



31st
IASP WORLD
CONFERENCE

QNCC | 19th – 22nd October

**MODELS OF COOPERATION BETWEEN
UNIVERSITIES AND COMPANIES AND THE
ROLE THAT STPS CAN OR SHOULD PLAY**

PARALLEL SESSION 6

STPs filling the gaps

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MODELS OF COOPERATION BETWEEN UNIVERSITIES AND COMPANIES AND THE ROLE THAT STPS CAN OR SHOULD PLAY

CO-CREATION AND THE ROLE OF STPS

1. THE COOPERATION MODEL BETWEEN THE TECHNOLOGY PARK OF ANDALUSIA AND THE UNIVERSITY OF MALAGA

The close cooperation between Malaga University (UMA) and The Technology Park of Andalusia (PTA) is one of the most important driving forces of the territory economic development.

In this sense both institutions are highly connected with the city of Malaga, and they contribute jointly with the territory development, allowing the creation and constant improvement of a unique collaborative environment together with the city, the companies and the University.

Innovation, academic training and employment, are the three major lines of action from the University and the Park. They are the landmark in strengthening and recovery that our system needs and also they are really important to handle with the best guarantees the new stage of economic and social growth.

Therefore, it is of a great importance to reinforce the cooperation between the Administration, the enterprises and the University to combine synergies and foster a good atmosphere to develop the ideas and set business challenges.

The collaboration of the PTA with UMA is based on the development of a joint strategy between the PTA and the University that allows companies and entrepreneurs in the park to benefit from a range of services including:

- Training
- Support for recruitment
- Support for joint research
- Development and innovation
- Advice on public and private funding
- Boosting business internationalization
- Access to specialized library resources
- Promotion of the creation of spin-offs
- Support for the establishment of companies in the PTA- UMA environment
- Support for dissemination and exchange of scientific and technical work and news generated by the companies

In one hand, the park faces the challenge to carry out more innovation and greater investigation and development activities together with the University of Malaga, investing in well trained human capital.

On the other hand, the University challenge is to offer an academic training focusing on the market requirements to improve the committed for business training and to facilitate the university managements, among others.

The project carried out jointly by the PTA and UMA has been created from opportunities involving the fusion of positioning capabilities and strengths of both entities, resulting the following objectives:

- Create a physical space to allow meetings between the different agents involved in the articulation of an adequate university education, focus on business and research.
- Generate joint proposed actions to improve managing and the efficiency of technology transfer.
- Facilitate an exchange about the knowledge, experiences and also the best academic practices and entrepreneurial.
- Attract and develop the talent, forming an ecosystem of generation, transfer and application of knowledge, involving the university and technology park with their companies.
- Becoming an international reference of drive of the economy based on specialized knowledge society in different cluster like ICT, biotechnology, energy, bio health, audiovisual...
- Powerful scientific and technological ecosystem: with a firm commitment to the generation and transfer of knowledge to the productive sector and exploitation in the form of cutting edge technology.
- Open campus model, sustainable and universal, developed jointly by the UMA and the PTA to obtain a sustainable economic model, environmentally friendly, in an enterprise environment.
- International dimension: Institutions work together to foster the international talent attraction, making easier the exchange of learning, investigation and knowledge showing it in an international level.

2. THE SERVICE IMPLEMENTED JOINTLY

This is a project aimed at the excellence in teaching, research, innovation and management, the attraction and integration of talent, knowledge generation and transfer and business area. All at the international level.

Beside this, the main activities to carry out for the co-creation of the business and academic environment, developed by the Technology Park of Andalusia and the University of Malaga, include the following:

A) HUMAN RESOURCES

TRAINING ON REQUEST

Promote specialized training to support specific training requirements identified by companies and demanded by the market, through the design, management and delivery of custom-fitted training courses, with the possibility to be recognized by the University of Malaga.

They are aimed in one hand at students to complete their training to be adapted to the labor market and in the other hand to professionals, enterprises and staff from these companies. In concrete they offer:

- Design´s courses and search for qualified workers
- Full courses management
- Processing of certificates

INTERSHIP IN COMPANY

Facilitate the incorporation into the labor market of students and graduates from the University of Malaga, through the realization of works in regime of practices in companies from the Technology Park of Andalusia.

There is an internship program that it is call "Ícaro" through which companies and students are able to contact according of the situation vacant. Ícaro lets companies to get the best applicant to the job and young has the opportunity to have their first labor experience.

The training requesters have to update their profile constantly to be the most competitive.

The students has the chance to start in the labor market, earning a modest salary (Minimum 360€/ per month) since three until six months. The pupil must have passed the 50% of their degree to have access to this platform and they should check the employ offers every day to register on them because there isn't any alarm system.

Otherwise the companies are able to make a folder to choose which profiles are the most adequate for them and they can cover a job.

The Portal Management Enterprise and Employment Practices are used by Andalusian Public Universities. There are ten Universities participating, 215983 applicants and 94803 offers.

Concretely it is offered:

- Receiving requests for candidate profiles work experience, according to the particular company needs.
- Selection of candidates as the company requires.
- Total management of the procedures required for the practices incorporation.

SUPPORT IN THE SELECTION OF PERSONNAL

Boost employment and professional development of graduates from the University of Malaga supporting the companies in the process of the selection of candidates according to the profile required by themselves and adapted to their job offers.

Specifically, it provides:

- Receiving and distributing jobs.
- Access to the databases of human resources in the Technologic Park from Andalusia and the University of Malaga.
- Search and preselecting of candidates.

B) BUSINESS INNOVATION

ASSISTANCE TO TECHNOLOGY MONITORING

Offer companies privileged information in scientific and technical areas of interest for the business sector, enabling the detection of opportunities thus facilitating the analysis and reflection on their managerial strategies.

Specifically, it provides:

- Access to a newsletter with scientific and technological results oriented to business sectors.
- Access to the portfolio patents of the University of Malaga.
- Involvement in technology transfer organized by the Association of Science Parks Technology (APTE) and the Network of Technological Spaces Andalusia (RETA) and participating in the Technology Park from Andalusia and entities integrated in it.
- Participation in meetings, conferences and forums organized by the Technological Park of Andalusia and of interest to entrepreneur's managers of companies located in the park.
- Participation in outreach and dissemination of scientific and technical culture generated by the University of Malaga and the PTA.
- Participation in conferences , exhibitions , seminars , forums organized by the University of Malaga and Andalucía TECH interest for the development of enterprises and economic area in the region .

SUPPORT TO JOINT RESEARCH, DEVELOPMENT AND INNOVATION ACTIVITIES

The creation of a scientific-business environment enabling the promotion of business innovation, as well as the University-industry collaboration contacts with professional experts to carry out work required by enterprises in the field of scientific research, technological development and innovation, as well as other works of technical assistance and professional services that require a high degree of specialization.

Specifically, it provides:

- Search expert professionals through the catalog scientific and technical capabilities of the University of Malaga.
- Scientific and technical advice.
- Processing of contracts and / or university-industry agreements.
- Carrying out technical assistance.
- Performing essay thanks to technological scientific infrastructure from University of Malaga.

SUPPORT THE ACCESS TO PUBLIC AND PRIVATE FINANCING

Support the presentation of proposals to calls of University-industry cooperation, both public and private and in regional, national and European areas to improve the technological level of the companies.

Specifically, it provides:

- Information and support proposals to national public and private calls, which are financing R & D and in which companies can participate and they are installed in the Technological Park of Andalusia.
- Search for the correct partnerships with businesses in order to create agreements and join in the public calls, national like European, that finance the development of R+D collaborative projects.
- Providing information, help in processing and uptake of partners in order to submit proposals to EU calls where participating companies located in the Technological Park of Andalusia and research groups of the University of Malaga.

PROMOTION OF THE ENTERPRISE INTERNATIONALIZATION

Facilitate the internationalization of enterprises through participation in business missions, meetings with international companies and support for the international installation of your company in other science and technology parks.

In particular, it is provides:

- Support the Spanish companies installation in others scientific and technologic international parks towards to the soft-landing agreements signed between PTA and others parks.
- Participate in the enterprises missions, companies meetings and commercial delegations programed by the PTA and UMA.

ACCESS TO SPECIALIZED BIBLIOGRAPHIC RESOURCES

Help companies to access to bibliographic resources, using these as an indispensable tool for the development of research and innovative projects and the decision-making on issues related to the development of science, technology and innovation activities.

Especially it is offered:

- Free access to database, books and magazines from University of Malaga library.

C) TECHNOLOGIES SUPPORT

IMPULSE FOR THE CREATION OF SPIN-OFF

Promote entrepreneurship particularly among technologists and doctors, thus allowing the creation of new enterprises in order to mature and to commercialize the technologies developed within the University of Malaga, thus saving the gap between applied research and business innovation. Analysis of feasibility of business projects, investors searches and access to a database of mentors of spin-off companies.

Specifically, it provides:

- Conducting feasibility analysis of business projects.
- Offer seeking investors.
- Access to a mentoring exchange of spin-off.
- Facilities to the installation of entrepreneurs at the Center for Training and Incubation Technological Park of Andalusia.

SUPPORT THE ESTABLISHMENT OF COMPANIES IN THE ENVIRONMENT PTA-UMA

Promote the installation of both national and international companies, thus enabling a better and faster development of the local production environment.

A special emphasis will be put to facilitate the installation of national and foreign companies in the Technology Park of Andalusia, as well as to promote their participation in the activities carried out in the environment of the PTA-UMA, thus expanding its contacts with other companies and institutions installed in the PTA.

Specifically, it provides:

- Publishing, dissemination and exchange in any medium, of the research work, teaching and cultural and artistic creation developed by the company in collaboration with the university.

D) SCIENTIFIC-TECHNOLOGICAL PROMOTION

SUPPORT FOR EDITING, DISSEMINATION AND EXCHANGE OF SCIENTIFIC AND TECHNICAL WORK

Promote the dissemination of scientific-technical knowledge generated as a result of collaborations university-enterprises through the dissemination and promotion of the University book among teachers, students, researchers and readers in general.

SUPPORT FOR EDITING AND BROADCASTING OF THE NEWS GENERATED BY THE COMPANIES

Encourage the dissemination of the business activity of the entities in the PTA, in order to facilitate the knowledge of the products and services offered as well as to publicize news of interest generated by them.

Specifically, it provides:

- Editing, broadcast delivery media, related to the activity of PTA, the calls and press releases generated by businesses.
- Publication of news on social networks and PTA website, plus any other medium that the PTA has available.

Since the direction of the PTA is immersed in a process of reflection on the possible new directions and even proposals for alternative models that the PTA pretend to approach as a vital element of reflection considering the University of Malaga with a differentiable and specific treatment, and that could be one of the variables of future developments which the PTA would assume.

This new model of joint co-creation involves the so-called triple helix, where the PTA and the University, without abandoning the current characteristics of the PTA, as a space open to any technology sector, working together and strongly to develop all the aspects of the technology development and commercialization process.

3. EXAMPLES OF TECHNOLOGY TRANSFER IN AN INTERNATIONAL LEVEL

A clear example of cooperation between the PTA and UMA is the international protection that both institutions are carrying out.

- MALAGA UNIVERSITY-TECHNOLOGY PARK FROM ANDALUSIA -INCHEON UNIVERSITY- TECHNOLOGYC PARK FROM INCHEON

In this sense, it is highlighted the cooperation made up of UMA, the PTA and The Incheon Technological park in Korea, where since three years ago it is developing a joint schemes program, to getting improve between them the investigation group formation to develop projects with enterprises which are situated in both parks.

As a result of this narrow collaboration, in 2011 was inaugurated in the Malaga University campus an Incheon University representation office.

In the same way it is already open a Malaga University office, in cooperation with PTA in the Incheon university campus where it is also situated the Incheon Technologic Park.

The aim from both parts is to promote the cooperation between companies, investigation groups, the technology transfer between parks and both universities, the exchange of students, teachers, and administration staff and services. At the same time it is encouraging the investigation projects.

-Students exchange from each universities to both parks

Another important collaboration action between both institutions is a program that has been launched to let students from both Universities (Malaga and Incheon) be able to make business practices in the companies that are in the park, favoring the international cooperation from enterprises of these technology enclosures. This practices system is making possible the existence of students in these parks.

Another of his challenges focuses on the institutional relations between the two countries, thus strong relationships between Korean and Spanish institutions and companies with common interests are created. This is the first office on Spanish soil of a Korean university.

-Organization of educational and cultural activities and technology missions

Among the activities carried out jointly, include activities such as organizing international training courses; promote activities aimed at promoting Malaga, Andalusia and Spain; collaborate with the Technology Parks and the Chambers of Commerce in contacts between companies in both countries; assist in the preparation of trade missions between Incheon and Malaga, and promote international internships Malaga between Incheon and students from both universities.

Its activities also include cultural programs , an annual essay contest is organized Korean literature ;also held annually in Korea UMA week has increased knowledge about Korean culture between Malaga University community , and once a month the office organizes a Korean - Spanish language exchange students to practice the language.

Similarly there have been numerous meetings between representatives of the two universities and both parks to extend the agreements and continue the lines of joint work.

- CREATION OF JOINT STRATEGY GROUP

The Malaga University and the technologic park from Andalusia have created a strategic group integrated by businesspeople aiming of joint the work from both investigations and take part together in the European program project Horizon 2020.

As we know the investigation and the innovation, in an enterprise and university level are nowadays in a key moment, this group is focus on the carrying out of jointly projects and their presentation in a European level in a consideration to a competitive economy. In this way, the aim is to strengthen the union according to the projects carried out jointly.

The group is also designed to promote a debate where people from enterprises situated in the park will explain their own demands to the University and the investigations groups also could offer their points of views.

As a result of the first meetings of this group, companies claim a University more agile and faster related ti the R+D projects made and even a bigger amount. Enterprises want increase the participation in the University and the academic training is more useful for them.

This group is helping the work improvement between both institutions and the group intend of reflect the conclusions in a document.

- THE INTERNATIONAL UNIVERSITY OF ANDALUSIA

The UNIA (International University of Andalusia) is also based in the PTA. It is a is a public institution created by an Act of the Autonomous Community of Andalusia in 1994, which was established with the aim of contributing to the creation, development, transmission and criticism of science, technology and culture, through teaching, coordinated research and the exchange of scientific and technical information of interest to international and interregional levels.

4. THE MALAGA UNIVERSITY IN THE TECHNOLOGIC PARK FROM ANDALUSIA AND THE EXTENSION OF PTA

The PTA has been appointed to operate the future Science Park promoted within the University Campus. PTA will have 74,847 square meters of land in the park extension named “PTA-UMA”, in which the first building was completed in 2013 which replicates the PTA business development model. This will contribute to the development of scientific knowledge in close cooperation with the university.

Otherwise, The University is represented in the Technology Park of Andalusia through the University Institutes Building, which is one of the main areas where research and business activities are carried out by university groups. In addition the Bio-innovation Centre of the University of Malaga is also in PTA.

Since 2008, the UMA has the Bio-innovation building in the technological park, achieved like a space aiming to investigation works in areas like the biotechnology, the biomedicine, the bio computation, the bio engineering or the nanotechnology. In addition it is situated the Bioinformatics platform from Andalusia and the super computation center of UMA.

Another building is the Investigation Transfer of Results which is aiming to strengthen the competitiveness, the presence and the protection of R+D developed in the UMA, being the park companies’ one of the application areas.

The presence of UMA in PTA has the intention also identify and protect the investigation results and the business sector transfer towards the society.

In this mission the promotion, marketing, counselling and dissemination scientific results values are crucial in cooperation with the park.