by impact | | | | | | |
|-----------------------------------|------|------|------|------|------|-------|
| Type | 2003 | 2004 | 2005 | 2006 | 2007 | Total |
| HIGH | 0 | 0 | 0 | 0 | 0 | 0 |
| MEDIUM | 0 | 0 | 0 | 0 | 0 | 0 |
| LOW | 0 | 0 | 0 | 0 | 0 | 0 |
| Not assigned | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |

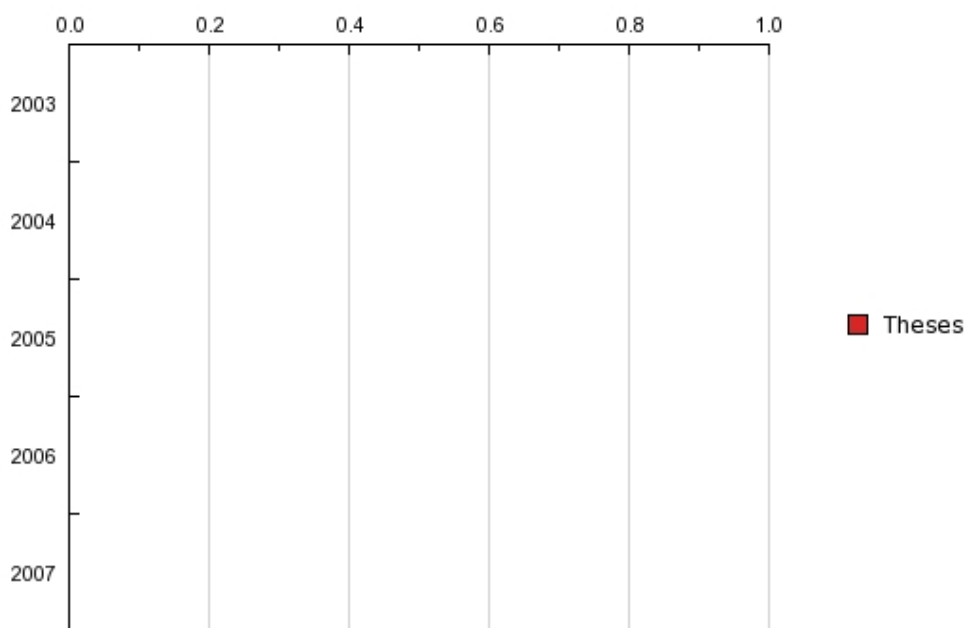


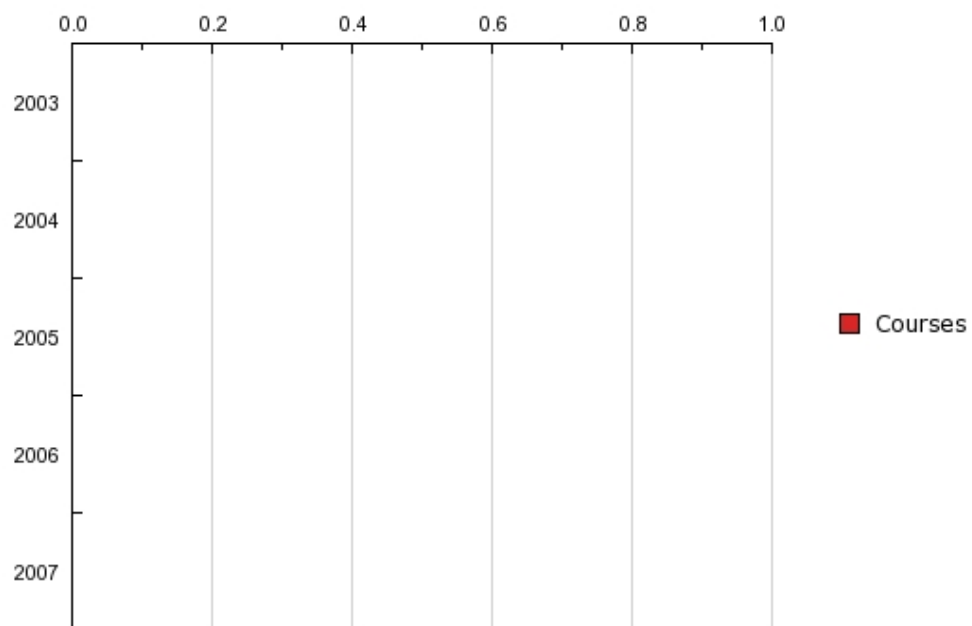
| Totals by type | | | | | | |
|-------------------|------|------|------|------|------|-------|
| Type | 2003 | 2004 | 2005 | 2006 | 2007 | Total |
| Requested patents | 0 | 0 | 0 | 0 | 0 | 0 |
| Licensed patents | 0 | 0 | 0 | 0 | 0 | 0 |
| Spinoffs | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |



Training by type

| Training by type | | | | | | |
|------------------|------|------|------|------|------|-------|
| Type | 2003 | 2004 | 2005 | 2006 | 2007 | Total |
| Theses | 0 | 0 | 0 | 0 | 0 | 0 |
| Courses (hours) | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |

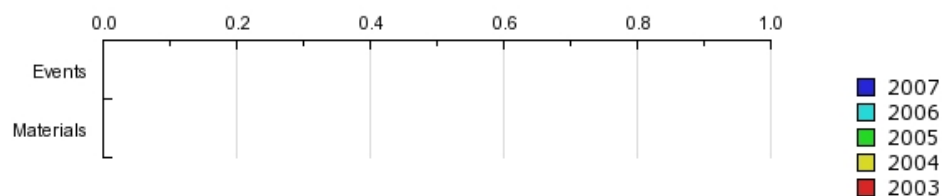






Science divulgation activities

| Science divulgation activities | | | | | | |
|--------------------------------|------|------|------|------|------|-------|
| Type | 2003 | 2004 | 2005 | 2006 | 2007 | Total |
| Events | 0 | 0 | 0 | 0 | 0 | 0 |
| Materials | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |





SWOT

Weaknesses

- Low participation of the human resources of the service in those investigation projects that require the use of the facilities of pilot plant.

Threats

- The main threat is that some staff people in this service is close to the retirement age.

Strengths

- Pilot plants with infrastructures and excellent maintenances.
highly qualified human team and with great experience.
Possibility to carry out operations at pilot plant industrial scale and tailored according to the necessities of the industry, either for a collaboration with the industry or with the own lines of research of the institute.

Opportunities

- The incorporation of new equipments as, high hydrostatic pressure, pulsed electric fields, aseptic packaging and the incorporation of new biotechnological equipments could open new opportunities of collaboration in research and technological transfer to the industry

RA (Relational Analysis)

Competitor groups

Colaborator groups

Leading groups

Selective Advantages

The plant pilot has qualified technological equipment for the development of technological operations in the food industry at a small industrial scale, as well as all the facilities required in a food industry: steam, water, compressed air, electromotive power

Good installations to provide formation in topics related with the process technologies.



Highly qualified personal

General Objectives

General Objectives, Goals?

Increase the interaction with the different research groups mainly in existing emergent technologies.

Increase the teaching activities and cooperation with universities in pilot plant formation practices.

To perform analysis and controls of products and raw materials for each processes carried out in the pilot plant

Scientific objectives

Knowledge Transfer objectives

Training objectives

Outreach objectives

Internationalisation objectives

Common services objectives

Gender equality objectives

Quality programmes objectives



Electronic management objectives

Efficiency objectives

Self-funding objectives

General Strategy

Summary

In this service the strategy that is pursued is to consolidate the provisions that it offers and to guarantee an appropriate level of resources so that the necessities of the investigators and of the educational activities that are carried out continue with effectiveness. The works that are carrying out at the present time will improve the infrastructure building a small laboratory and a seminar. These works consolidate the infrastructures and permit a better interaction with the research groups and the teaching activities.

Strategy Analysis

Summary

The outlined strategy will allow exploiting to the maximum the material and human resources in the service, allowing its change in the performance and provision.

This change will allow a better interaction and collaboration with the groups of investigation of the institute, as well as the improvement and increase of the formation carried out for the different secondary schools and universities.

The incorporation of personal will strengthen the human resources improving the service in relation to the workshop activities which can avoid long time delays for equipment reparations or maintenance.



Progress Indicators (Quantitative objectives)

Progress Indicators (Quantitative objectives)

| | | Indicator | 2010 | 2011 | 2012 | 2013 |
|----------------------|--------------------------------|-----------|------|------|------|------|
| Funding(k€) | Self financing ⁽¹⁾ | | | | | |
| Efficiency | Relative efficiency respect to | | | | | |
| Knowledge Transfer | Requested priority patents | | | | | |
| | Licensed priority patents | | | | | |
| | Spin-Offs | | | | | |
| | External services | | | | | |
| Training | Courses | | | | | |
| Outreach | Events | | | | | |
| | Material | | | | | |
| Internationalisation | Services in English? | | | | | |
| Management | Electronic management | | | | | |
| Quality programme | ISO certification | | | | | |

Resources

Human resources

| Personnel(number) | 2010 | 2011 | 2012 | 2013 | Total |
|------------------------------------|------|------|------|------|-------|
| Tenured Scientist | 0 | 0 | 0 | 0 | 0 |
| Higher Scientific Officer | 1 | 0 | 0 | 0 | 1 |
| Intermediate Specialist Technician | 0 | 0 | 0 | 1 | 1 |
| Research assistant | 0 | 0 | 0 | 0 | 0 |
| JAE-Senior | 0 | 0 | 0 | 0 | 0 |
| JAE-Doc | 0 | 0 | 0 | 0 | 0 |
| JAE-Pre | 0 | 0 | 0 | 0 | 0 |
| JAE-Tec | 0 | 0 | 0 | 0 | 0 |

Financial resources

| Action | 2010 | 2011 | 2012 | 2013 | Total |
|------------|------|------|------|------|-------|
| EQUIPA(k€) | 0 | 20 | 0 | 0 | 20 |