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**The Technology Park of São Paulo – a project to stimulate the local knowledge-based  
innovation system  
Track 11 - 150**

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**Abstract**

This paper is based on authors' actions to develop an institutional structure to optimize university/research centres – industry – government relations. The Technology Park of Sao Paulo Project (Sao Paulo Tech Park) aims to propose public policies to face the regional (State of Sao Paulo – Brazil) impacts and challenges of the new social and economic conditions due to the globalization of markets. These public policies are coordinated by the S&T and Economic Development Bureau of Sao Paulo State (SCTDE) and concentrate the efforts on the following matters:

- to create new conditions to social and economic development of the Sao Paulo State;

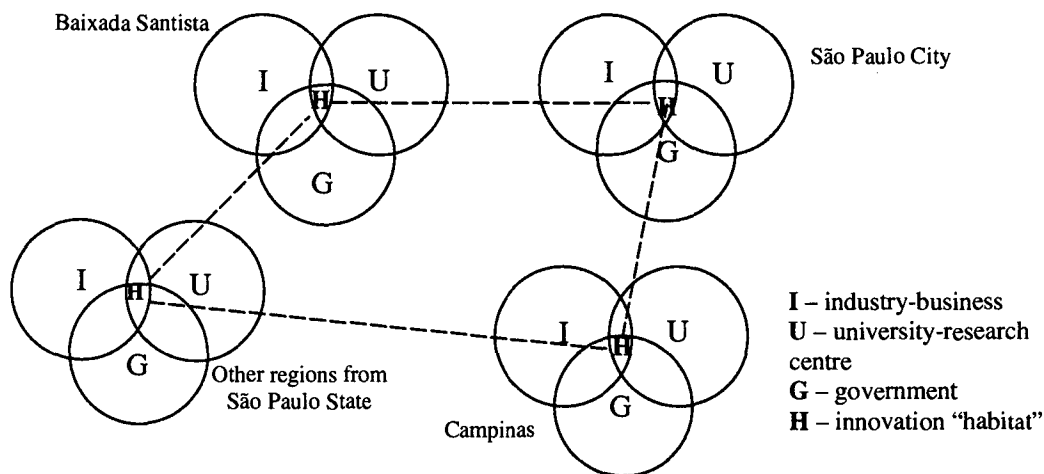
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- to stimulate the local knowledge-based innovation system in highly population density regions of Sao Paulo (focus on the metropolitan regions of the Sao Paulo State);
- to stimulate and attract new businesses, opening up the academic institutions and research centers to the society.

The model is being developed taking advantage of the structure of the University of Sao Paulo (USP) and other Research Institutes in the *campus*, in Sao Paulo City. Some methodological implications about the model are pointed out in this paper.

### 1. The Triple Helix Model and the Sao Paulo Tech Park

The “Triple Helix” is a figure to model the very complex university-industry-government interactions. The Triple Helix Model comprises the government (at various levels), the industry-business community (from the start-up companies to multinational corporations) and the universities and research institutes as partners. As an instrument of the Triple Helix Model, the innovation “habitat” like an incubator centre or a S&T Park can help the partners to develop actions that can positively impact the social-economic growth of the region. In the case of the Sao Paulo State, this benefit can be scattered by meaning of a “network” of innovation “habitats” (see Figure 1.1).



**Figure 1.1: “network” of innovation “habitats” – Sao Paulo State**

In the case of the Sao Paulo Park Tech, the Triple Helix Model is well characterized by actors and actions involved in the developed model as it can be seen in Figure 1.2.

The model that is being developed for the Sao Paulo Park Tech is a dynamic Technology Park (see Figure 1.3, the correlations for the model) linking the following players: the Incubator for Technological Enterprises (the CIETEC – established since 1998); the maturing companies, or graduated from the Incubator Center, technology-based SME and some corporate and institutional S&T&I (Science & Technology & Innovation) activities.

The model aims to represent each activity group as a part of a system where the Incubator Center is at the center of the business radiation. The Technology Park of Sao Paulo aims:

- to accommodate companies engaged in the commercial application of S&T&I,
- to develop activities including R&D, production, sales and services, preserving, otherwise, an academic involvement with the campus ambient;

- to stimulate quality gains and competitiveness by incorporating technology to the productive process of the micro, small and medium-size companies, which stand for great employment generators.

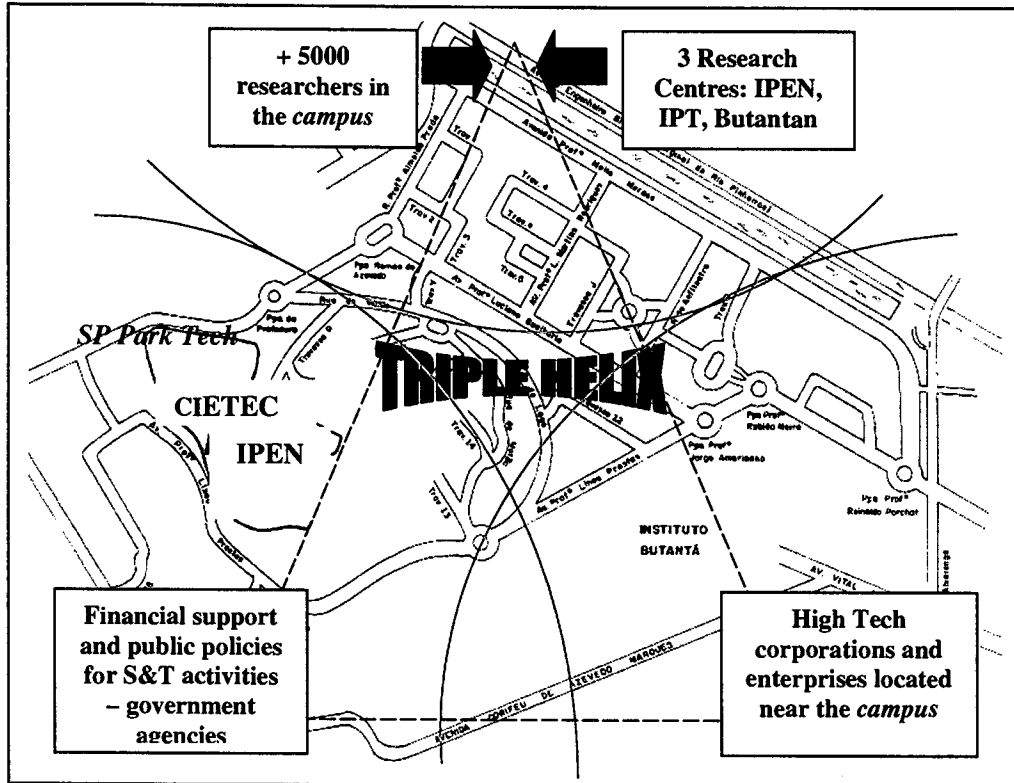


Figure 1.2: The Triple Helix Model in the University of Sao Paulo campus – location of the Sao Paulo Tech Park

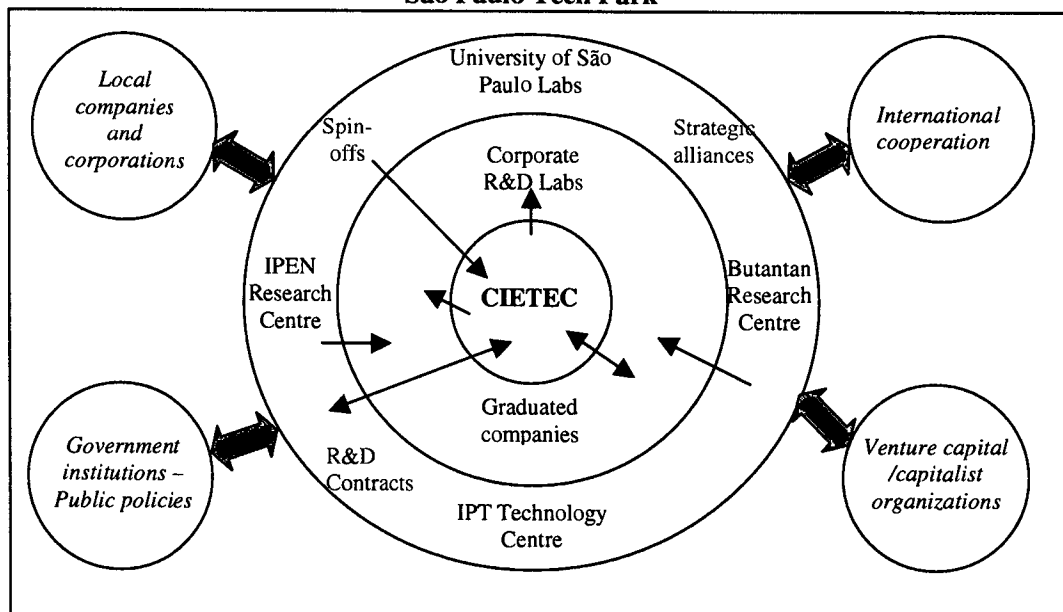


Figure 1.3: The correlations of the Sao Paulo Technology Park model

## 2. Regional Characteristics

The Sao Paulo State has three metropolitan regions: the “great” Sao Paulo region, the Baixada Santista region (a region lying along the coast) and the Campinas region. Typical figures from these regions are shown in Table 2.1.

These figures reflect that the three metropolitan regions concentrate about 58.3% of the whole population of the Sao Paulo State and about 13% of the whole population of Brazil. Other important figure is the GDP of these three regions – about 63.5% of the São Paulo State GDP and approximately a quarter of the national GDP.

Region	Population (1999)	GDP (1997) US\$ billion	GDP per capita US\$
“Great” São Paulo	17 218 461	147,0	8,758
Baixada Santista	1 368 051	9,3	7,015
Campinas	2 151 543	24,5	12,000
Total	20 738 055	180,8	8,921
São Paulo State	35 582 772	284,6	8,232
Brasil	167 723 983	804,2	5,038

From: EMPLASA (2001) – Empresa Metropolitana de Planejamento da Grande São Paulo S.A. and IBGE/2000

**Table 2.1: Regional Characteristics – the Metropolitan Regions of São Paulo State**

São Paulo is one of the five global *megacities* of Latin America. As well known, the world *megacities* characteristics are: more than 10 million of inhabitants (trend analysis: the *megacities* may reach more than 20 million of inhabitants in 2015). To be a global *megacity*, more important than the population concentration are the local economic activities. In São Paulo, these activities are linked to highly intensive knowledge and technological activities, forming dense networks. Using the ternary models considered metaphor for local innovative systems, the Sabato Triangle and the Triple Helix, in São Paulo City, in the South-West region, it can find the three organization players: the infra-structure for S&T&I development (more than 5000 researchers in University of São Paulo and three research centers – IPEN, IPT and Butantan); the most important financial support for S&T activities agency of the country (FAPESP) is located very near to the *campus*; and the high-tech corporations and companies located in the regions near the *campus* (*the Berrini Avenue – is being considered the “Silicon Valley” of the Sao Paulo City*). A new kind of occupation of the Sao Paulo City spaces can be observed, focalizing the South and South-West regions, where old industrial facilities are being occupied by great corporations, mainly from technological and pharmaceutical sectors.

### 3. The CIETEC – Technology Incubator Centre

Installed in the University of Sao Paulo *campus*, located in Sao Paulo City, the CIETEC, the considered “business radiation” of the Sao Paulo Park Tech model, points to a new direction for the entrepreneurial development in Sao Paulo State. At CIETEC, 83 companies (see Table 3.1 for the modalities of the incubation system), in addition to their own researchers’ expertise, may count on researchers and technical individuals from the Research Centers and Laboratories of the *campus*.

The CIETEC’s mission is:

- a. To support setting-up and consolidating micro and small companies of technology basis,
- b. to assure their strengthening and performance improvement;

- c. to have a positive impact on the City of Sao Paulo's economic development by maximizing the success of emerging companies.

The CIETEC's mainly areas of incubation are: instrumentation, biomedicine and biotechnology, laser applications, chemicals, new materials, information technology, software applications, environment and nuclear technical applications. In addition to physical infrastructure and administrative support, CIETEC also provides other services:

- d. *Experienced mentorship* – the residents in the program are provided with business mentoring (Business Plan);
- e. *Networking* – events, in a regular basis, are organized to provide support and feedback on entrepreneurial issues and opportunities (“technology breakfast”, Venture Capital Meetings, etc...);
- f. *Access to capital* – to facilitate the access to financing sources such as national and local programs for technology development, venture capitalists, strategic partners and other investment alternatives;
- g. *Training solutions* – in house learning sessions (business plan development, management issues, team building, etc...);
- h. *Ready-to-use facilities* – provides administrative support on a fee for services; flexible space modules.

Modality	2002	Vacancies	Total
➤ Start-ups incubation	20	10	30
➤ Resident companies	28	10	38
➤ Resident companies – software	19	10	29
➤ Incubator without walls	16	20	36
➤ Total	83	50	133

**Table 3.1: Occupation of the CIETEC Incubator Center – march, 2002**

#### 4. Final Comments

The aim of this paper has been to underline the aspects of the Sao Paulo Tech Park Project, as a Triple Helix Model example, characterizing the synergy between the private initiative, the academic community and the public administration (in this case, Federal and local State Government levels). The “urban” model of the Sao Paulo Tech Park, as a public policy, can be applied for other regions of the Sao Paulo State, setting up a “network” of “innovation habitats”. Such a “network” could be an appropriate structure for exploiting the S&T infrastructure of the metropolitan regions and other important urban regions of the Sao Paulo State. Thus, the Sao Paulo Tech Park would be more than just a regional instrument of social-economic development, but scatter the benefits for other regions of the country.

The Technology Park of *Sao Paulo* Model Project is being partially supported by FAPESP (The State of *São Paulo* Research Foundation) in its Public Policies Research Program (research projects developed in partnership with public and non-governmental organizations (see <http://www.fapesp.br>). The State of *São Paulo*, as established by its constitution, allocates 1% of its total tax revenue to FAPESP, for the funding of scientific and technological research in all areas of knowledge. The FAPESP is an autonomous organization and works strictly on a peer review basis. To achieve its goals, the FAPESP maintains regular and special programs of research grants and fellowships.

The implementation of the Sao Paulo Tech Park – Phase I is being supported by a Federal Government Program for S&T Parks – The “Yellow-Green Fund” (see [www.finep.gov.br](http://www.finep.gov.br)) and by the S&T and Economic Development Bureau of São Paulo State (SCTDE).

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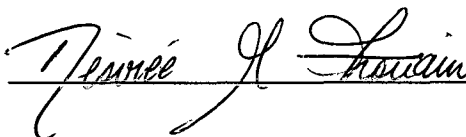
**PALAVRAS CHAVES PARA IDENTIFICAR O TRABALHO:**

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Science Park; Technology Park; innovation habitats.

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