

## TECHNOLOGICAL AND INNOVATIVE ENTREPRENEURSHIP

Tecpar manages incubators and technology parks. It also transformed one of its campuses in an outdoor laboratory to test new technologies.

#### **Innovation Agency**

Tecpars' Innovation Agency helps to transform good ideas into meaningful technologies for the market. On top of that, it manages the incubator, technology parks and the Living Lab program.

#### Tecpar's Technology Incubator (Intec)

Created in 1989 to encourage the creation and installation of technology-based companies in Paraná, Tecpar's Technology Incubator (Intec) was the first of this kind in the State. Over its history, it supported over 100 innovative businesses. The incubator offers incubation jobs in the resident and nonresident modalities (Curitiba and Jacarezinho campuses). To be included in the selection process, the entrepreneur or businessperson must submit its/his/her Business Plan, which will be evaluated by a Judging Board. The project must comprise three features: innovation, technological base, and proof of concept or prototype.

#### Tecpar's Technology Park

The Health Technology Park attracts companies with investment in Research and Development (R&D) and production of innovative goods and services, and encourages the creation of new technology-based companies of Paraná.

#### Tecpar's Living Lab Program

Tecpar structured the Living Lab program, which transformed the CIC campus in an innovation ecosystem. Its purpose is to employ the space as an outdoor laboratory to test ideas of services or technological products, and evaluate their efficiency. Among these technological branches, we find, for example, renewable energy and smart cities.



tecpar.br

As a public company of the State Government of Paraná, created in 1940, Tecpar promotes research, technological development, and innovation.







## **ABOUT US**

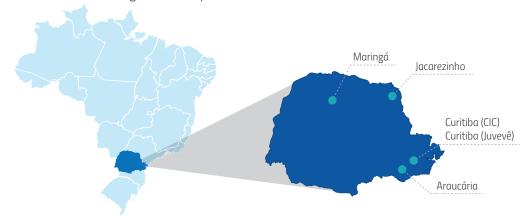
The Technology Institute of Paraná (Tecpar), a public company of the State Government, founded in 1940, is a science and technology institute that, with its technical staff, promotes innovation and the economic and social development of Paraná and Brazil.

Tecpar is present in four Paranian cities: in Curitiba, with its headoffice in the Industrial City and with Juvevê's unit; in Araucária, in the metropolitan region; in Maringá, in the Northeastern region of the State; and in Jacarezinho, at the Northern Pioneer.

The Technology Institute of Paraná's mission is to promote Research, Development and Innovation in Technological Production and Solutions that add value to customers and the society.

#### Tecpar's work is sustained by three pillars:

innovative technological entrepreneurship, the health industry, and technological development and innovation.









## **TECHNOLOGICAL DEVELOPMENT AND INNOVATION**

In the field of technological development and innovation, Tecpar actively promotes the certification of managerial systems and products, and technological solutions for the industries of health and environment, material measurement, validation and technology. On top of that, it provides consultancy with strategic information and data analysis.

#### Tecpar Certification

Tecpar Certification is the institute's division responsible for the certification of managerial products and systems. It has been in operation since 1997 in the entire territory of Brazil. Tecpar Certification works independently from the commercial relation and certifies that systems, products, processes, and/or services are in conformity with national, foreign, or international requirements. The conformity evaluation and certification programs are structured by international standards, ensuring an acknowledged and safe process.

In products, Tecpar certifies wires, cables, and flexible electrical cords; plugs and outlets; switches; home appliances; telecommunications; production/processing organic systems; and storage units in natural environment.

As for systems, it certifies Quality Management Systems (NBR ISO 9001); Environmental Management Systems (NBR ISO 14001); SiAC conformity through PBQP-H (Brazilian Program of Habitat Quality and Productivity); LIFE; Occupational Health and Safety Management System (ISO 45001/OHSAS 18001); Safety, Health, Environment, and Quality Evaluation System (SASSMAQ - Road Module); Road Safety Management System (ISSO 39001); and Research, Development, and Innovation Management System (ABNT NBR 16501).

Tecpar Certification also performs technical evaluations, such as Vehicle Disassembling Company Evaluations. On top of that, the institute is accredited by the Finance National Board (Confaz) to perform evaluations in the Fiscal Application Program (PAF-ECF), the Electronic Invoice Authentication and Transmission System (CE-e-SAT), and the Fuel Volumetric Measurer (MVC).



### Material Technology

Tecpar's Material Technology Center develops technological solutions and performs technological trials in the industries of metal-mechanics, wood, furniture, polymeric materials, elastomeric materials, textile products, road signalization, dentistry-medicine-hospital, paper, cellulose, fuel, lubricants, and physical-chemical trials in general. The competences of the center's laboratories are acknowledged and their trials are accredited by the General Coordination of Accreditation of the National Institute of Metrology, Quality and Technology (Inmetro). Additionally, the center is affiliated to the Brazilian Association of the Technological Research and Innovation Institutions (Abipti).

#### Technology in Health and Environment

Tecpar's Center of Technology in Health and Environment develops technological solutions for the adequacy of production process and performs trials to evaluate the conformity of products and raw materials. The center serves companies and businesspersons of the industries of environment and agriculture, food and beverage, containers, and health, performing chemical and biological trials, and issuing statements and technical reports.

The laboratory's competences are acknowledged, with accredited trials by Inmetro's General Coordination of Accreditation, registered in and accredited by the Ministry of Agriculture, Supply, and Farming (Mapa), licensed by the National Sanitary Surveillance Agency (Anvisa), integrating the Brazilian Network of Analytical Laboratories (Reblas), and registered in the Environmental Institute of Paraná (IAP).

#### **Measurement and Validation**

Tecpar's Center of Measurements and Validation is accredited by Inmetro's General Coordination of Accreditation for calibration under no 085, operating in the industry since 1997. In addition to offering calibrations to the market of different units, it also renders services of technical consultancy for the accreditation implantation of calibration and trial laboratories and for the development of technological solutions and services in the metrology field. The center is currently accredited for the units of mass, pressure, volume, physical-chemical, electricity, temperature, relative humidity, time, and frequency. The center also renders non-accredited services for thermal qualification trials and calibrations of the units force and torque.

**Center of Technological Studies and Data Analysis** Tecpar's Center of Technological Studies and Data Analysis delivers Technological Studies to the market based on pieces of information about products, services, technologies, or companies to support the decision making. The center integrates a Data Office that performs the analysis of open data or those provided by customers, through Data Mining, and generates strategic panels with dynamic and interactive charts in the most advanced tools of Business Analytics.

The Center is also responsible for the maintenance and issuance of the scientific magazine Brazilian Archives of Biology and Technology (BABT), which has been publishing scientific papers of the fields of agriculture, agribusiness and biotechnology, human and animal health, biology and applied sciences, food science and technology, environmental sciences, and engineering and technology for 75 years. Tecpar integrates a national network of research institutions, supported by the Ministry of Science, Technology, Innovation, and Communication (MCTIC), that integrate the Brazil Service of Technical Responses (SBRT) - the operation of this service is performed by the center.

#### **Ouality Control**

Tecpar's Quality Control Division laboratories offer to the market microbiological, physical-chemical, TOC determination, and bacterial endotoxin trials for drinking, purified, and injection water, in addition to Bacterial and Fungal Sterility Tests for several immunobiological products. As for the biological trials conducted for rabies vaccine, among other things, the viral inactivation and efficiency (immunogenic activity) are evaluated through the NIH method.

# **HEALTH INDUSTRY**

The Technology Institute of Paraná (Tecpar), a renowned science and technology institution in the health industry has been working since its foundation in the production of biological medicine, vaccines, and diagnosis kits for animal and human use. Tecpar's production, since its inauguration, has been meeting the municipal, state, and federal demands of the Government.

In the health industry, Tecpar works, as an official public laboratory, to provide raw materials, medicine, and vaccines to the Ministry of Health, such as veterinary rabies vaccine, which has been produced by the institute for 40 years. With the vaccine developed by Tecpar, Brazil was able to control cases. of human and animal rabies.



To supply the State Government's emergency demand, Tecpar structured a laboratory to produce two types of alcohol: ethyl 70% and glycerin ethyl 80% rubbing alcohol.



