

UFRJ SCIENCE PARK SUSTAINABILITY REPORT

2016



Universidade Federal do Rio de Janeiro

TECHNICAL RECORDS

UFRJ Science Park Sustainability Report - 2016

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^{*}This report was elaborated based on non-confidential information provided by all functional managers and UFRJ Science Park companies.

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MCTIC – Ministry of Science, Technology, Innovation and Communication.

State Government of Rio de Janeiro

City Government of Rio de Janeiro

FINEP – Studies and Projects Financial Supporter

SEBRAE – Brazilian Support Service for Micro and Small Companies

FAPERJ – Carlos Chagas Filho Foundation for Research Support in Rio de Janeiro

Rio Negócios – Investments Promoting Agency of Rio de Janeiro

ANPROTEC – Brazilian Association of Science Parks and Business Incubators

ANPEI – National Association for Research and Development of Innovative Companies

IASP - International Association of Science

Parks and Areas of Innovation

TecnoPUC
PUCRS Science and Technology Park

Digital Port- Science Park

TusPark - Tsinghua University Science Park

Telefônica

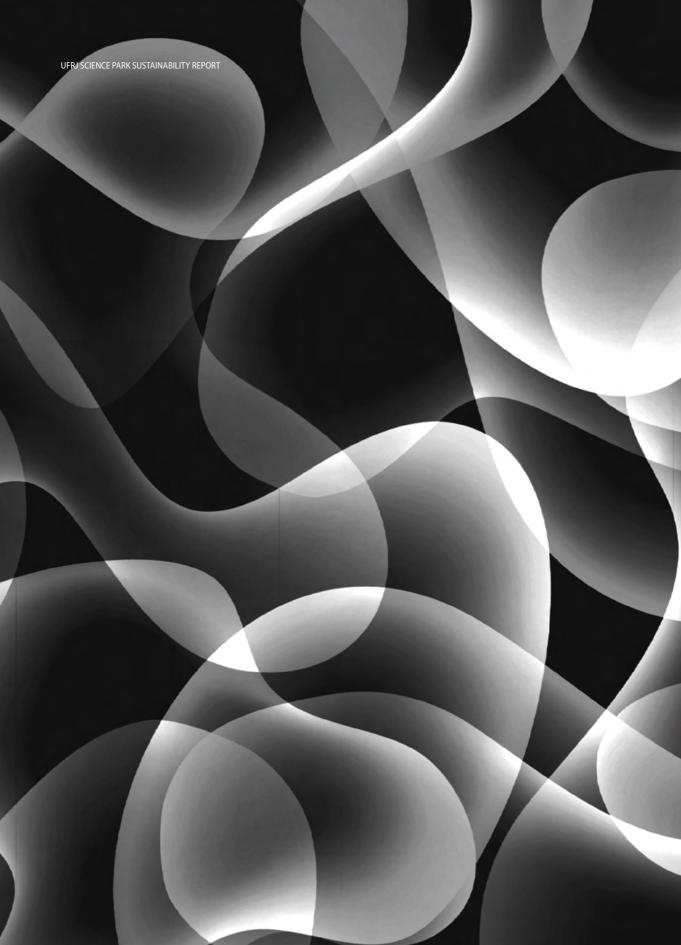
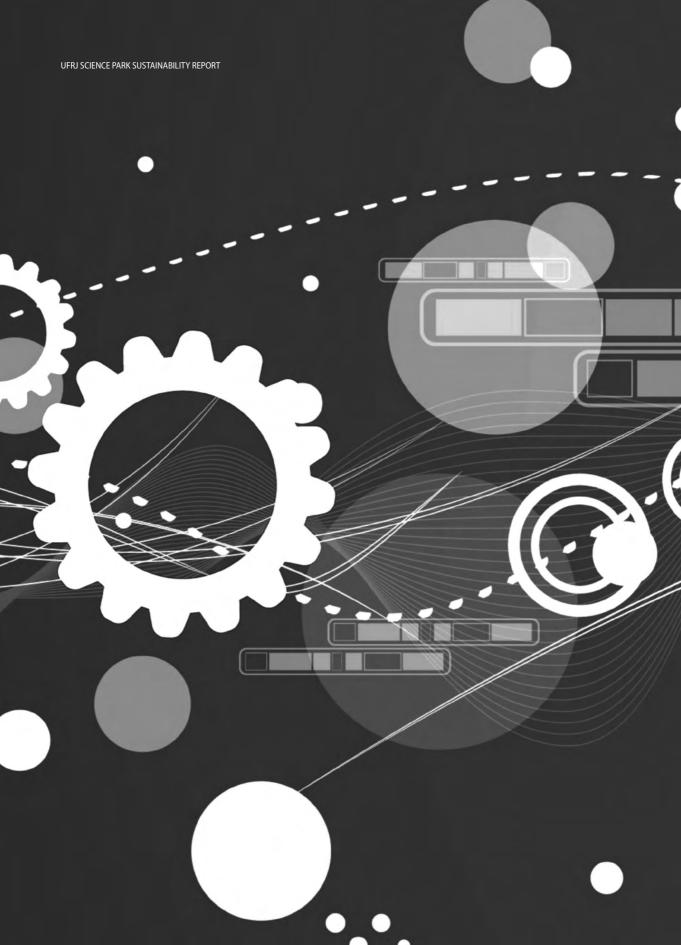


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ABOUT THE REPORT

PRESENTATION

It is a great pleasure to present the second UFRJ Science Park Sustainability Report (**G4-3**). This report shows the major economic, financial, social and environmental performance indicators of the organization from January 1 until December 31 of 2016¹ (**G4-28**). Through the Report, we display the current management results in a transparent and accessible fashion to the interested audience and the society at large.

During the year of 2016, the Park developed its strategic planning for the next 30 years and, for this reason, this report – whose theme is "Transforming the present in view of the next 30 years" – aims at consolidating this process.

The graphic concept of this material was inspired on the graphic forms of the Dutch artist M. Escher, in an allusion to the seemingly impossible buildings, which, paradoxically, involves a continuous transformation process.

SCOPE

The information presented in this report refers mainly to the UFRJ Science Park Management, including the Coppe/UFRJ Business Incubator. Whenever possible, we will also present the results of the resident companies, as in the case of the indicator of jobs generated in all the innovation and recyclable waste disposal environments.

(G4-18; G4-20).

METHODOLOGY (G4-18)

This sustainability report follows the guidelines and indicators of the *Global Reporting Initiative (GRI)* in the G4 version in the essential option (G4-32).

^{1 (}G4-30; G4-31) The Park Sustainability Report is published in the first semester of the year. For doubts and further information about its content, please contact through the following e-mail: sustentabilidade@parque.ufrj.br.

More than merely circulating information and data of the operations, this publication aims at being a tool for the management and relationship with our clients, employees, suppliers and other people interested in the Park.

To improve the report's scope, interviews were carried out and focal groups of debate were created with our interested audience throughout the year of 2016. Among them are the Board of Directors of the Park, clients, employees, non-governmental organizations, the government, and the academy and class associations. The material generated out of these meetings - which has also served as a basis for the Strategic Plan 2016-2045 -, was compiled and divided into a list of topics comprised of three dimensions: economic, social and environmental. This list was sent to the interested audience who, in turn, assessed and catalogued the themes that would be considered material.2 (G4-26; G4-27).

The themes selected in the materiality matrix, as well as other subjects considered relevant to the UFRJ Science Park, are presented as follows and developed in this publication (**G4-26**; **G4-27**).

The concept of materiality refers to the relevant topics for an organization because they reflect the economic, social and environmental impacts or because they influence the decisions of the interested audience.

A Materiality Matrix is a graphic representation of the results of the process of defining materiality itself. It presents the classification of each theme in two axes: internal, which shows the perspective of the company and of its business strategy; and external which shows the perspective of the other people involved (shareholders, investors, neighboring communities, governments, trend makers, non-governmental organizations, specialists, among others).



² Material themes are those which reflect significant economic, environmental and social impacts of the organization or strongly influence the assessments and decisions of the interested audience.

Relevance for the interested audience

The materiality of 2016 is based on the following themes (G4-19):

•Companies-University Integration



- •Jobs 🛱
- •Transparency and integrity



•Life Quality in the Park



- •Diversity of economic sectors and size of the company
- •Interaction between companies of different sizes 🝣
- •People's engagement



•Effluent and waste disposal 🕻



•Mobility 🗸



Compared to the materiality of the previous report (referring to the year of 2015), it can be observed that the themes are

more detailed, which shows a higher level of maturity of the organization during this process.

Below, we present the interested audiences of the Park (G4-25). The featured audiences were the people prioritized and engaged in the process of defining the creation of the Park's materiality (G4-24). The prioritization process was based on the GRI guidelines. Once identified, its impact on the Park's economic, social and environmental performance was analyzed, the same way as this group is influenced by the economic, social and environmental performance of the Park.

Resident Companies

- UFRJ Special Laboratories at the Park
- Board of Directors
- Coppe/UFRJ Business Incubator
- Functional managers of the Park
- Services providers
- COPPETEC Foundation
- Residents association
- Rectory
- Pro-Rectories
- Academic Schools
- Graduation
- Post-graduation
- Civil Society
- Embassies
- NGOs and Foundations
- Affiliations

- Other ICTs
- R&D Centers
- Funding and promotion agencies
- Class Representations
- Investors
- City Government
- State Government
- Federal Government

It is important to highlight that some people who belong to our interested audiences are members of our Board of Directors as explained in the chapter The UFRJ Science Park (page 39).

One of the greatest challenges of a science park is to elaborate and promote an eco-system of innovation which contributes to the local development. Therefore, this document is organized in three chapters:

1) The UFRJ Science Park – who we are and how we manage the Park; 2) The Park and the Local Development – results as an eco-system of innovation and impacts on human and social development; and 3) The

Park and the Future – presentation of the future planning.

The most relevant themes indicated in the materiality matrix, the responses to the performance indicators and the policies and practices of the Park will be approached using a direct and simple language. This content aims at helping the reader to better understand how sustainability management is inserted in our business strategy.

LIMITS OF THE REPORT (G4-20, G4-21)

		Limites	
Sustainability Categories Materiality		Direct Control of the Park	Indirect Control of the Park
Economic	Integration companies-university	x	
	Transparency and integrity	x	
	Diversity of economic sectors and size of the companies	x	
	Interaction between companies of different sizes	x	
Social	Jobs	x	х
	Qualidade de vida no Parque	x	
	People's engagement	x	
Environmental	Environmental Effluent and waste disposal	x	x

16

MESSAGE FROM THE CEO

The year 2016 was a time of deep and bold transformations which will unquestionably cause an impact on the future of the UFRJ Science Park. In a partnership with a team of consultants, experts, and partners, the institution has developed its Strategic Plan 2016-2045. A series of action plans were defined to ensure the continuity of the Park as an agent of transformation of research into actual assets for the society.

In addition, it was also in 2016 that the Park consolidated its sustainability policies. We recorded a reduction in the consumption rates of both electricity and water, enhanced integration with the university considerably. Moreover, we filled our spaces with activities, lectures, and discussions on entrepreneurship and innovation. In 2016, the Park became an even more vibrant environment.

The CEO of the UFRJ Science Park, José Carlos Pinto, provides details of all the actions that have been developed.

Check the interview below!

What is the relevance of the development and promotion of a sustainability report for the Park?

JCP: We are very proud to be launching the 2nd edition of the Sustainability Report of the UFRJ Science Park. It is a commitment we made to publicize our results, complying with the best practices used by all the world's modern enterprises. This report should include economic and social-environmental aspects as well as describe the relationship with our target audience. This is a pioneering action of both the UFRJ Science Park and the university, which also allows us the opportunity to interact with other institutions around the world.

How are both the topic and the sustainability actions expressed in the Park?

JCP: Sustainability is a topic that runs consistently with all the objectives and work areas of the Park for the next 30 years. It is not possible to think or develop activities unless they are economically sustainable. As far as this issue is concerned, I would like to emphasize that the UFRJ Science Park is a 100% economically sustainable project and that all the actions are planned so as to maintain this pattern. In addition, environmental sustainability is another action pillar in which we feel committed to be an example to our community. One of the projects we develop is ParkLab, where the Park acts as a living laboratory for new technology development aimed at sustainability. This is a way to encourage the engagement of the academic and business communities in this subject. Consider one example: The Science Park is located in one of the UFRJ campi, on the Fundão Island: surrounded by the Guanabara Bay. We feel environmentally committed to the Guanabara Bay, for example, and with the solutions for the water-related problems as well as with electricity waste. In addition, we are engaged with the Circular Economy Center supported by different institutions and whose meetings frequently happen in the Park's head office. Our goal is to start a transformation process and influence society on how to face the next century concerning the services we wish to have. Thus, essentially, reflect upon the importance of

expanding the life cycle of the objects that are consumed and continuously reintegrate them in the production chain.

Another issue is social sustainability. After all, innovation is promoted by people. And the concern about the people and the community where they live is essential for both the efficiency and effectiveness of these actions. Within a healthy environment, we believe both the people and the communities must be respected. Practically speaking, this is about promoting the discussion and development of actions to overcome extreme poverty and to improve people's quality of life and working conditions.

UFRJ Science Park is a 100% economically sustainable Project and all the actions are thought out so as to maintain this pattern.

Generally speaking, how was 2016 for the UFRJ Science Park?

JCP: 2016 was a very difficult year for the Brazilian society. However, we cannot say 2016 was a bad year for the Park. During that year, there were many great achievements. We finished 2016 with a number of resident companies larger than what they were at the end of 2015. The experiences of the resident companies were not uniform, but never was there a decrease in their inte-

rest level in technological development and innovation. Evidence of this is the fact that all the resident companies are replacing their bets on the recovery of the Brazilian economy.

Another issue greatly worked on in 2016 was the humanization process of the Park. People should feel integrated, in order to feel happy within their working environment. We invested in the quality of life in the Park and launched projects to increase the number of services and the availability of services in the Science Park area. We promoted artistic exhibitions, gastronomic fairs, presentations, and different campaigns. In 2016, we were proud to have been chosen to house the UFRJ Student's HUB, which during its opening hosted simultaneously more than 50 technical, cultural, and artistic events.

During 2016 the Park's Strategic Plan for the next 30 years was developed. What was the Plan about and which are its major focuses?

JCP: The Park's Strategic Plan is the result of a team work with the participation of all interested sectors of the Park. It is a practically unanimous opinion that the Park is changing, as if it were a videogame. We finished the first building stage and started a new phase. This stage was marked by a time for improvement, enhancement, and of putting our ideals into practice. To achieve these objectives in the next 30 years, the Park must play a leading role in innovation. We believe that innovation is the best

option for the development of the country. Planning the next 30 years may seem excessively ambitious, but we believe we need to be prepared, thinking consistently, to take these steps towards this future. The Park is a dynamic environment, capable of carrying out different activities and rapidly adapting to changes and expectations imposed by society.

While developing this work, some work areas appeared to be fundamental for the coming up years for the Park. One of them is called Park's humanization. In other words, it is essential that we create an environment where people feel like constantly working and developing new activities.

Another strategic area is what we classify as the Park's enlargement. In other words: the Park's actions and connections are much more important than its geographical boundaries. The Park's activities go beyond this small physical area of the University campus, on Fundão Island, and we are removing geographical restrictions of the actions of the UFRJ Science Park. What we understand by enlargement is our ability to interact with enterprises, people and institutions around the world. And, when I say the world, I am not trying to sound ambitious. It is just because innovation does not exist on a local basis. That is the reason why we are focusing, in particular, on building a relationship with other innovation environments in Brazil and abroad. For example, in 2016, we signed a very important partnership with TUSPARK, the lasgest Science Park of China,



aiming at the exchanging experiences. Our goal is that, by the end of 2017, we will be able to report many other strategic alliances.

Diversity and intensification of innovation actions will be greatly worked out equally in these upcoming years. Thus, our goal is to attract companies that have and carry out activities with even more interaction with the university and act in different areas; such as, health, data technology, environment, among others. In the coming years, our priority will be to attract small and medium-sized companies and start-ups and to create an environment of collaboration among big and small companies. Additionally, this integration is essential for keeping UFRJ students motivated by the entrepreneurial activities in their university.

In the next 30 years, the Park must have a leading role in actions of innovation. And we believe innovation is the best path for the development of the country.

How do you assess the Park's relationship with UFRJ and which are the plans to foster this interaction?

JCP: The connection Park – UFRJ is fundamental, and it represents one of the constantly-monitored goals. We are interested that the engagement between the companies and the university be permanent, constant and increasing. We must bear in

mind that the innovation process is essentially a collective process. And, being so, to be more creative and ingenious, this process needs people with different kinds of knowledge to get involved. Therefore, integration between the university and companies surpasses the obstacles of academic projects and becomes fundamental for the innovation process itself.



EXECUTIVE SUMMARY

The Sustainability Report presents the main indicators of economic, financial, social and environmental performance of the Park from January 1 until December 31, 2016. The report follows the guidelines provided by version G4 (Core option) of the *Global Reporting Initiative* (GRI) in an attempt to achieve the best international practices on sustainability.

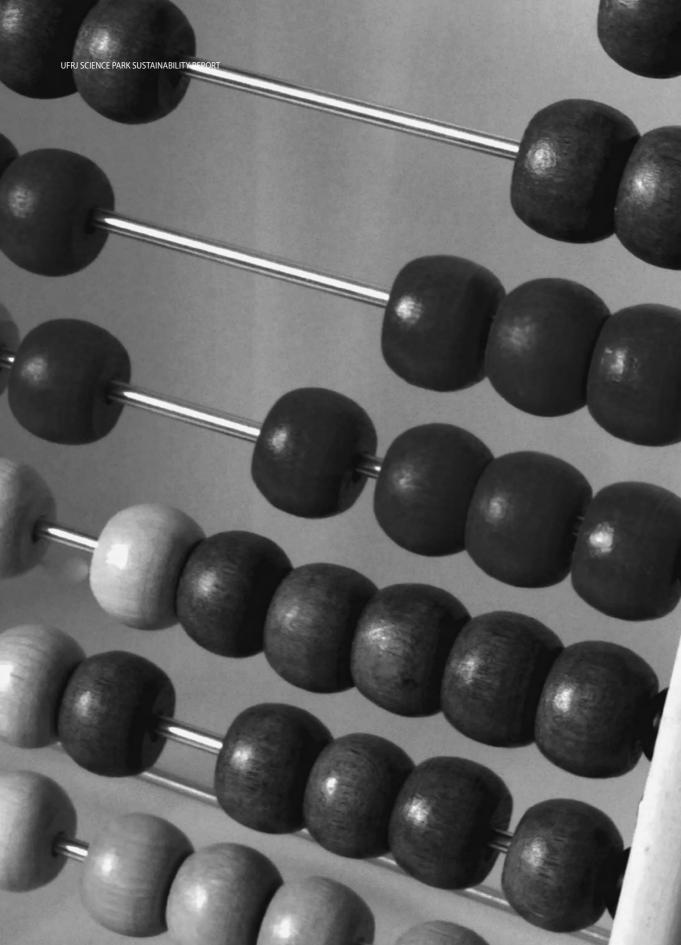
The section called "Science Park" describes the organization as an innovation environment that aims at strengthening the ecosystem's capacity for renewal to increase society's wealth and well-being. The ecosystem is a place for entrepreneurial initiatives and knowledge generation. This section includes information on the organization of events for networking and for stimulating corporate social responsibility as well as information on specific actions for improving operational performance. It is significant that water consumption has reduced by 15 % due to the implementation of the sustainability guidelines to which the Park adheres in its Sustainability Policy.

The section "Park and Local Development" presents the main results obtained in four different areas: UFRJ students; the university; relations among companies; the economy and the area. Firstly, as far as UFRJ students are concerned, the main highlights correspond to the sponsorships received in a total of R\$ 421.000. One of the most important is Hub UFRJ, a networked laboratory for experimental projects. Secondly, R\$ 2.008.106 were invested in the university by means of cooperation projects, 54,92 % of which correspond to an investment in R&D. Thirdly, events for the strengthening of businesses were organized and partnerships with new institutions were established, such as FIOCRUZ - Farmanquinhos, Aquafluxus, GPE, Manserv, Mobicare and PROMEC. Several results on the fourth topic, "economy and the area", are provided in this section as well: 1073 new highly qualified jobs were created; tax revenue came to 9 million reais in 2016; 61 intellectual property titles were filed based on research developed in the Park; 713 visitors coming from 170 different

countries; five new companies joined CO-PPE Business Incubator, which now has 24 resident companies with a revenue of about R\$ 12.180.460 in 2016.

The section "The Park and the future" focuses on the elaboration of the Science Park's Strategic Plan for 2016-2045, which is a new step forward in the transformations that the Science Park wishes to make. One of the most important elements of the Strategic Plan is the expansion of the Park by means of two partnerships that will allow for the exchange of resident companies with other innovation environments. The first exchange will involve the Science Park of the Catholic University of Rio Grande do Sul (Tecnopuc) and Porto Digital in Recife (Pernambuco); the second involves TusPark (Tsinghua University Science Park) from Tsinghua University in China, which will offer the UFRJ Science Park a physical and permanent base there.

Finally, the reader is invited to attend the 27th Anprotec Conference on "Innovation and entrepreneurship that transform cities", which celebrates Anprotec's 30 years (Federal Association of Incubated Businesses and Technological Parks). This is the biggest event on innovative entrepreneurship in Brazil and it gathers around 1000 national and international participants. The UFRJ Science Park is the local organizer of this conference that will take place on October 23-26 2017 in Rio de Janeiro.



RELEVANT **FIGURES** OF THE PARK **IN 2016**

- :: Companies-university integration
- :: Jobs
- :: Transparency and integrity
- :: Quality of life within the Park's community
- :: Diversity of economic sectors and companies' size
- :: Integration between companies of different sizes
- :: Engagement of people
- :: Discharge of wastes and residues
- :: Mobility

350.000m²

area within which

73.660,77m

of green area

reduction of electricity consumption in the Park's administration buildings compared to 2015.

reduction of water consumption in the Park's administration buildings compared to the previous year

pilot Project of Selective Waste Collection



resident companies



laboratories





institutions

from other countries



employed in the Park







trainees





R\$ 2.088.106

of which

invested in cooperation between companies and university in contracted amounts

R\$ 1.146.737

invested in R&D in the university in its interaction with the Park's companies

28 events for companies' integration

61 deposits of Intellectual Property

projects hired
as example of
cooperation with UFRJ



units involved in the cooperation projects between companies and UFRJ

R\$ 5.702.828

generated from resources for UFRJ coming from assignments of land use in the Park

R\$ 421 thousand

invested in sponsorship of projects supported by the Park



617 students directly involved in these projects

03 food and cultural fairs of the Park

attracted

6.000

people to the events

43

blood bags received during a blood donation campaign

01

blood donation

66

workers benefited from the audience formation program

R\$ 9,5 million in collected taxes

ACCUMULATED

from 2003 to 2016

R\$ 144.056.234

invested in cooperation between companies and the university in contracted amounts

R\$ 24.772.722

transferred to UFRJ by the companies installed at the Park as a payment for the assignment of land use

R\$ 28,9 million*

of collected taxes

lion* R\$ 900 million* million invested in the creation,

* This figure is for the years 2013 to 2016.
Before 2013 the Park did not assess this information.

generation and operation

R&D centers of the Park

*[accumulated amount since the opening of the Park]

R\$1,3 million

invested in sponsorship of projects supported by the Park

112

deposits of Intellectual Property

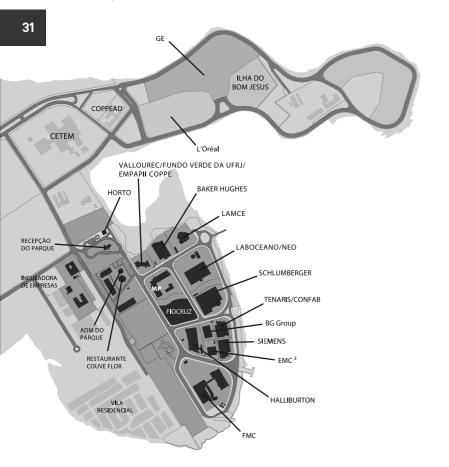


THE UFRJ SCIENCE PARK

Who are we?

The UFRJ Science Park is an innovation environment. As a project of the Federal University of Rio de Janeiro it aims at stimulating the interaction between the University–students and technical and

academic personnel– and the companies, turning knowledge into jobs and income and offering innovative products and services to society (**G4-8**).



Opened in 2003, it is comprised of innovative companies, UFRJ laboratories, an area for the students' integration, a business incubator and adequate infrastructure which adapts and fosters the innovation capacity of our eco-system.

Located on one of UFRJ campuses on Fundão Island, in the city of Rio de Janeiro (G4-5), the Park is a public enterprise³, and its goals are aligned with the objectives of the University. The Park covers a 350- thousand-square-meter area and expresses the potentiality for urban revitalization that projects like this are able to offer to the society, particularly when the focus is on the development of activities related to the economy of knowledge.

On December 31, 2016, the Park was home to nine laboratories and 48 companies - 15 large ones (among which there were two research centers, GE and L'Oréal, located on Bom Jesus Island), eight SMC (Small and Medium-sized companies), as well as 25 incubated companies. It is important to emphasize that the companies installed in the Park are, by and large, R&D centers.

The incubated companies are installed in the Coppe/UFRJ Business Incubator, which is part of the innovative environment of the Park. The Incubator was specially designed to encourage the creation of new companies based on the technological knowledge generated in research groups located at UFRJ. It systematically plays a role in turning the knowledge generated from the research activities into innovative products and services which benefit the society as a whole. As part of the Park, the Incubator is the locus for the startups within this innovative ecosystem.

• 15 Large Companies:

Ambev, Baker Hughes, BG Group/Shell, BR Distribuidora, Dell EMC², Fiocruz, FMC Technologies, Halliburton, Petrobras, Schlumberger, Siemens, Tenaris, Vallourec, GE e L'Oréal (the last two are installed on Bom Jesus Island);

• 8 Small and Medium-sized companies:

Ambidados, Aquafluxus, GPE, Inovax (Neopath), Manserv, Mobicare, PAM Membranas and PROMEC.

• 25 Startups:

ARES, Ativatec, Atomum, BeeFleet,
Biorepair, Biotecam, Cellen, CUG,
EasySubsea, EDB Renováveis,
Geonumérica, GT2, INDNAV, Lemobs,
Mancha, Netcommerce, Open Labs,
OptimaTech, Petrec, TGR, TR-Subsea, Twist,
Vidya, Vortex Mundus Consultoria and Wikki.

9 Laboratories:

Embrapii Coppe, Green Fund for
Development and Energy (Green Fund
- Fundo Verde), Laboratory of Ocean
Technology (LabOceano/Coppe), Laboratory
of Computer Methods in Engineering (Lamce),
Center for Ocean Studies (NEO), Brazilian
Panel of Climate Changes (PBMC), Acoustics
and Vibration Laboratory (LAVI), Laboratory of
Membrane Separation Process
(Lab PAM), and Hydrorefining Laboratory,
Processes and Applied Thermodynamics
Engineering (H2CIN).

³ From a formal point of view, the Park is a project directly connected to the Rector's office (it has no legal personality)), and is supported by CO-PPETEC Foundation (Institute for Graduate Studies and research in Engineering) (G4-7).

COMPANIES AND LABORATORIES OF THE PARK IN 12/31/2016









Schlumberger

HALLIBURTON





INOVAX



















SIEMENS



















LANCE



During 2016, "the Strategic Plan of the Science Park 2016-2045" was developed and defined the Park's new mission, as well as its vision for the future and its organizational values. Further information about "the

Strategic Plan of the Science Park 2016-2045" can be found in the section "The Park and the Future". **(G4-56)**

To strengthen the innovative capacity of the eco-system to create wealth and well-being for the society within an environment of connections of entrepreneurial initiatives and generation of knowledge.

VALUES

Commitment with innovation

We generate innovations that have an impact on the improvement of entrepreneurial, social and academic environments.

Collaboration

We connect the links of innovation networks in the generation of knowledge and technology.

Entrepreneurial attitude

We are proactive and persevering in strengthening the innovation eco-system.

VISION OF THE FUTURE 2045

The Science Park is a dynamic and diverse environment that generates relevant innovations for the economic and socio-environmental development.

Within this context, the major operational attributes of the UFRJ Science Park are:

Protagonism:

Active and anticipatory attitude to boost global innovation networks;

Diversity:

Environment with cultural diversity which comprises both national and international companies of different sizes, connected to the UFRJ research groups and articulated with entrepreneurs and investors;

Dynamism:

Highly renewable environment, full of life, characterized by its dynamism and lightness.

SERVICES OF THE PARK (G4-4)

We now present the major services offered by the Park in 2016:

- Promotion of the interaction between the resident companies of the Park with UFRJ schools/ research groups;
- Establishment of direct and continuous channels to foster university-company cooperation;
- Bringing together the companies of the Park and the Incubator;
- Management assistance for small and medium-sized companies installed in the Park;
- Organization of workshops, meetings to improve relationship and networking for the resident companies, mainly the small ones in their initial stages of activities
- Mediation of contacts between the companies and the UFRJ foundations (CO-PPETEC) to sign cooperation agreements;
- Support for the communication between research and innovation funding organizations, investors and the other strategic partners;

- Development, analysis and/or approval of architecture projects and an urban, landscape and engineering project for the Park;
- Property security of common areas;
- Conservation and maintenance of the landscape, renovation, planting and management of the project of the common areas;
- Operational management of common areas of the Park: water and sewage networks, electric grids, telecommunications network, maintenance of public lighting of streets and squares, daily waste collection and manifests control;
- Support for the actions of the press office, networking application and promotion of the resident companies of the Park and of the Incubator
- Access to the Park's auditorium, which holds up to 70 people;
- Support and dissemination of social responsibility and sustainability within the

Park's environment, as well as support to the joint actions of corporate sustainability and social responsibility, projects of mobility; volunteer programs; environmental education projects, relationship with the neighboring communities and the other audiences of interest;

Support the implementation of the company's sponsorship policy for the UFRJ interested audience, support for the creation and organization of projects and artistic and cultural products of the company's interest, management of the technical follow-up and framing process of these projects in the main 47 ncentive Laws (ISS, ICMS, ROUANET, AUDIOVISUAL, ESPORTE, PRONAS, PRONON and LEI DO IDOSO - "Senior Citizen Law").

The services of the Park will be revised according to the new value proposition for each target audience defined in the Park's Plan 2016-2045.

GOVERNANCE OF THE PARK (G4-34)

The governance systems of the UFRJ Science Park consist of a combination of governance and management mechanisms which aim at ensuring the accomplishment of its mission in a participatory manner.

The reference instruments that control the actions are: (i) Regulation approved by the UFRJ University Council in 1997; (ii) Strategic Plan of the UFRJ Science Park 2016-2045; (iii) Regulation for land use and occupation; (iv) Public Tenders (including selection criteria) and; (v) Contracts.

The Board of Directors is the highest decision body of the Park. In addition to nominating and approving the CEO and his/her management plan, the Council also evaluates the companies that apply to become part of the Park and permanently assesses the different impacts generated by the Park's performance. The CEO is responsible for the strategic decisions and performance concerning the economic, environmental and social sustainability of the Park. It is a four-year term and the main requirement is that the CEO be a member of the academic or administration staff of UFRJ.

For the accomplishment of the Park's mission, there are two other mechanisms of governance support: (i) UFRJ Management Committee of Articulations– Company/Science;

and (ii) Consulting Committee for Architecture and Urban Planning.

The former supports the Park defining guidelines for prioritizing actions and initiatives that are of interest of UFRJ and that are economically and financially supported by the companies installed in the Park. The committee is also responsible for the assessment of the investments made in UFRJ concerning the return made by companies installed in the Science Park, as provided in the respective concession agreements. This committee is solely formed by members of the academic or administration staff of UFRJ, aiming at better accounting for the interests of the University. On the other hand, the Consulting Committee for Architecture and Urban Planning defines the parameters for land use and analyzes the companies' projects according to these parameters. It is a mixed committee, with representatives from both the UFRJ and the Park's bodies.

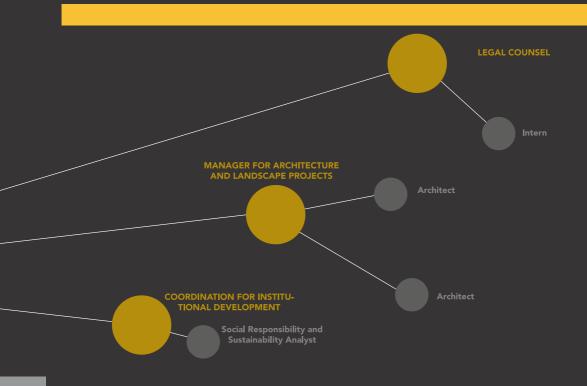
MANAGEMENT OF THE PARK

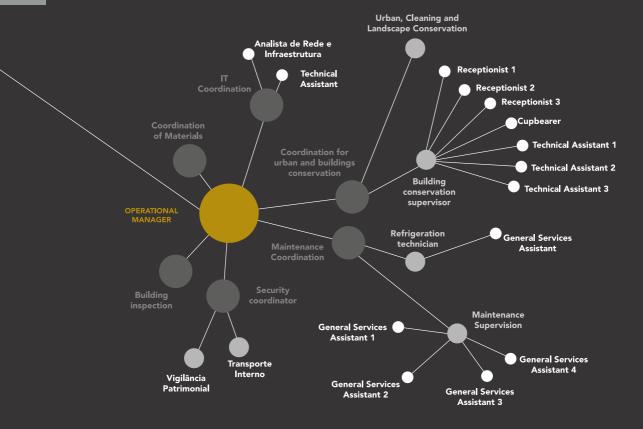
To implement the strategic plan, as well as to carry out the activities and services of the Park, the CEO is supported by a team formed of 48 employees⁴ (G4-9),organized in six management areas.

The Science Park team is complemented by 25 outsourced employees (**G4-9**), that work in the property security and landscape gardening areas (**G4-10**).

⁴ This data assessment refers to December 31, 2016.

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TRANSPARENCY AND INTEGRITY



The Park develops the Transparent Park program (Parque Transparente), a series of actions that make publicly known the data of the institution. Among these activities there are: daily information updating on the website and on the social networks of the Park, sending the monthly newsletter to a large audience reporting on the major activities of the Park and the Incubator, a monthly visiting program to the general public and this sustainability report.

In addition, we are subject to Law number 12.527/11, which regulates the access to information provided for in the Federal Constitution in Article. 5, clause XXXIII. Thus, besides responding to occasional questions, we provide at our electronic address the base documents which supported the creation and operation of the UFRJ Science Park, according to the decision of Consuni (University Council of the Federal University of Rio de Janeiro), as well as Coo-

peration Partnerships signed with partner organizations.

With the purpose of respecting the publicity principle, and because we are placed within a federal area, we also provide at our electronic address the Tenders and Public Calls for the establishment of resident business associations and services provider.

As an innovation environment, located on the campus of the Federal University of Rio de Janeiro, we are subject to the General Bidding Law (Law n° 8.666/93), Decree Law n° 9.760/46, Law n° 9.636/98, Decree n° 3725/2001, Decree Law n° 271/67, and to the norms that regulate innovation and research such as Law 10.973/04, Law n°13.245/16, and Law 8.958/94, this latter addresses the relationship developed between the Universities and their Supporting Foundations, particularly relevant if we consider that the Science Park is managed by the COPPETEC foundation.

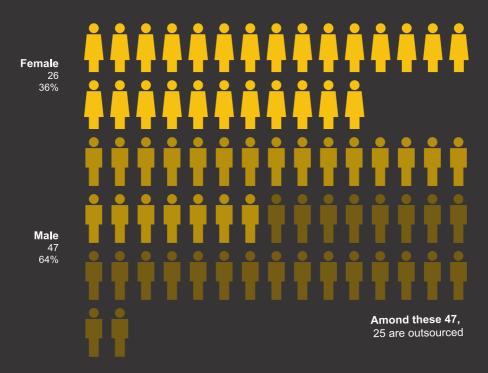
HUMAN RESOURCE



PROFILE OF THE ADMINISTRATION EMPLOYEES OF THE PARK IN DECEMBER, 2016 (G4-10)

EMPLOYEES CLASSIFIED BY GENDER

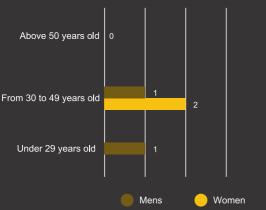
In 2016 the Park had 73 employees (48 hired and 25 outsourced) (G4-9).



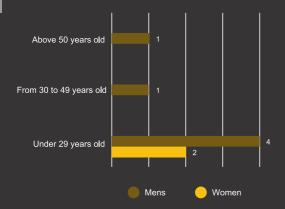
To provide a truer picture of the daily routine of the staff of the Park, the outsourced employees were included in the number of employees of the Park in this report (G4-22). On December 31, 2016, the Park had 48 hired employees (26 women and 22 men) and 25 outsourced (all male ones). On December 31, 2015, there were 50 hired (28 women and 22 man) and 39 outsourced (37 men and two women). After analyzing

the number of hired employees of the Park, it is possible to observe that 54% of them are women, and 19,23% of this total work as managers and coordinators. Among the men, 22,72% work as managers and coordinators. However, we have the same quantity of men and women doing these jobs (the figures are the same as in 2015). The rate of employees turnover was 4,2%, with admission of four new ones and the

EMPLOYEES WHO STARTED WORKING IN THE PARK IN 2016



EMPLOYEES WHO LEFT THE PARK IN 2016



release of eight. All the hired employees took on pre-existing Jobs. (G4-LA1).

Out of the four employees hired by the Park, one was a Young Apprentice (from the Jovem Aprendiz Program), one was a trainee and two were eople with disabilities (PCDs), hired through the COPPE Inclusion Program.

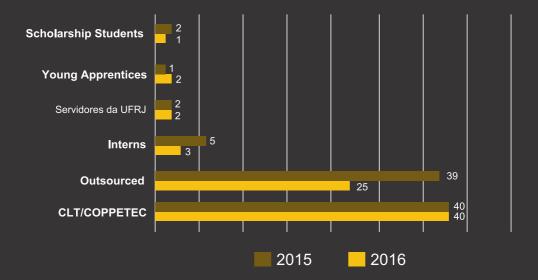
PCD (PWD) is the term used to refer to people who have permanent limitations (people with both visual and hearing impairment, as well as physical and intellectual disability). The COPPE Inclusion program was created by COPPE and COPPETEC Foundation to ensure that people with disability have access to work with quality in the technological area, in accordance with the Quotas Law (Law 8.213/91).

In 2017 the Park's building and the public areas will be reassessed so as to outline an accessibility plan.

EMPLOYEES CLASSIFIED BY TYPE OF CONTRACT*

Of all the administration staff of the Park, 55% are hired from outside the ranks of the civil service by the COPPETEC Foundation and 34% are outsourced ones who

work in security and landscape maintenance. The decrease in this number in relation to 2015 was due to a restructuring process in the contracts.



EMPLOYEES CLASSIFIED BY AGE*

The average age of the hired employees of the Park is 37 (one year more than in 2015), and the ages vary from 21 to 61 years.

Under 29 years old

11
23%

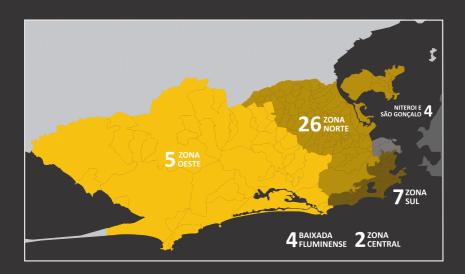
From 30 to 49 years old
21
45%

Above 50 years old
15
32%

^{*} the data included here refers to the Park's own employees.

EMPLOYEES CLASSIFIED BY PLACE OF RESIDENCE*

By analyzing the geographical distribution of the Park's employees, it can be observed that the administration employees live in the North area of the city. From the 48 employees, 54,1% live in North area neighborhoods (4 live in the *Maré* community and 2 in *Vila Residencial*).



EMPLOYEES ACCORDING TO THEIR ACADEMIC DEGREE*

After analyzing the educational level of the hired administration employees, we observed that 70,83% (34) have either gone to technical schools or have a Bachelor degree or have completed a post-graduation course

and 25% have only finished high school. Comparing to 2015, there was a 4% increase in the number of technicians, employees with a Bachelor degree and post-graduated ones.



^{*} the data included here refers only to the Park's own employees because data on third-party companies was not available at the moment this report was written

Life quality in the park



We understand "life quality" in the Science Park as the creation of an environment where it is possible to study, work and develop new contact networks, being certain that it was worth the amount of time invested.

In this respect, the Science Park firmly believes in urbanization to create a positive environment so that people can healthily relate with their peers and with the surroundings.

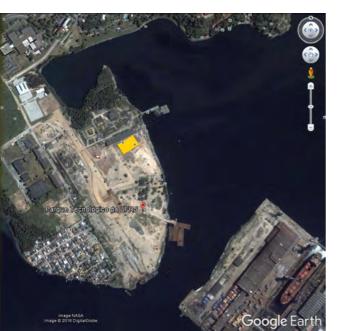
Urbanization in the park (G4-EN13)

The Park's urbanization was based on the landscape design developed by CAP Landscape Environmental Consultancy - Consultoria Ambiental Paisagística), a firm founded by Fernando Chacel. It is a unique area within the University campus that uses native plant species of the local ecosystem, in this case, sandbank vegetation. The Project was

developed in 1998 and complies with the law 6938, which provisions about the National Policy for the Environment. Its objective is "the preservation, improvement and restoration of the environmental quality which is favorable to life", aiming at "making the economic-social development compatible with the preservation of the environmental quality and the ecological balance".

Therefore, the Park is born committed to create an environment which fits into the landscape project which includes mangroves and native vegetation.

PARK IN 2003



PARK IN 2016



The Parque Verde (Green Park) Program is responsible for permanently maintaining and preserving biodiversity. The result of this program is the vegetable garden, which meets the requirements and internal demands of production and of landscape design of all the Park's green areas. This garden is the main supplier of seedlings and fertilized land (produced with composting of pruning waste in the Park). In 2016, the Park expanded its green area planting more than 50 trees of three species from the Atlantic Rainforest.





In 2016, we observed some fauna species in the Park (Callithrix penicillata apes whose popular name is either wied's marmoset or black-tufted marmoset (*mico-estrela or sagui-de-tufos-pretos*).



GREEN AREAS					
Green area of marginal mangrove strip / Green corridor	7.014,30				
Green area close to the buildings /green area ornamental plants	9.828,21				
Vegetable Garden and composting areas	3.855,30				
Green area without afforestation	17.806,66				
Green area with in-progress landscaping implementation	5.220,87				
Green and wooded area	29.935,43				
TOTAL	73.660,77				

People's engagement



The Science Park presupposes the existence of a committed, active and connected community. When people identify with a place, a project or even an idea and, somehow, work towards strengthening them, we can say that they are engaged. For this reason, the Science Park has sought to develop its projects taking its users' opinions into consideration. By placing the user at the central place during the formulation of solutions, we progress towards a community more engaged with the present and future of the Park. During 2016 the Park promoted a series of engagement actions and maintained others already taken in the past years.

The actions were:

Information gathering to create the Program Life Quality in the Park

In 2016, we conducted an opinion survey with our companies, laboratories, administration team of the Park and administration of the COPPE Business Incubator to identify the programs and services that these collaborators considered relevant to improve the life quality in the Park.

Based on the research, the following development areas of the projects were identified:

- Health and well-being
- Culture and sociability
- Eating
- Convenience Services

The actions highlighted by our community In each area were:

Health and Well-being

- Physical activities (gym, walking,running, zumba, labor gymnastics, etc.)
- Green square with tables and benches
- Health room (with health tips weighing service, blood pressure measurement, etc.)
- Outpatient facility/infirmary/health center
- Blood donation campaign
- Bicycles and bicycle rack

Culture and sociability

- Integration activities (happy hourbarbecues, integration parties, breakfast)
- Entertainment options (electronic games and musical instruments)
- Lona cultural a covered open-air theater (including cultural fairs and technology fairs

Eating

- Restaurants
- Convenience Store (café, ice-cream parlor, bakery, health products offering)
- Food trucks
- Bar

Convenience Services

- ATM machines available 24 hours
- Drugstore
- Post offices
- Beauty Parlors/barber shops
- Nursery
- Lottery retailer
- Shoemaker
- Movie theater
- Print shop
- Stationery shop/gift shop

Based on the demands identified, during 2016, the Park promoted its Gastromomic and Cultural Fair and the Blood Donation Campaign.

Gastronomic and Cultural Fair of the Park

During 2016, there were three editions of the Park's Gastronomic and Cultural Fair, a project in a partnership with the UFRJ Gastronomy Course. One of its goals was to create a new environment within the Park to promote interactions and generate opportunities for integration between people. The result was fully achieved with around 700 people daily coming to the Fair.

Different activities were held during the fair and were carried out by UFRJ. Among them: the Gastronomy course, with professor and students; the Universidade das Quebradas; some extension projects of the university, such as: UFRJ Challenges, with the exhibition of its prototypes; the project Story Tellers Students, from Martagão Gesteira Pediatrics and Childcare Institute (IPPMG/UFRJ); ATIVIDA, with activities to improve life quality; UFRJ Agroecology Faira; and food trucks and bands made up of UFRJ students.









This was a very successful project, becase it helped to create a new gastronomic and cultural environment in the Park and we intend to continue to promote it. After all, bringing together one of the best innovation environment of Brazil and the well-known UFRJ

gastronomy course will certainly generate the main fuel of an innovation environment: highquality interdisciplinary interactions.

Blood Donation Campaign

The first campaign for blood donation happened on March 11, 2016, in a partnership with HEMORIO, when 43 units of blood were donated.

Among the donors there were professors and students from UFRJ, employees from the resident companies of the Park and from Coppe/UFRJ Business Incubator, researchers of the university laboratories and administration employees from both the Park and the Incubator.





The Program for audience education was created in 2015 in a partnership with Rio de Janeiro State Department of Culture and aims at stimulating different audiences to experience artistic performances and/or cultural spaces.

In 2016, the audience attended four shows, among which classical music, contemporary dance and a theater play, including comedy and musical. The total of 66 people participated in the program, among them 30 employees of the Park and 36 of resident companies, with an average number of 16 people per show.

Date	Show	Employees of the Park
03/20/2016	Medida por medida	25
08/18/2016	Quarteto Radamés Gnattali	15*
09/02/2016	Vero	10*

^{*}Only administration employees of the Park

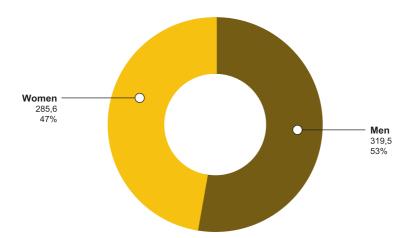
Support for employees qualification

One of the policies of the Park is to encourage the qualification of its employees. For that purpose, the Park offers 50% scholarships for courses, trainings and qualifications. In 2016, 19% of our employees benefited from this policy. There was a total of 2706 hours of qualification during the year, with an

average of 300 training hours per employee. In 2015, the number of average hours was six times smaller than in 2016.

The quantitative discrepancy concerning the hours of qualification between men and women employees was due to the courses taken, since out of the nine qualified employees during 2016, five were women and four were men.

TAVERAGE TRAINING TIME PER EM



53

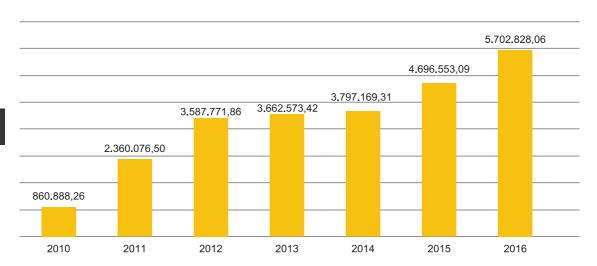
FINANCIAL MANAGEMENT OF THE PARK (G4-9; G4-EC1)

The financial resources of the Park are managed in a partnership with a foundation of support to the university, the COPPETEC Foundation. The Park's funding sources Park derive from four modalities: assignment of

use of shared buildings; land services charges; shared buildings services charges and funding.

The Park generates an additional funding source which is the assignment of land, according to the chart below; however, these resources are totally transferred to the university.

REVENUES FROM ASSIGNEMENT OF LAND USE



Funding Sources of the Park (G4-9)

Funding Sources of the Science Park - 2016					
Land Services Charges	7.869.160,05				
Shared Buildings Services Charges	872.425,12				
Assignment of Use of Shared Buildings	699.820,38				
Funding Revenue (Finep)	6.955.947,80				
Total	16.397.353,35				

The resources of funds derived from FINEP (Studies and Projects Financial Supporter), and are, therefore, used according to the project approved by the Agency. These resources were used to continue the first phase of construction of CUBO⁵ and to pay part of the personnel.

The revenue derived from the assignment of use of the shared buildings is not entirely reverted to the Park's operation. Part of it, 1/3 of its value, goes to a fund created by the Park, called Fundo de Bolsas – Scholarship

Fund, that currently gives financial support to the Institutional Program of Scholarships for Scientific Initiation in Middle Schools(Programa Institucional de Bolsas de Iniciação Científica para o Ensino Médio - PIBIC-EM). Another part, 1/3, aims to sponsor annually selected UFRJ extension projects. And finally, 1/3 of these resources pay for investments necessary for the Park's operation.

Thus, the Park' operation is funded in the following manner **(G4-EC4)**:

Funding Sources that financed services and operations of the Park in 2016					
Land Services Charges	7.869.160,05				
Shared Buildings Services Charges	872.425,12				
1/3 Assignment of use of Shared Buildings	233.273,46				
Funding Revenue (Finep)	6.955.947,80				
Total	15.930.806,43				

The operational costs of the Park in 2016, totalized R\$ 7.351.181, 20 distributed

according to the following table, closing the year with a budget surplus.

Annual Operational Cost - 2016					
Concessionaires	617.824,90				
Bulk Material	144.108,23				
Travel and subsistence expenses	15.274,31				
Human resources	3.688.290,73				
Third-party services	2.187.080,42				
Administration fee	698.602,61				
Investments	-				
Total	7.351.181,20				

⁵ The Science Park Cultural Center, focusing on art and technology, aims to create an environment that fosters interdisciplinarity In the cultural and creative field.

ECOEFFIENCY MANAGEMENT OF THE PARK

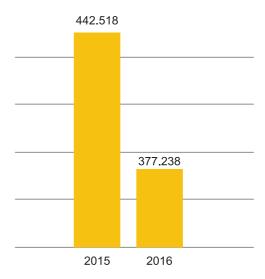
In 2015, the Park systematized its actions in the "Parque Ecoeficiente" (Ecoeffient Park) program, which aims to promote the reduction of environmental impacts and of consumption of natural resources (energy and water consumption, recycling and reuse of solid wastes).

Energia (G4-EN3)

In 2016, the energy consumption of the administration buildings of the Park (entrance building, administration building and the shared buildings (CETIC⁶ e MP⁷) was of 377.238 KWh/ year, recording a 15% decrease in the energy consumption if compared to the same period in 2015 (442.518 KWh/ year). It is important to highlight that, comparatively to 2014, the year of 2015 had already recorded a 26% reduction. This reduction was due to some measures that have been taken since 2015:

- Determine the operating hours for the refrigeration equipment (chiller) located in the CETIC building;
- Switch off one of the elevators of the CETIC building;
- Use of ambient lighting based on the natural light of the building.

ENERGY CONSUMPTION IN KW/YEAR



Water (G4-EN8)

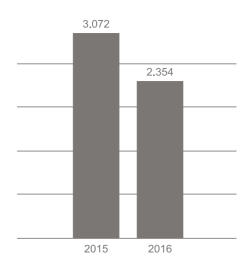
The water consumed in the administration buildings and in the Park's buildings in 2015 was 2.354 m³/ year. In 2015, there was a 3.072 m³/ year consumption. The consumption reduction from one year to the other was of 15%, revealing the efficacy of the measures taken since 2015 (pointing out that in 2014 the consumption reduction had already been of 26%). These measures were:

- Raising awareness about water waste;
- Increase the use of rain water cisterns, used in irrigation;
- Operational planning and maneuvers to minimize waste, when cleaning water reservoirs and cisterns.

⁶ Center of excellence in Information and Communications Technology (CETIC) – Shared or multi-use building to house small and medium-sized companies.

⁷ Prototyping Module (MP) — Shared or multi-use building to house small and medium-sized companies that need space for prototyping.

WATER CONSUMPTION M3/YEAR



Mobility 🗸

The Park Mobility Program aims to facilitate the movement of people between the Park, the university campus and its connections with the city of Rio de Janeiro.

The actions that integrated the program in 2016 were: free transportation to carry people around and the feasibility study to implement water transportation in the Park.

For free transportation, the following modalities were used:

- The UFRJ Mayor UFRJ provided 13 bus lines to move people around within the campus and intercampus (leaving the Fundão campus and going to other UFRJ units and strategic places, at the end of the night classes);
- The Fundo Verde (Green Fund), one of the laboratories located in the Park, provided a van for the internal transportation from Monday till Friday, from 8 AM to 5:30 PM 17h30, driving from the BRT line to the Park;
- The Science Park provided two jardineira electric trucks which drove from the Park to the Incubator and the University Rectory Building.

In 2016, around 18 thousand people were carried in these *jardineiras*.

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Monthly report on the frequency of the jardineira electric truck														
	2016													
Schedule	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ouc	NOV	DEC	%	Total
From 7 to 9 am	296	246	319	275	261	255	232	282	356	286	274	246	18%	3328
From 9 to 11 am	257	295	318	270	313	318	244	333	401	357	286	210	20%	3602
From 11am to 2 pm	1050	951	958	893	999	821	806	563	792	590	553	495	52%	9471
From 2pm to 4pm	96	125	144	88	189	150	0	143	210	189	178	156	9%	1668
Total	1699	1617	1739	1526	1762	1544	1282	1321	1759	1422	1291	1107	100%	18069

A feasibility study was carried out to implement waterway transportation in the Park. This type of transportation was considered possible to be implemented. In 2017, the UFRJ Science Park intends to call tenders for the the assignment of two pre-existing piers in its area to be used and explored by the corporation specialized in waterway passenger transportation. The service will be provided by means of a transportation agreement between the company and the user, with departure time, values and periodicity previously established. This model does not anticipate the ticket daily sale.

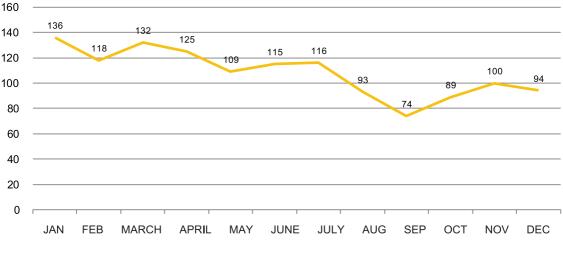
Discharge of effluents and wastes



The discharge of effluents and wastes is one of the pillars of the sustainability policy of the Science Park. Next we present the activities carried out during 2016.

Follow-up of the waste destination

The total monthly volume of non-dangerous waste for landfilling the Park's administration site was of 130,10 m³.



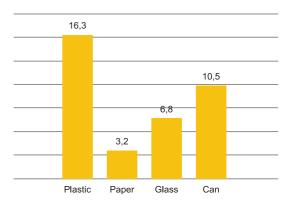
Sustainable destination for the maintenance waste of the landscape

All the waste derived from landscape maintenance is stored in order to produce decomposed matter, high-valued organic manure for plant beds. This way, it is possible to eliminate the waste discharge and cut down on the financial expenses with the use chemical manure.

Recycling in the Park

In 2016, we started a partnership with the UFRJ project Recicla CCS (CCS Recycles). The first action carried out was a pilot project for selective collection during the Park's third Gastronomic and Cultural Fair. During the first three days of the fair all the waste produced was selectively collected.

SELECTIVE COLLECTION DURING THE PARK'S 3rd GASTRONOMIC AND CULTURAL FAIR IN KG



The Recicla Parque (Park Recycles) Project will be implemented in a constant and effective manner in 2017.



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Among the large companies installed in the Park, three of them practice selective collection of its waste. The same is done by one small/medium-sized company, 25 start ups and the administration of the Coppe⁸ Business Incubator. Data from the large companies are described in the table below.

Recyclable per year in kg							
	Paper/Cardbo- ard	Plastic	Organic				
FMC	2.304,00	722,00		0,00			
GE	10.800,00	8.400,00	6.996,00	0,00			
Siemens	1.366,00	57,00		32.941,80			
GPE		47	0,00				
Tenaris		0,00					

Discussion about Circular Economy

In 2016, the Park started a discussion on the new forms to produce, consume and interact using a circular economy.

Circular Economy

There are new business forms that foster a disconnected growth of the natural resources exploration. Products become services and consumers become users. This is an economy whose development is based on generation of value, production and efficient consumption.

⁸ The 25 startups and the COPPE Business Incubator have their waste collection carried out by the University campus administration with the support of the Technical Incubator to Popular Cooperatives (Incubadora Técnica de Cooperativas Populares -ITCP). Since the waste does not go through any kind of sorting center in the university and goes straight to the garbage pickers cooperatives, this waste is not counted.



NEC - Center of Circular Economy

In May of 2016 the Center of Nuclear economy (Núcleo de Economia Circular - NEC) was launched in the Park with the support of the Consulate of Netherlands and facilitation of the company Exchange 4 Change Brasil, marking the beginning of partnerships in the field of circular economy.

It aims at generating knowledge and creating opportunities for exchanging experiences to develop circular economy in Brazil, providing solutions that can be applied to the Brazilian reality. For this purpose, the Center has the participation of a multidisciplinary team which also interacts with international institutions recognized in the area.

During the 2016 Olympic Games, in August, the Circular Economy Seminar was organized at the Holland Heineken House. During the event, the Science Park could contribute with its positions participating in the Shared resources & sharing services round-table.



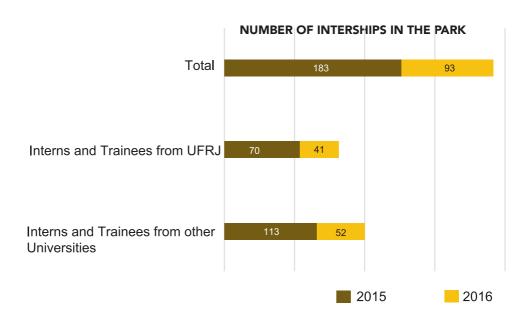
THE PARK AND THE LOCAL DEVELOPMENT

DEVELOPING THE UFRJ STUDENTS

The park contributes to the development of the UFRJ students in different ways; creating qualified job opportunities; providing them with the opportunity of getting in contact with real challenges faced by the private sector and bringing up the innovation theme to the daily activities of the university; contributing for the third mission of the universities (build up an entrepreneurial university oriented towards facing the social challenges).



Creating internship opportunities in the Park is important to make its enviorment more dynamic and to foster the development of the UFRJ students. The total number of internships in the Park in 2016 was 93. 44% of this total was granted for UFRJ students.



In comparison with 2015, there was a 50% decrease in the number of internships due to the political and economic crisis that Brazil and the world had to face.

UFRJ HUB Space – Networked Laboratory for Experimental Projects

The UFRJ HUB Space is a networked laboratory for experimental projects that aims at becoming a landmark for those academics that are interested in changing society by means of scientific and technological discoveries. In this physical space you can share resources, equipment and services. The HUB is formed and managed by students, experts of the Science Park and experts of the Agency for Innovation, whose aim is to transform knowledge produced in the university into useful innovation for society.

The initiative works as a hub for hundreds of entrepreneurial movements by students and features a *Makerspace* (a workshop for collective use), a FabLab (a workshop for digital projects) and a MediaLab (a laboratory for interdisciplinary projects in several areas, such as design, the arts, journalism, etc).

The Space wants to be a reference for those who wish to innovate in their fields and need help in developing their activities. This is a support network for social projects, startups and collaborative projects.

In December 2016, the UFRJ HUB Space was opened with a Sustainability Hackathon that lasted three days and resulted in five solutions that will, eventually, be used in the Park.







HACKHATON

Hackathon is an event that gathers entrepreneurial people and those who love technology and sustainability for a marathon of programming, prototyping and collaboration.

It can last one day or even one week and, in addition to the exchange of ideas and networking, often participants can also compete for prizes that help them develop their projects. Due to the opportunities given to participants as well as to those that promote it, marathons of hackathon have become some sort of open dynamics of innovation. For this reason, companies are increasingly promoting this kind of activity, which is also applied to several different fields of knowledge.

This type of meeting is a great opportunity for praising talents and generating innovative proposals.

PARK'S SUSTAINABILITY HACKATHON – DECEMBER 6 TO 8, 2016

Do we really do everything we can to decrease human impact on the environment? What can we, here, teach the world? What are we not understanding at the moment that can cause unbalance in the future? These were the questions on which the first Sustainability Hackathon was based. Held at the UFRJ Science Park, the event aimed at creating and implementing ideas for a more sustainable future by means of interventions in the urban space.

It took place on December 6-8,2016, and gathered 25 participants in a marathon of ideas on the creation of solutions that could meet the challenge. How can we transform the urban environment into a more sustainable and intelligent space?

The projects involved in the Hackathon were:

- Ecominerva A big data platform with augmented reality to catalogue the Park's flora as well as to monitor the Park's sustainability actions.
- Pufi A game created to teach waste recycling. It is based on the concept of "smart waste bins" that can verify whether the waste deposited in them is appropriate. If someone uses the right bin, they will be given access to the Pufi game on their cell phone.
- UFRJ Sustainable Network It is a project on the creation of living spaces on the campus that are made of recycled materials and bio-building techniques.
 These could be collected through collaborative actions and group gatherings as well as by the people that circulate on the campus.
- Architecture and Vermi Composting
 Urban Systemi (S.U.A.V.E) The project
 aims at building a recycling center for
 organic wastes. It was developed by
 students on Xerém campus.

⁹ The Project called Sustainable House was also developed but it was not presented during the Hackathon. It is scheduled for the 2017 presentation.

 GreenData – This system combines traceability of water consumption and of electrical energy from different buildings and places at the UFRJ Science Park. It offers a statistical comparison of local data and allows for the detection of over-consumption, information which is immediately sent to the system's manager.

Resultado:

Best Green Hack: GreenDATA Project. Best Environmental Solution Hack: SUAVE Project.

Best Popular-vote Hack: given to all participating projects.

For more information, click here: http://cultiva.referata.com/wiki/Hackathon2016



SOCIAL INVESTMENT

The Program "Parque Investe" (lit. The Park Invests) aims at stimulating the development of UFRJ by directly contributing to its mission through funding for programs, projects and actions that value experimentation and multiple ways of knowledge and expression. Support consists of direct funding, institutio-

nal support or aid in getting funds from resident companies, according to the Support and Sponsorship Rules of the Park.

Theory + Practice =

More complete academic training.

Supported projects:

Projet	Number of students in the project	Number of students directly involved	Amount of Social Investment
UFRJ Representing Sports Team	200	150	R\$ 156.000,00
UFRJ Desafia	112	6.000	R\$ 150.000,00
Hub UFRJ	05	4.000	R\$ 50.000,00
Gilberto Velho Theses Prize	05	6.000	R\$ 50.000,00
COPPE Business Incubator	145*	460	R\$ 150.000,00
Total	617	16.610	R\$ 421.000,00

^{*}Students, professors, UFRJ employees and other people outside university.

UFRJ DESAFIA

The group UFRJ DESAFIA (lit. UFRJ Challenges), founded five years ago, gathers competing teams of the Polytechnic School of UFRJ that are very experienced in the categories in which they are competing. Some of them are over ten years old.

UFRJ Desafia currently includes the following teams:

- Minerva Bots;
- Ícarus Formula SAE;
- Minerva Aerodesign;

- Minerva Baja;
- Solar Brasil;

The partnership with the Park increases the technical quality of the teams in both national and international competitions

UFRJ Representing University Sports

This is a university extension Project of the Coordination for Sports of the School of Physical Education and Sports. Its aim is to develop, coordinate and institutionalize actions that stimulate university competition sports.

In 2016, the project included, approximately, 350 academic-athletes, professors and technicians in basketball, futsal, handball, judo, karate, swimming, volleyball (women's and men's categories), football, rugby (men's category).

GILBERTO VELHO THESES PRIZE

The Gilberto Velho Dissertation Prize is supported by the UFRJ Science Park ever since its beginning, in 2013. The project, in a partnership with Pro-Rectory for Graduate Studies and Research, awards the five best Ph.D. dissertations defended each year from five different areas: Life Sciences, Technological and Nature Sciences, Social and Human Sciences, Letters and Arts, and Innovative Dissertation. Winners were: Paula Grazielle Chaves da Silva, with a thesis called "Interaction between blood cells, neurodegeneration and neurogenesis in decapod crustaceans" (Morphological Sciences Program); Alexandre Solon Nery, with a thesis called "Automatic complex instruction of efficient application happing on to ASIPs" (Engineering of Computing Systems); Angela Facundo Navia, with a thesis called "Exodus and shelters: Columbian refugees in the South and Southeast of Brazil" (Social Anthropology Program); Daniela Hockmann Labra, with a thesis called "International Legitimization of Contemporary Brazilian Art:

analysis of the path 1940-2010" (Visual Arts Program); and George Carneiro Campelo, with a thesis called "Project methodology for the anchorage system of flexible pipelines and proposal of new technology" (Civil Engineering Program).

Each winner is awarded a prize of R\$ 10,000 and their advisors get a trip to participate in scientific events. Criteria for winning the prize are: the novelty of the research, its relevance for the scientific, technological, cultural and social development of the country, and value added to the Brazilian educational system.

DEVELOPING THE UNIVERSITY **S**



UNIVERSITY-COMPANIES INTEGRATION

This is the purpose of the Park and it is through the university-companies integration that the Federal University of Rio de Janeiro can reinforce its mission. The relationship between the university, the government and the companies is a fundamental element towards the country's innovative capacity, since it helps implement development patterns based on science, technology and innovation. In the innovative environment of the Park, the university's ability to create can be aligned with the companies' ability to innovate, in order to come up with new solutions and generate wealth for society.

The interactions that took place in 2016 focused on the following research areas:

- Imaging science and technology
- Big Data
- **Analytics**
- Machine Learning
- Electromagnetic Compatibility
- Voice Over IP Communication
- Software development
- Artificial Intelligence
- Internet of Things
- Sentiment analysis

- Text mining
- Computer simulation
- Scoring
- Bot
- **Robotics**
- Automation and Control
- Nanotechnology
- Water treatment
- Membrane monitoring
- Fluid mechanics
- Drilling
- Sensor physics
- Formation Evaluation
- Carbonates and Enhanced Oil Recovery
- Reservoir Modeling
- Full Waveform Inversion
- Risers
- Corrosion Fatigue
- Materials qualification
- Energy efficiency
- Welding dissimilar metals
- Geosciences
- Telemetry
- Gastronomy

Over 2016, 1,146,737.00 reais were invested in research that established a cooperation with the university. The investment was directed at the research areas mentioned above and it represents 54,92% of the interactions between the companies and the university. The remaining interactions encompassed training for the companies' employees in the Park (21,77%), services which include the use of the laboratories for testing, practices and other companies demands, and the endorsement of academic and cultural events.

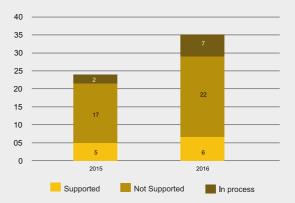
The projects called "UFRJ Initiatives" were also part of the investment regarding the university-companies integration. The university develops these projects so as to receive funding from the companies. However, they must be taken to the Corporate Articulation Management first, who decides whether the projects constitute a collaboration between the company and UFRJ.

Since the beginning of the sponsorship control in 2012, 116 requests for funding from the UFRJ Initiatives have been sent to the Corporate Articulation Management and 29 of them were supported by the resident companies.

In 2016, 35 requests were received, 31 of them were approved and considered as collaboration projects, and 6 were supported by the companies. In addition to these 6 requests, which were sent to and approved by Corporate Articulation Management in 2016, 2 other initiatives were submitted in the previous year (2015).

By establishing a comparison between 2016 and 2015, there was an increase of 46% in the number of requests.

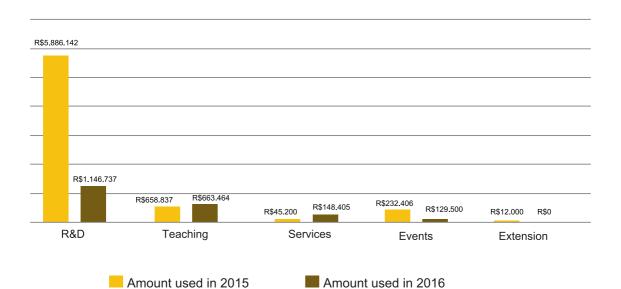
2015 - 2016 COMPARISON



In 2016, most of the initiatives received correspond to events (51%), followed by extension projects (20%), and R&D projects (11%).

All the initiatives supported correspond to events that were organized by the Center for Technology, the Center for Mathematics and Nature Sciences, the Center for Health Sciences, and the Center for Law and Economic Sciences. In 2016, a total of 122,445.00 reais was used in the UFRJ Initiative projects by 5 resident companies.

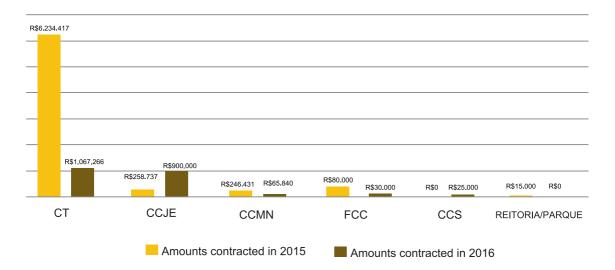
INVESTMENTS IN COLLABORATION UNIVERSITY-COMPANIES INTEGRATION



In 2016, an alteration in the investment rules was made which established that the minimum mandatory amount for collaboration, which was R\$ 3 million, would then be R\$1,5 million per year. In addition to that alteration, the macroeconomic setting was recessive in 2016.

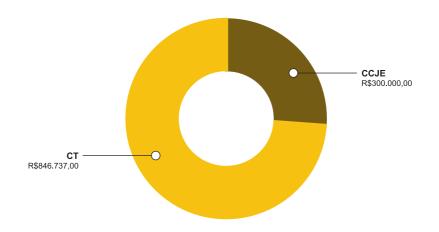
The partnerships between the resident companies in the Park and the university continued in 2016. Most of the partnerships were

between the companies and the Center for Technology (51,11%). However, in comparison with 2015, we can observe that there was a better distribution of partnerships in terms of amount of money used by the Centers. In 2016, 43.10% of the resources were invested in the Center for Law and Economic Sciences. The increase in this Center was 3 times higher.



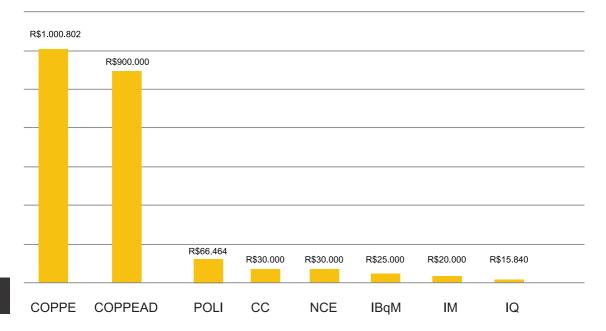
Considering only the interactions of R&D, it can be observed that the amount invested in the university focused on R&D, on the Center of Technology (CT) and on the Legal and Economic Sciences Center (CCJE).

AMOUNTS CONTRACTED IN R&D (2016)



72

The interactions occurred in the following centers and correspond to the following amounts contracted by the companies of the Park with the university:



DEVELOPING THE RELATIONSHIP AMONG COMPANIES

In order for the Park to be an environment of development and innovation, it is important that the companies settled here interact not only with the university, but also among themselves. When this happens, one can say that we are getting closer to a consolidated innovation ecosystem. Therefore, the Park plays a significant role in stimulating interactions. Only then can the relationship between laboratories, small, medium and large companies become a lever for innovation and attract new companies to the Park.

INTERCTION AMONG COMPANIES OF DIFFERENT SIZES

An ecosystem of innovation only becomes effective when the several actors which it includes interact and become strong together. This way, by promoting the interaction among companies of different sizes, the UFRJ Science Park contributes to the productive intensification of the region and creates new business opportunities.

To respond to this objective, throughout the year of 2016 twelve meetings took place with people from UFRJ involved in projects and research, students, and representatives and

trend makers of companies, who all showed various skills in several areas of the university to potential residents and target audiences.

- Panorama and Opportunities in the Oil Industry – with representatives of FGV (Getulio Vargas Foundation) and ONIP (National Petroleum Industry Organization);
- Technological Opportunities of Petrobras: technological and investment priorities for the coming years – with representatives of CENPES/Petrobras (Petrobras Research Center);
- Market Scenarios of Subsea Inspection, Maintenance and Repairing Services – with representatives of CENPES (Petrobras Research Center) and of Santos Basin/Petrobras;
- Workshop on Oil Reservoir Engineering with representatives of CENPES (Petrobras Research Center), Baker Hughes, Schlumberger, Petrec and UFRJ researchers;
- Rio & Software: What is Riosoft's agenda like? – with a representative of RioSoft;

- Smart Cities Urban Mobility with representatives of Siemens, Rio's Operation Center and UFRJ researchers;
- Advanced Manufacturing with representatives of SENAI (National Service for Industrial Training) and ONIP (National Petroleum Industry Organization);
- Presentation of BNDES Technological Fund (FUNTEC) – with a representative of BNDES (National Bank for Economic and Social Development);
- Open Innovation: Interaction between Small and Large Companies – with representatives of the Agency for Innovation of UFRJ, of the Elo Group companies, Dell EMC and Oilfinder;
- Presentation of the Supercomputer with UFRJ researchers;
- Innovation and Entrepreneurship in Health Sciences – with representatives of the SFY companies, Forebrain and D´Or Institute;
- Presentation of the COPPE-Columbia Center for Urban Solutions with researchers from the University of Columbia and UFRJ.



In addition to these meetings, 12 Open Talk events took place, in which the Park allows experts to present themselves to the resident companies:

- Cycle of Conferences on Intellectual Property: Patents – with a representative of Kasznar Leonardos office;
- Cycle of Conferences on Intellectual Property: Trade Secrets – with a representative of Kasznar Leonardos office;
- Cycle of Conferences on Intellectual Property: Contracts: Basic Cautions and e Provisions on Technological Innovation: Perspectives of the Good Law – with representatives of Inventta+BGI;
- Corporate Sustainability with a professor of UFRJ/COPPEAD (Business Administration Institute);
- NASA's Culture of Innovation with a fellow from Cambridge University and

- with the support of Elo Group, ANPEI and Sebrae;
- Corporate Growth with a professor of UFRJ/COPPEAD (Business Administration Institute).
- Finally, three round tables on the Strategic Plan were organized, which were open to the Park's community, and one debate on circular economy also took place.
- The University of the Future: Teaching, Research and Extension for development purposes;
- The Future of Rio: Economy and Multiple Aspects of Development;
- Low Carbon Economy: Energies of the Future and the Challenges of the Cities;
- Circular Economy on the table.



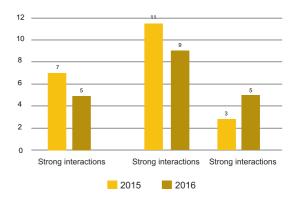
In 2014, the Park created interacting cells whose main objective is to stimulate interactions between the companies and the university, by helping the former develop new products and innovative services.

At the end of 2016, a survey was carried out in order to evaluate the interactions¹⁰ that took place throughout the year between the resident companies, the incubated companies and the labs settled in the Park.

We could observe that out of the respondents¹¹ (a total of 16 companies – big and small & medium companies), 11 developed some sort of interaction with the residents – a company or a lab. Regarding these interactions, most of them were weak since there were conversations about possibilities, but no deals were closed.

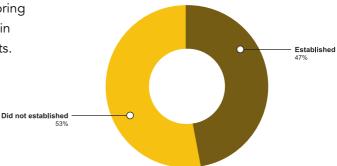
Three companies stated not having had any sort of interaction with another resident company from the Park in 2016. It is noticeable that there were fewer interactions between the companies in 2016 than in 2015 and the collected data indicate that the Park needs more effective actions to help bring the companies closer and assist them in developing new proposals and projects.

NUMBER OF COMPANIES PER INTERACTION



Another important aspect to evaluate the innovation ecosystem is the relationship between the Park's companies and their respective productive chains. To assess this matter, the companies were asked if they had supplied any product, service or whether they had established any technical cooperation to Petrobras in 2016.

COMPANIES THAT SUPPLIED A PRODUCT, SERVICES OR TECHNICAL COOPERATION TO PETROBRAS IN 2016



¹⁰ The options for answers were: "weak interaction" (there were conversations about possibilities, but no deals were closed); "strong interaction" (a deal was closed and/or actions were executed); and "no interactions established".

¹¹ The following companies did not answer the survey: Ambev, Ambipetro, BR Distribuidora, Inovax, L'Oréal, Mobicare and PAM Membranas.

DIVERSIFICATION OF ECONOMIC SECTORS AND COMPANIES' SCALE

The search for diversity in the companies activity sectors is essential for the Park to keep its sustainability in the long run and partnerships with companies such as GE, L'Oréal, Ambev and FIOCRUZ represent its important steps towards diversification of the activity sectors. Therefore, the concentration of companies which relate in a direct or indirect way to the O&G sector has been exceeded. To continue the expansion in different sectors, we have been developing prospecting plans by aligning UFRJ's competence with the city of Rio de Janeiro's talents.

In addition to it, the Park has taken the challenge to diversify the companies' scale with the objective to increase the number of startups and Small & Medium companies all of which add value to the Park's big companies.

In 2016, we prospected plans to attract companies to the Park (mainly small and medium-sized companies). To do so, we received support from Sebrae-RJ (Brazilian Micro and Small Business Support Service), ONIP (the National Organization of Oil Industry), COPPETEC Foundation (Coordination of Projects, Researches and Technological Studies) in order to identify businesses whose main challenge is innovation.

Over the year, 42 companies were invited to on-site meetings. Out of 200 assessed com-

panies, Aquafluxus, FIOCRUZ – Farmanguinhos, GPE, Manserv, Mobicare and PROMEC were the youngest companies in the Park.

The Park reaches the end of the year with more companies than it started despite the difficulties faced due to the macroeconomic situation of the country.

DEVELOPING THE ECONOMY AND THE AREA

EMPLOYMENT GENERATION (G4-9)



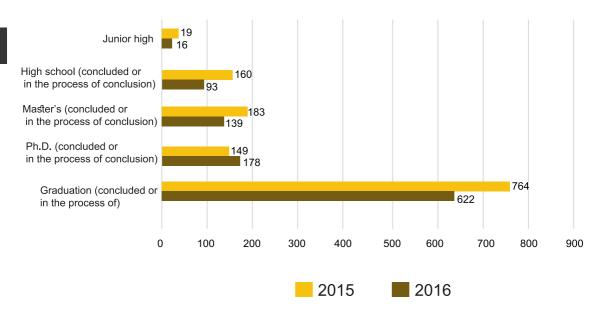
In 2016, the Park had a total of 1,073 employees working at the administration of the Park, in the resident companies, in the labs and in the incubator. In comparison to 2015, there was a 14.6% decrease in employment, which is a consequence of the political and economic crisis that reached national and global scales.

	2015	2016
Administration of the Park	50	73 ¹²
Coppe/UFRJ Incubator	160	159
Companies and Labs settled in the Park	1.065 ¹³	841
TOTAL	1275	1.073

The qualification of the employees working at the resident companies, in the labs settled in the Park and in the Incubator is listed below. We could verify that 30.25% of these employees have a Master's or a Ph.D.

degree and 59.35% have an academic degree. This shows the potential the Park has to elevate the qualification standards of the area in which it is located.

THE PARK'S WORFORCE PROFILE*



^{*} The Park's outsourced employees were not considered in the analysis

¹² This is the first year we consider the administration employees (48) and the outsourced ones (25). Prior to this year, only the administration employees were taken into account.

¹³ This number was updated on December 31st, 2016 according to a new methodology applied to calculate the employment rates generated by the residents in the Park. Until 2015, we had considered the number of the employees affiliated to the companies whether they were in the physical space of the Park or not, even though they were working on existing projects or developing new ones. As of 2016, we only considered those who permanently work in the Park and the amount of generated employment in 2015 decreased (1,597 to 1,275), considering the new methodology.

Despite the fact that the number of employees decreased, the number of Ph.D. holders increased if we compare 2015 to 2016.

TAXES DIRECTED TO THE CITY

In 2016, the companies settled in the Park generated R\$ 6,140,005.29 in state taxes (ICMS) and R\$ 3,353,934.23 in municipal tax on services (ISS), a total of approximately R\$9,5 million in state and municipal taxes. In 2015, the companies generated a total of R\$7,8 million, which shows a 22% increase of the income taxes in 2016.

KNOWLEDGE (INTELLECTUAL PROPERTY) (G4-22)

The amount of requests filed for intellectual property titles is one of the indicators used to evaluate the innovative activity in the organizations. As to the Park, there are companies that prefer working with the concept of industrial secret instead of working with patents.

With this in mind, we have analyzed a research conducted with the resident companies. In 2016, out of the respondent¹⁴ companies, 5 (representing 33%) stated having filed requests for titles whereas most declared not having filed any. These 5 companies had 61 titles in the patent category and 2 in the trademark¹⁵. Gathering all numbers, 112 intellectual property files were awarded due to the researches carried out in the Park.

All in all, in terms of monitoring and assessment, which has an impact on creating performance metrics, the Park has been assessing whether a deeper knowledge of the possibilities to use the tools offered by INPI (National Institute for Industrial Property) could elevate these numbers. In terms of orientation, the Park has put an effort on two fronts: 1) bringing the Innovation Agency of UFRJ, sector responsible for dealing with intellectual property in the university, and the Pro-Rectory of Graduate and Research of UFRJ (PR-2) closer; and 2) promoting lectures on the theme. In 2016, we organized some lectures on patents, industrial secrets, contracts regarding technology transfer and trademark.

SUPPLIERS

Our suppliers are selected according to the best public purchasing practices, including the Law 8,666 (Bidding Law). All procedures (registration, verification as to whether they follow the legislation and hiring standards) are carried out by COPPETEC Foundation, which is the sector in charge of the Park's financial management.

¹⁴The following companies did not answer the survey: Ambev, Ambipetro, BR Distribuidora, Inovax, L'Oréal, Mobicare and PAM Membranas.

¹⁵To conduct the survey with the companies, we required the number of requests for intellectual property titles not only from Brazil but also from other places. Therefore, the comparison with 2015 is not feasible

In order to promote local development, the Park informs its purchase demands to local suppliers, so that they can take part in the public competition process.(**G4-12**, **G4-13**).

In regard to the Park's total resources in 2016, 24.37% were invested in hiring suppliers. Throughout the year, 81 contracts were signed with the suppliers for service deliveries, material for the conservation of buildings, office supplies, computer graphics service, consulting, licenses and software, waste collection, communication, telephony. **(G4-12, G4-13).**

As to the suppliers' location, 47.43% are in the vicinity of the Park and 70.51% in the north area of the city **(G4-12, G4-13)**.

REPRESENTATION

The Park is a relevant innovative ecosystem in Rio de Janeiro and as such it plays an important role in portraying the city as innovative and connected to great themes and challenges of our time. Therefore, in 2016, the Park was visited by 42 institutions, a total of 713 visitors, 544 of them coming from Brazil and 169 from different places in the world.







42 VISITS 713 VISITORS































01 **RUSSIA**









81

In 2016, the Park was also mentioned 317 times by the press (newspaper articles, news agencies, TV reports). It made the headlines of Globonews, Jornal O Globo, Jornal Valor Econômico and Reuters.

Newspaper O Globo

7/10/2016

Fiocruz terá centro de pesquisas na UFRJ em 2018

Desenvolvimento de insumos no Parque Tecnológico vai priorizar doenças negligenciadas

JÉSSICA LAURITZEN jessica.lauritzen@oglobo.com.br

Um acordo assinado ontem entre a Fundação Oswaldo Cruz (Fiocruz) e a Universidade Federal do Rio de Janeiro (UFRJ) promete tornar o Brasil mais autônomo no combate a problemas de saúde pública, tendo como prioridade doenças como malária, esquistossomose e leishmaniose, recorrentes em populações de áreas pobres e rurais.

A partir de 2018, o terreno do Parque Tecnológico da UFRJ, na Ilha do Fundão, vai abrigar o novo Centro de Referência Nacional em Farmoquímica do Instituto de Tecnologia em Farmacos (Farmanguinhos). Lá serão desenvolvidos Insumos Farmacêuticos Ativos (IFA), substâncias químicas que compõem medicamentos e que atualmente são, em grande parte, importadas.

Segundo o diretor do Parque Tecnológico da UFRJ, José Carlos Pinto, a produção nacional de comprimidos e cápsulas, apesar de farta, trata apenas da finalizacão dos remédios.

— É quase impossível tratar doenças, mesmo as mais triviais, sem usar remédio importado e caro. Acho um absurdo — disse ele. — O centro de pesquisa vai ter uma contrapartida social enorme e estimular interação entre pesquisadores da Fiocruz e núcleos tecnológicos.

O vice-presidente de Produção e Inovação em Saúde da Fiocruz, José Bermudez, defende respostas rápidas para doenças negligenciadas:

— O país tem autonomia na formulação farmacêutica, mas não nos insumos. Alguns productos estratégicos para o Brasil não interessam ao setor privado por serem baratos e de pouca demanda, como os que tratam malária e tuberculose. Nesse convênio, teremos uma planta piloto para produzir, em pequena escala, mas suficiente para atender ao sistema público de saúde. •

Reuters Brazil

9/07/2016



Home > Notícias > Internet > Artigo

Polo de pesquisas no Rio busca diversificação além do petróleo

terça-feira, 28 de junho de 2016 16:57 BRT

⇔ Imprimi

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Por Marta Nogueira

RIO DE JANEIRO (Reuters) - Em um dia quente típico de dezembro na cidade sede dos jogos olimpicos, a multinacional de tecnologia EMC lançou em 2011 a pedra fundamental de seu centro de pesquisas na área de petróleo, sem imaginar que poucos anos depois teria que diversificar devido a uma crise da indústria petrolifera, que reduziu vertiginosamente seus investimentos em inovação.

A surpresa não veio apenas para a EMC, mas também para diversas empresas gigantes de petróleo que se instalaram ao seu lado no Parque Tecnológico da Universidade Federal do Rio de Janeiro (UFR), no embalo das descobertas do pré-sal e dos preços mais altos do petróleo no passado.

Mas o diretor-executivo do Parque Tecnológico, José Carlos Pinto, busca formas de evitar que o empreendimento seja mais uma das vítimas da crise do setor de óleo e gás e foca na diversificação, agora que a Petrobras enfrenta uma crise e investe bem menos e os preços do petróleo estão abaixo da metade do que valiam há dois anos.

"O foco inicial nesse setor (de petróleo) em particular... faz todo o sentindo do mundo... o setor foi importante, é importante... Mas eu entendo que desde o inicio o parque nunca foi pensado em um parque temático de óleo e gás", disse Pinto à Reuters.

O polo tecnológico, que juntamente com a UFRJ já recebeu estimados cerca de 2 bilhões de reais em investimentos, sendo a maior parte da indústria petrolífera, agora aguarda a conclusão das obras da empresa de cosméticos L'Oréal e da de bebidas Ambev, cujos prédios já começam a ganhar forma.

Além disso, há tratativas avançadas para a Fundação Oswaldo Cruz (Fiocruz), uma das mais importantes instituições de ciência e tecnologia em saúde da América Latina, arrendar uma das últimas áreas disponíveis no local.

Enquanto isso, empresas com foco em petróleo que lá se instalaram, como as norte-americanas Baker Hughes, Schlumberger, Halliburton e FMC, enfileiram-se em quarteirões recém-construídos e dividem o amargor da capacidade ociosa, pressionados pela cotação do petróleo, de acordo com especialistas ouvidos pela Reuters.

"Escolheu-se o Brasil pelas condições do pré-sal, pelo que a Petrobras representa para o setor... os eventos que estavam acontecendo no Rio, toda visibilidade que a cidade trazia justificava colocar o centro de pesquisa aqui", afirmou à Reuters o diretor de operações da EMC, Fred Arruda.

Fundado em 2003 e localizado em uma ilha na Baía de Guanabara, cartão postal do Rio, o parque ganhou visibilidade entre 2007 e 2012, após as descobertas do pré-sal, lembrou o ex-diretor e fundador do Parque Tecnológico, Maurício Guedes.

"Com o anúncio do pré-sal em 2007, a vocação foi acentuada, então recebemos um conjunto impressionante de grandes empresas, o parque tem hoje um número muito maior de empresas pequenas do que grandes, mas é famoso pelas empresas grandes", disse ele.

Mas os investimentos totais obrigatórios de petroleiras em pesquisa, desenvolvimento e inovação caíram quase 30 por cento, entre 2014 e 2015, para 1 bilhão de reais, com baixos preços do petróleo, crise financeira na Petrobras e falta de atratividade na regulação do setor no Brasil.

(G4-16)

The Park participates in the following institutions:

Member of the following Councils:

- Technology Council of the Federation of the Industries of the State of Rio de Janeiro (FIRJAN);
- Superior Council of Carlos Chagas Filho Foundation for Research Support in Rio de Janeiro (FAPERJ);
- City Council the city of Rio de Janeiro Municipality;
- Consultant Council of ANPROTEC (Brazilian Association of Science Parks and Business Incubators);
- Technology and Innovation Council of the Commercial Association of Rio de Janeiro (ACRJ).

It was member of the following committees:

- Committee for the Promotion of the Relation between Large, Micro, Small and Medium-sized Companies to bolster Innovation ANPEI (National Association for Research and Development of Innovative Companies);
- Executive Group of the Industrial Complex of Life Sciences GECIV RJ State Government of Rio de Janeiro.

It is affiliated to:

- International Association of Science Parks and Areas of Innovation (IASP);
- Brazilian Association of Science Parks and Business Incubators (ANPROTEC);
- National Association for Research and Development of Innovative Companies (ANPEI).

COPPE/UFRJ BUSINESS INCUBATOR

Coppe/UFRJ Business Incubator is a specially designed environment to stimulate the creation of new companies based on the technological knowledge generated in research groups of UFRJ. Systematically, it contributes to converting the knowledge generated in the research activities into innovative products and services that bring benefits to society as a whole.

Founded in 1994, the Incubator constitutes the foundation of the professionals that created the Park's structure. Integrating the Park's environment, the Incubator is the locus of the startups that are part of this innovative ecosystem. Although it is integrated in the Park's environment, the Incubator has its own organizational structure. In 2016, the management board of the Incubator had 11 collaborators, five of them acting in the administration of the Incubator, three technicians, three people responsible for general services and two interns (**G4-9**).

In over 20 years of activities, the Incubator has supported the creation of 110 companies which are responsible for generating 1380 highly qualified jobs. In 2016, the Incubator released to the marketplace not only successful companies but also highly qualified workforce that includes around 50% of Masters and Doctorate holders.

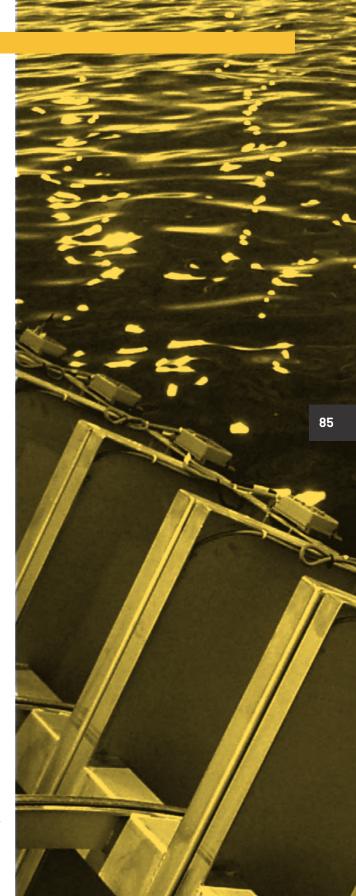
In 2016, the companies of the Incubator have reached a revenue of 12,180,460.00 reais. The resident and graduated companies have been growing steadily because they carry the innovation and flexibility that all new companies should have. The Incubator's companies are called "big small" companies, i.e. they are startups developing pioneering and innovative technologies and solutions; they are able to grow and attract both national and international markets.

In order to help the companies to reach excellence, the Incubator offers services for developing the incubated businesses through the Decolar Program. This program basically consists of three actions: capacitation; individual consultancy and follow-up. These actions focus on five pillars: Market, Capital, Management, Entrepreneur and Technology. All are addressed through individual consultancy, capacitation and follow-up.

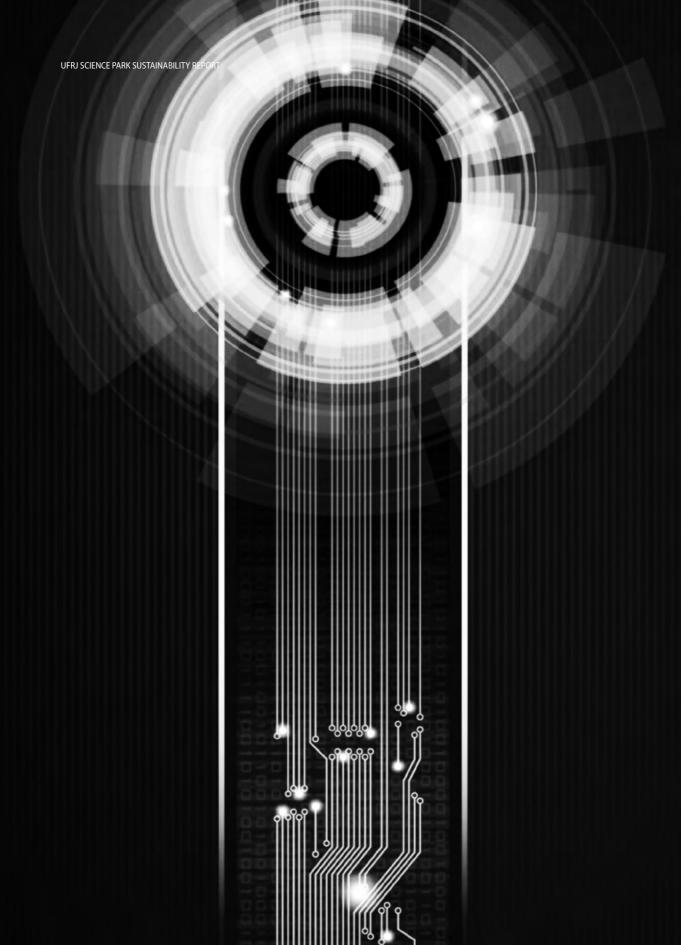
Numbers about the Incubator in 2016			
Number of companies that entered	5		
Number of resident companies	24		
Number of graduated companies	2		
Number of job posts (including partners)	139		
Number of MA and PhD holders	81 (40 MA students or MA Holders and 41PhD students or PhD holders)		
Number of companies that participated in the selection in the pre-selection stage or that submitted a proposal	12		
Approximate total revenue	R\$ 12.180.460,00		
Taxes paid by the resident companiess	Undischarged		

The Incubator also develops other programs that promote entrepreneurship¹⁶:

- Mentoring Program Match between professionals that studied at COPPEAD and resident entrepreneurs from the Incubator;
- Sponsor Program
- Branding Program
- Internationalization Program Geared towards the internationalization of startups;
- Sebrae Business Program Geared towards the structuring of the commercial are of the startup;
- Entrepreneurial Paths Program
- Lean Meetings
- Demoday To get startups prepared for the search of venture capitalists, which means financial and communication training (pitch).



¹⁶ For more information, access :http://www.incubadora.coppe.ufrj.br/.



THE PARK AND THE FUTURE

STRATEGIC PLAN OF THE SCIENCE PARK FOR 2016-2045

The year of 2016 was another landmark in the Park's history. Throughout the year, we had the opportunity to reflect upon who we are nowadays and who we wish to be in 2045. It was a year of intense work that defined where the organization is heading, which culminated in the "Strategic Plan of the Science Park for 2016-2045". In the social and economic contexts, which often work with exceedingly short term plans, it was challenging to look 30 years ahead and realize that a future based on the dynamic of changes and renovations in the innovation ecosystem will demand effort, flexibility and dynamic attitude from the Park. This is the only way for the Park to continue to be relevant in promoting connections, innovation and generation of wealth for society.

Due to these challenges, the strategic direction of the Park for the next 30 years was based on three big pillars: (1) the organizational identity, which includes the mission and values of the organization; (2) the strategic

challenge for the future, which includes the vision for 2045, the proposal of value for the target public, as well as the objectives and the strategies; and (3) the execution schedule, with the projects and strategic actions.

As to achieve the intended Vision of Future, the Science Park takes a strategic positioning with three basic dimensions, which are:

- Value proposal for the target audience segments: through clearly identifying these types of audience, the transformations (benefits) the institution must generate for each segment, classified as "resident companies", "associated companies", "investors" and "UFRJ";
- Final Strategic Objectives: represent the final challenges and their focuses of action in the horizon of the Strategic Plan;
- Management Strategic Objectives: these are the challenges that need to be overcome to ensure a synergic activity of the organization and its partners, so that it is possible to provide a higher organizational performance.

The execution schedule to be developed over the next three years is composed of a portfolio of eight strategic projects and two strategic actions (2017-2020).

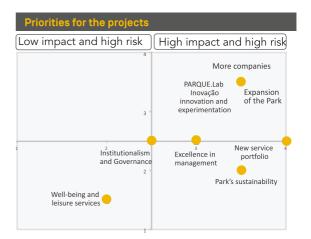
The strategic projects will contribute to the improvement of the Science Park's performance in the innovation ecosystem. They correspond to temporary initiatives that have a beginning and an end and whose objective is to create unique products or services, to establish or deactivate a process, or to promote changes in the business model.

The strategic actions are initiatives that have characteristics of institutional articulation or that aim to boost a process that already exists or an expansion of a line of products and services already offered by the Park. The execution of the strategic schedule will demand an integrated work and daily effort of the management team of the UFRJ Science Park. What is more, the preparation of the project managers and the suitable allocation of resources will be critical factors for the success of the execution of the schedule.

Execution Schedule

Strategic Projects 2017-2020

- 1. New service portfolio
- 2. Expansion of the Park
- 3. More companies
- 4. Park's sustainability
- 5. ParqueLab innovation and experimentation
- 6. Well-being and leisure services
- 7. Institutionalism and Governance
- 8. Excellence in management



Strategic Actions

1. Cooperation for innovation

2. People development

The elaboration of the Strategic Plan was an important step for the Park. However, in order to consolidate the desired transformations for the vision of the future and the strategic objectives, the next big challenge is its implementation.

As to face this challenge, throughout 2017 we will structure a strategy management office.

EXPANSION OF THE PARK

One of the strategic projects aims at widening our innovative connection web by eliminating our geographical limitation, by enabling the expansion to other spaces (physical and virtual) and by defining new ways of relationship with our audiences of interest. In this line, in 2016, the Park esta-

blished two partnerships that will allow the exchange of the resident companies with the ones of other innovation environments. In November, a soft-landing program was formalized in association with the Science Park of Pontificia Universidade Católica do Rio Grande do Sul (Tecnopuc) and the Digital Harbour, in Recife – Pernambuco (**G4-6**).

For this program there will calls for the selection of companies with a schedule that will occur simultaneously in the three institutions. In the first year of the program, five companies of each park will participate. The arrangement aims to strengthen the integration of the companies with other innovation environments in another location inside the country itself as a first step for an international expansion.



The second agreement was signed in December 2016 and it has an international scope: the Park closed a deal of cooperation with TusPark (Tsinghua University Science Park Tinsinghua), in China. The objective is to encourage partnerships and internationalization of the technology based companies headquartered in the two innovation environments, in particular the small and medium companies, in addition to the UFRJ Park itself. Directly connected to the

University of Tsinghua, TusPark is the biggest technological park of the world in size and number of resident companies, with more than six thousand installed companies (G4-6).

The deal allows the installed companies to develop activities in China and vice versa. The agreement also proposes that the companies will count on all the support of the local teams of the two innovation environ-



ments for prospection, networking and legal advice. In the period in which the Chinese and Brazilian companies are in exchange, they will be treated as all of the other resident companies.

The agreement corresponds to a deepening of the relationship that the Federal University

of Rio de Janeiro already has with the University of Tsinghua through COPPE, which has allowed the exchange of experiences among researchers, joint publications and development of technologies.

2017 ANPROTEC CONFERENCE

Celebrating the 30 years of existence of the Association, Anprotec and Sebrae, in association with the UFRJ Science Park, will host the 2017 Anprotec Conference with the theme "Innovation and entrepreneurship transforming cities".

Objectives of the Conference

To discuss the role of the environments and of the new mechanisms and spaces of generation of innovative entrepreneurships.

To formulate guidelines for the support and stimulation to the innovative entrepreneurship of the country.

To contribute with the regional and sectorial development process in the five Brazilian regions.

To make public the work developed by the education, research and funding institutions in the field of technological innovation and that is a result of the actions developed by incubators and science parks.

In 2017, the Park will be the local organizer of the event, which will take place from on October 23 to 27, in the SulAmérica Convention Center in Rio de Janeiro. The event includes a week of training and mobilization. It is an important place for discussion for the public and private agents, as well as for the promoters of entrepreneurship and innovation in the country. Annually hosted by the Brazilian Association of Science Parks and Business

Incubators (ANPROTEC) and by the Brazilian Service of Support to Micro and Small Companies (Sebrae), the ANPROTEC Conference for Entrepreneurship and Innovation Environments is one of the biggest events of innovative entrepreneurship in the world and it gathers around a thousand Brazilian and foreign participants.

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G4-11	Percentage of employees covered by collective bargaining agreements	The Park does not have a collective bargaining agreement	
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G4-14	How the precautionary approach or principle is addressed by the organization	66 - 68	
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G4-26	Organization's approach to stakeholder engagement	13 and 14	
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G4-29	Date of most recent pre- vious report	The Park's Sustainabi- lity Report of 2015 was published in June 2016.	
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GENERAL STANDARD DISCLOSURES	SECTION	PAGE	EXTERNAL ASSURANCE
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Specific Standard Disclosures

MATERIAL ASPECTS	DMA/INDICA- TORS	OMISSIONS	PAGES	EXTERNAL VERIFICATION
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MATERIAL ASPECTS	DMA/INDICA- TORS	OMISSIONS	PAGES	EXTERNAL VERIFICATION
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UFRJ SCIENCE PARK SUSTAINABILITY REPORT

THE PARK'S TEAM

ADMINISTRAÇÃO DO PARQUE

CEO

José Carlos Pinto

Communication Office

Daniele Faria Lua Pinheiro Aline Calamara Chaves Beatriz da Cruz Nascimento Corrêa David Luiz Colocci Madeira (until December 2016)

Legal Advisor

Carolina Leite Amaral Fontoura

Institutional Development Office

Leonardo Melo Danielle Páscoa Barbosa

Administrative and Financial Management

Maria Lindalva O. Lima Filha Fabio de Oliveira Martins (until November 2016)

Rute Hermógenes dos Santos Janaina de Fátima Antunes Mosqueira Gabriela Moura Carias França Priscila Nunes Barbosa (until November 2016)

Marlon Soares da Silva (until June 2016) Mateus Roberto dos Santos

Carlos Eduardo de Sousa Teixeira

Architecture and Urbanism Management

Teresa Cristina da Silva Costa Isabelle Santos Soares Karina Comissanha de Carvalho Érica Maria Lopes Menezes (until March 2016)

Corporate Articulation Management

Lucimar Dantas Clarissa Taciana Gabriel Gussen Paula Salomão Martins Renata da Silva Lima

Operational Management

Ismael Santos Barberan Helena da Silva Rodrigues Antônio Moreno Cadavid Aloísio Guilherme de Oliveira Liz Boaretto Teixeira Leite

Carlos Alberto de Araujo Pimentel Junior

Antonia Rosangela Souza da Silva

Alexandre Ferreira de Oliveira

Benedito Francisco da Silva

Evandro Espirito Santo

Gelson Correia da Silva

Francisco Mendes Batista Junior

Marco Cesar da Silva

Maria da Penha Alves da Silva

Solange Maria Fonseca

Ariana de Sousa Santos

Wellington Fernandes Alonso da Silva

Amanda Ventura Martins

Cristina Pereira da Silva

Socorro Gomes Cavalcante

Rapahel Kopher (until March 2016)

Bruno Mendes Drumond

Roney Gasperoni Barros

Pedro Paulo Ribeiro (until September 2016)

Daniel Aquino de Oliveira

João José Alves

Douglas da Silva Oliveira (until September

2016)

Franklin de Sousa Holanda

Secretaries

Simone Gomes Moura

Marcia Regina de Mattos Duarte

INCUBATOR'S MANAGEMENT

Technical Team

Regina Fátima Figueiredo de Farias Lucimar Dantas Isabella Kigston

Management Team

Christiane Andrade

Jorge Bandeira

Ray-n'hala Bire Loquê

Thaiza Lima

Design Team

Marcus Dohmann

Manuella Schorchit Meirelles

Nicole Soares de Souza

Ana Carolina Lourenço (until May 2016)

Vitória Carvalho (until March 2016)

Support Team

Michael Berlamino

Jorge Fagundes

Marcos Trindade

Pedro da Silva

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