



WIPO



# **The Importance of Intellectual Property Management in Universities and Public Research Organizations**

*The Brazilian Experience*

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# Outline

- Historical Evolution of IP in Brazil
- Brazilian Trends in R&D - Incentives and Support
- Brazilian IP Legal Framework
- IP in the Brazilian Universities and R&D Centres
- Brazilian Innovation Law – Key Issues
- The Impact of the Innovation Law for IP&TT in Universities and R&D Centres
  - FORTEC - Brazilian Association of IP&TT Managers
  - Network for IP Management in Universities and R&D Centres**
- ANPROTEC - Science Parks and Enterprise Incubation
- WIPO and INPI - Human Resources Development

# Historical Evolution of IP in Brazil

**1808 - Arrival of the Portuguese Court**

**1809 - Industrial Incentives - Inspiration: UK**

**1822 - Independency**

**1824 - 1<sup>st</sup> Constitution - Inventors Rights Protected**

**1830 - 1<sup>st</sup> Law for Industrial Priviledges**

**1882 - New Patents Law: 3 years rights**

**1883 - Paris Convention (Brazil in the first group to subscribe it )**

**1970 - INPI (National Institut for Industrial Property) creation**  
Law 5.648/11.12.1970

**1971 - IP Code - Law 5.772, 21.12.1971**

# Brazilian Trends in R&D - Incentives and Support

## ➤ 1970/1980

**Considerable Investment in Science and Technology **without articulation with Technological Development & Innovation****

## ➤ 1990

**Specific programs and Institutions created: PADCT (TIB), FINEP-TEC, PDTI/PDTA – **to increase Technological Capability in Industry****

## ➤ 1996-1998 – New IP Legal Framework

## ➤ 1998/1999 – Government Programs to surpass the Technological Gap

**Special Funds Created and Implemented**

# Brazilian IP Legal Framework

- **Law 9.279/1996 for Industrial Property**  
Replaced the Law 5.772/1971
- **Law 9.456/1997 for Agricultural Innovation**
- **Ley 9.609/1998 for Software**
- **Ley 9.610/1998 for Authors Rights**  
Replaced the Law 5.988/1973

# IP in the Brazilian Universities and R&D Centres

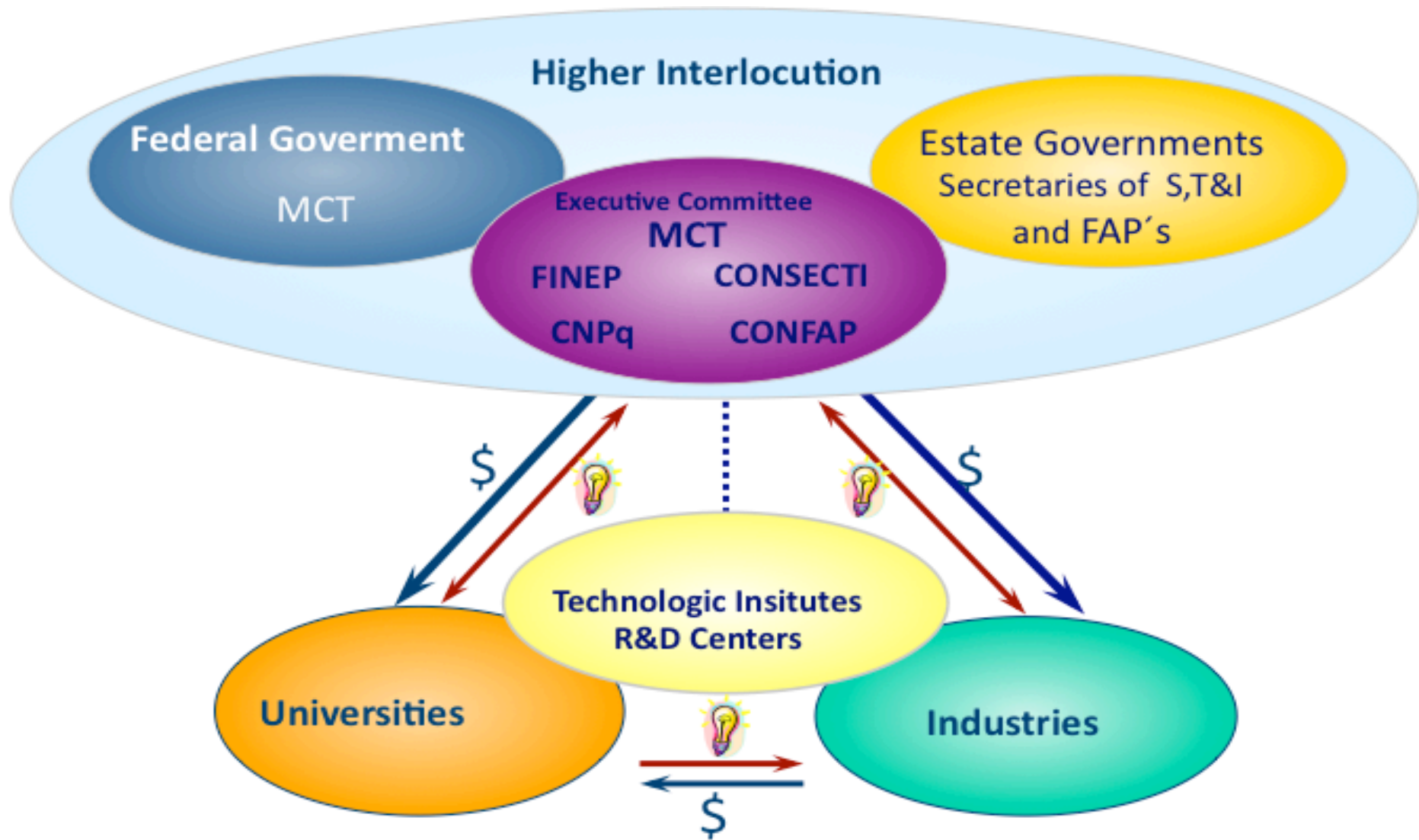
- 50's decade: **CNPq and CAPES creation**
- Until the 60's: Teaching was the **University Mission**
- 1968: Research added to the **University Mission**
- 1975: **Expansion of the University Mission**
  - Creation of the National Graduation System**
  - Governmental Support for Graduation and Research
  - Lack of Articulation with Technological Development and Innovation
- 80's decade: **High Inflation / Reduction of R&D Investment**
  - 1<sup>st</sup>. Attempts to install TTO in the Universities**
- 90's end: **Stimulus to the University / Enterprise Partnership**
  - "Marginal Activity" - Informal and sporadic - Absence of statistics
  - Lack of support for Technology Transfer
- Recognition of the University third Mission**
- **December/2004: Innovation Law issued**

# Special Features of the Brazilian Law 10.973/2004 “Innovation Law”

**Public-Private Cooperation** by making it easier for Enterprises, Public & Private Universities & Research Centres to **share resources, raise capital & settle IP rights**  
**8 Key Provisions:**

1. **Public Research Centres** are permitted to **share their Laboratory facilities** with Private-Sector Enterprises;
2. **Public Research Centres & Private Enterprises** are permitted to enter into Capital Relationship, for the purpose of R&D;
3. **Public and Private Partners** may **specify the ownership of any future IP Rights** by Contract;
4. **Public Research Centres** and their Employees must **protect Trade Secrets** associated with their cooperative research;
5. **Public Research Centres & Universities** may **license their technologies** to private Enterprises;
6. **Individual Public Researchers** may **share IP economic returns** associated with the **successful commercialization of their research results**;
7. **Public Researchers** may **take leave from their public position** in order to **create a new venture or to work for a private enterprise**;
8. **Government Development Agencies** provide **financial and human resources** assistance in support of Private Sector R&D.

# Brazilian Scientific-Technological and Innovation Plan 2010-2014





# NATIONAL SCIENCE & TECHNOLOGY PLAN FOR SUSTAINABLE GROWTH

## Sector Programs

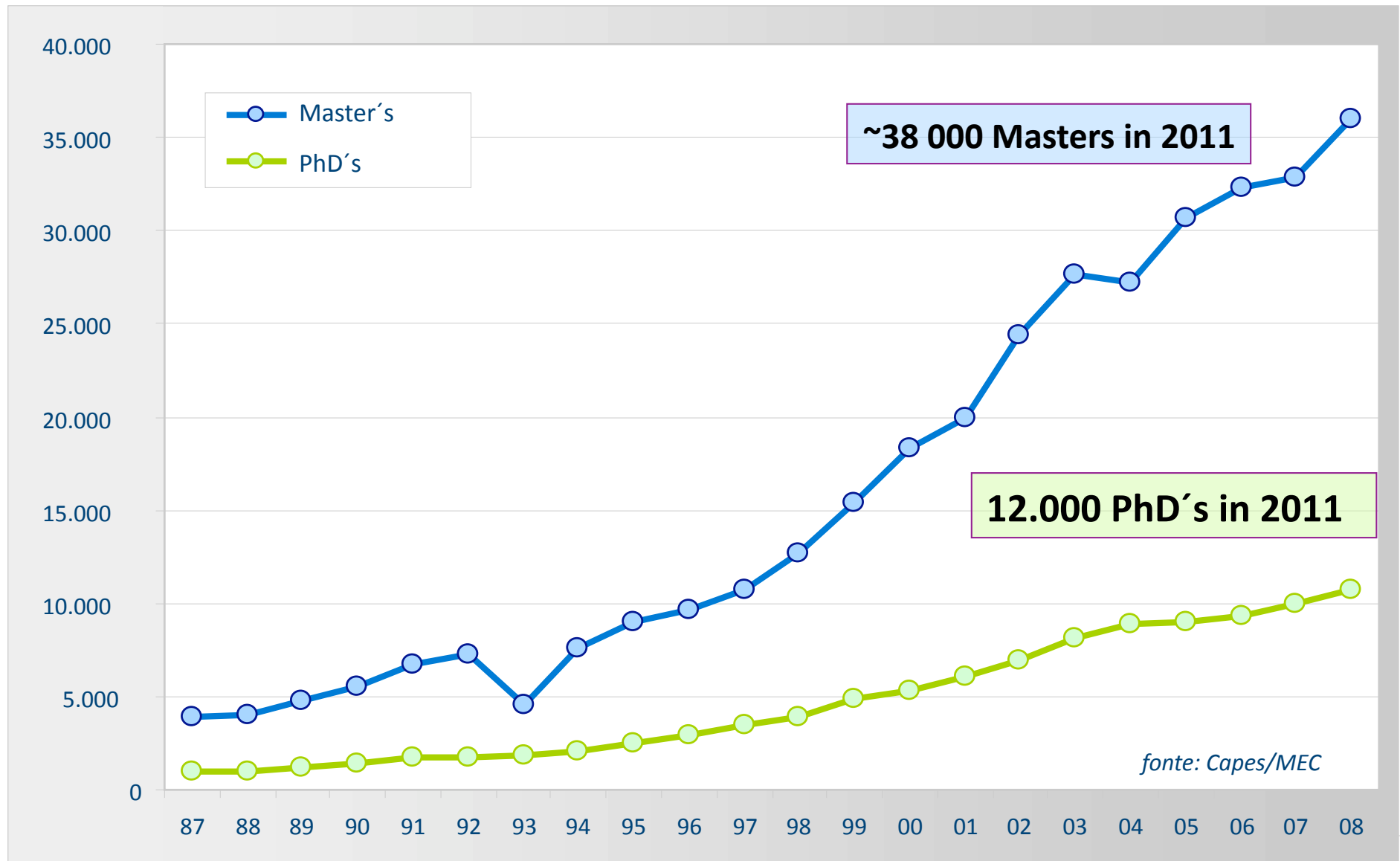
- TICs
- Aerospace
- Drugs & National Industrial Health System
- Sustainable Agriculture
- Chemistry
- Petroleum, Natural Gas & Mineral Coal
- Energy
- Industrial Defense Complex System
- Capital Goods
- Strategic Minerals

# NATIONAL SCIENCE & TECHNOLOGY PLAN FOR SUSTAINABLE GROWTH

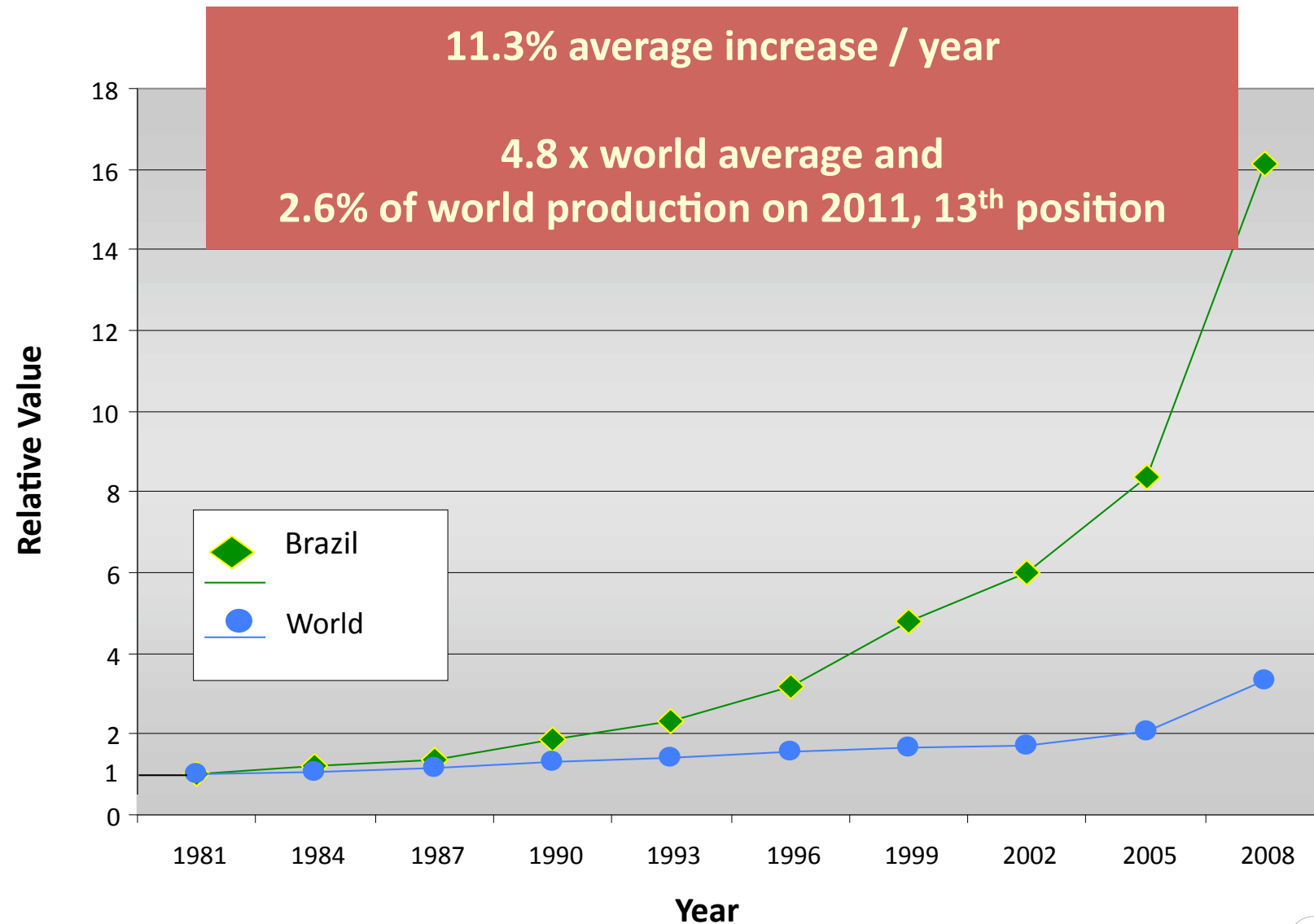
## Special Programs

- **Biotechnology**
- **Nanotechnology & New Materials**
- **Climate Changes**
- **Excellence in Science Education & Fostering of S,T&I**
- **Productive Inclusion and Social Technology**
- **Popular Housing and Sanitation**
- **World Cup 2014 and Olympic Games 2016**

# ROBUST BASE FOR INCREASING KNOWLEDGE GENERATION



# EXPONENTIAL GROWTH OF KNOWLEDGE GENERATION



# Brazilian GAP

## Scientific Knowledge X Innovation

### R&D & Innovation

### Brazil X World

**PIB**

**2%**

**More than 200.000 researchers**

**Scientific Publications**

**2,1%**

**But**

**Patents**

**0,2%**

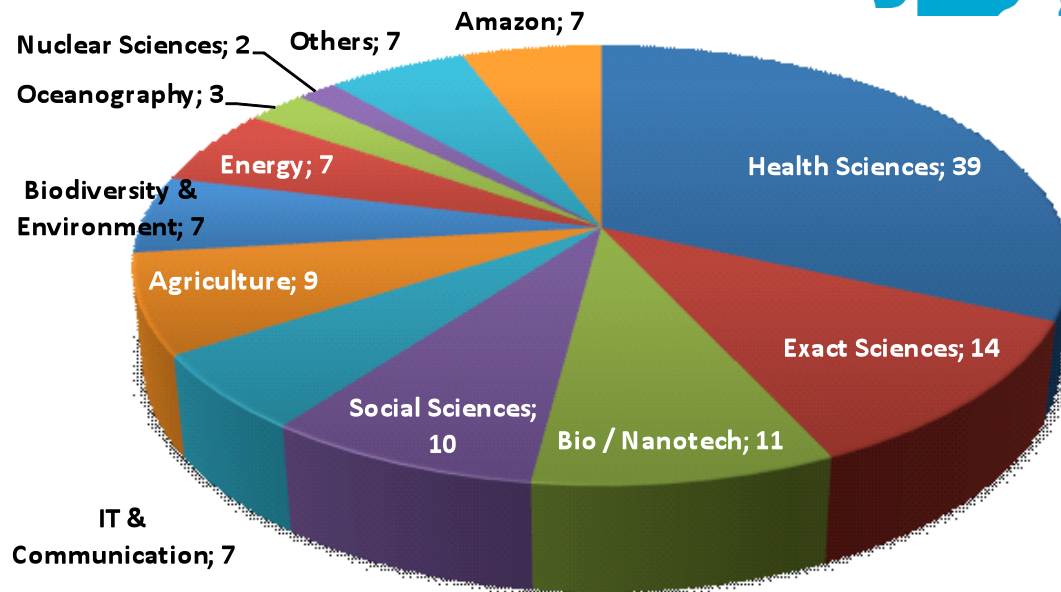
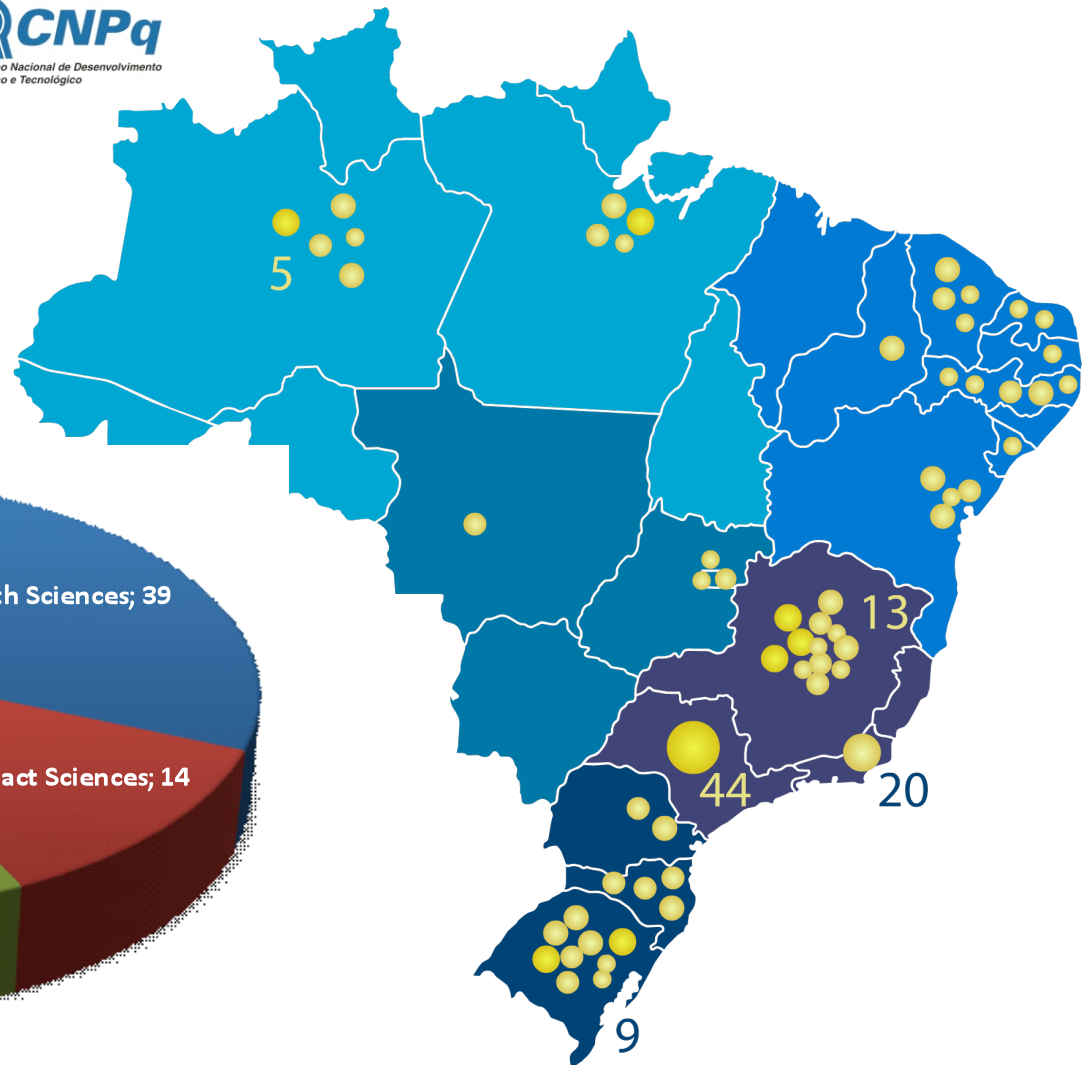


# 123 INCTs

## NATIONAL INSTITUTES OF SCIENCE & TECHNOLOGY



**inct**  
institutos nacionais  
de ciência e tecnologia





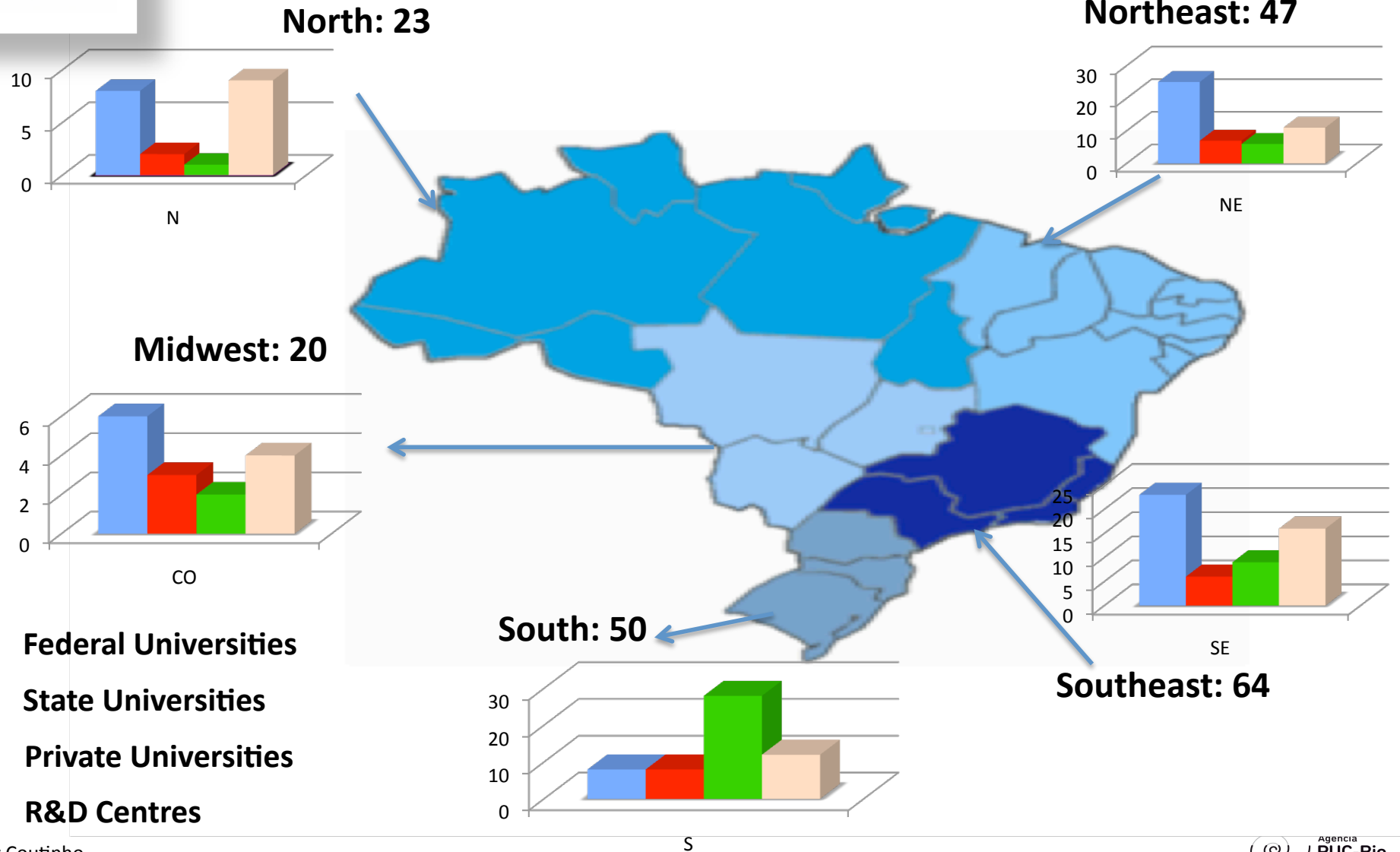
# BRAZILIAN STRATEGIC NATIONAL NETWORK OF IP, TT & INNOVATION MANAGERS

[www.fortec-br.org](http://www.fortec-br.org)

- **2002: 26 IP & TT Offices** in Brazilian Universities and Research Centres (Survey of INPI & FINEP);
- **2004: “Innovation Law”** Law 10.973/2004 - Incentive for Innovation in the Productive Sector;
- **2006: FORTEC established on May 1<sup>st</sup>, with 43 affiliates;**
- **FORTEC: Representative body of TTO from Public & Private Universities and Research Centres** that are responsible for **Innovation Policies** and all activities related to IP & TT management;
- **FORTEC Goals:** Commitment with the **dissemination, promotion, and enforcement of the culture and polices**, as well as in **training activities concerning to IP & TT in the Brazilian Universities and Research Centres.**



# FORTEC - Created in 2006 with 43 affiliates 204 in 2012







# THE PERFORMANCE OF FORTEC TTO MEMBERS

- **35.4% annual growth** in the number of **affiliated TTO** (from 43 in 2006 to 204 in 2012);
- Significant **increase in the number of patent applications and issued abroad**: from **47** patents application in **2006 to 134 in 2011**;
- **Royalty revenues** received by FORTEC TTO members reached **USD 101 million from 2006-2010**;
- Signed **MOU** with National **INPI, ANPROTEC, ANPEI**, and International Organizations, such as **AUTM (USA), Praxis-Unico (UK), Réseau Curie (France)** and **Red OTRI (Spain)**.



# Catalogues: Assistive Technologies and Green Technologies



FÓRUM NACIONAL DE GESTORES DE INOVAÇÃO E TRANSFERÊNCIA DE TECNOLOGIA

## CATÁLOGO FORTEC DE TECNOLOGIAS ASSISTIVAS

Organizado por:

Prof. Oswaldo Mazzambani - Centro Paula Souza  
Prof. Ruben Dario Sinisteras Milán - UFMG  
Profª. Heloiza Helena Ribeiro Schor  
Pedro Feres Goulart Guimarães - Doutorando UFMG



24 e 26 de outubro de 2011  
São Paulo - SP, Brasil



Catálogo  
**fortec**  
de

**Economia Verde**  
**Negócios Sustentáveis**

Prof. Oswaldo Mazzambani - UFMG  
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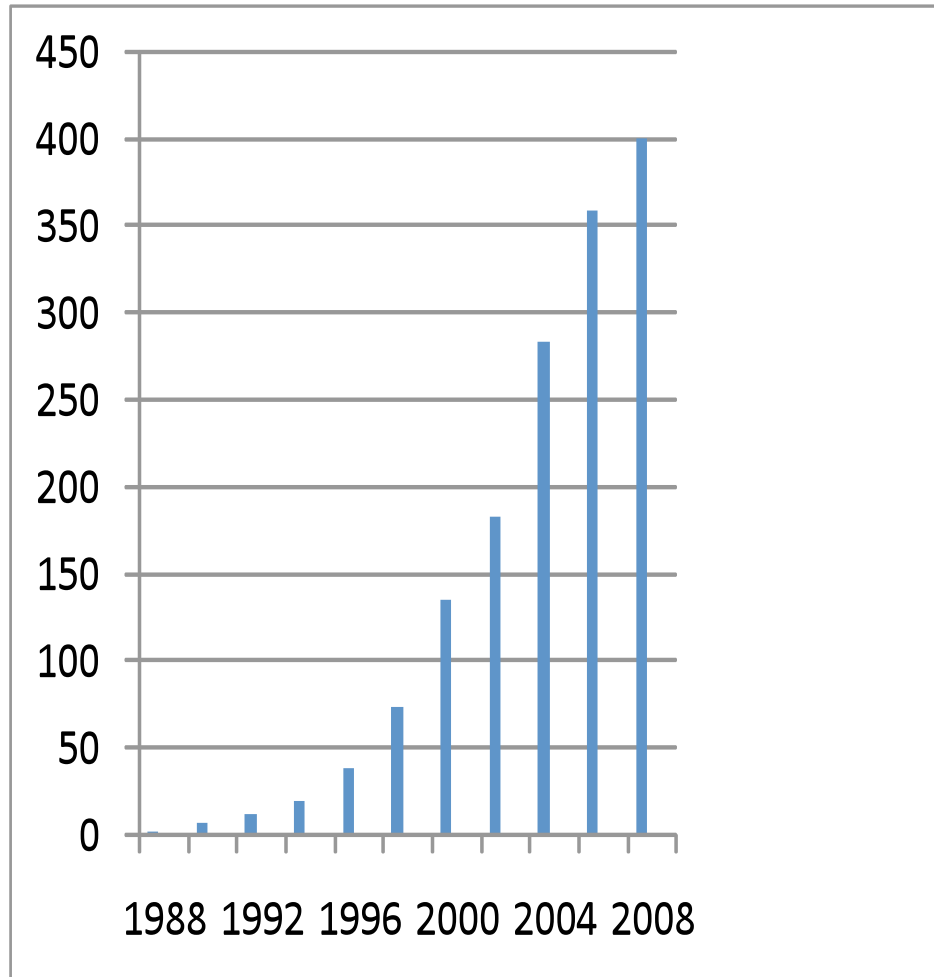
# Partner of the WIPO Green

## 184 Green Technologies

- BIOFUELS
- SOLAR ENERGY
- CELLS FUEL
- MINING: SOIL RECOVERY
- UTILIZATION OF WASTE
- WASTEWATER TREATMENT
- AGRICULTURE AND LIVESTOCK
- OPTIMIZATION OF INDUSTRIAL PROCESSES
- REDUCTION OF ELECTRICAL ENERGY CONSUMPTION
- SUSTAINABLE MANAGEMENT
- CONSTRUCTION
- BIODEGRADABLE MATERIALS
- DRUGS
- COSMETICS
- HYGIENE PRODUCTS
- PESTICIDES AND DISINFECTANTS
- FOOD PRODUCTION AND NUTRACEUTICALS



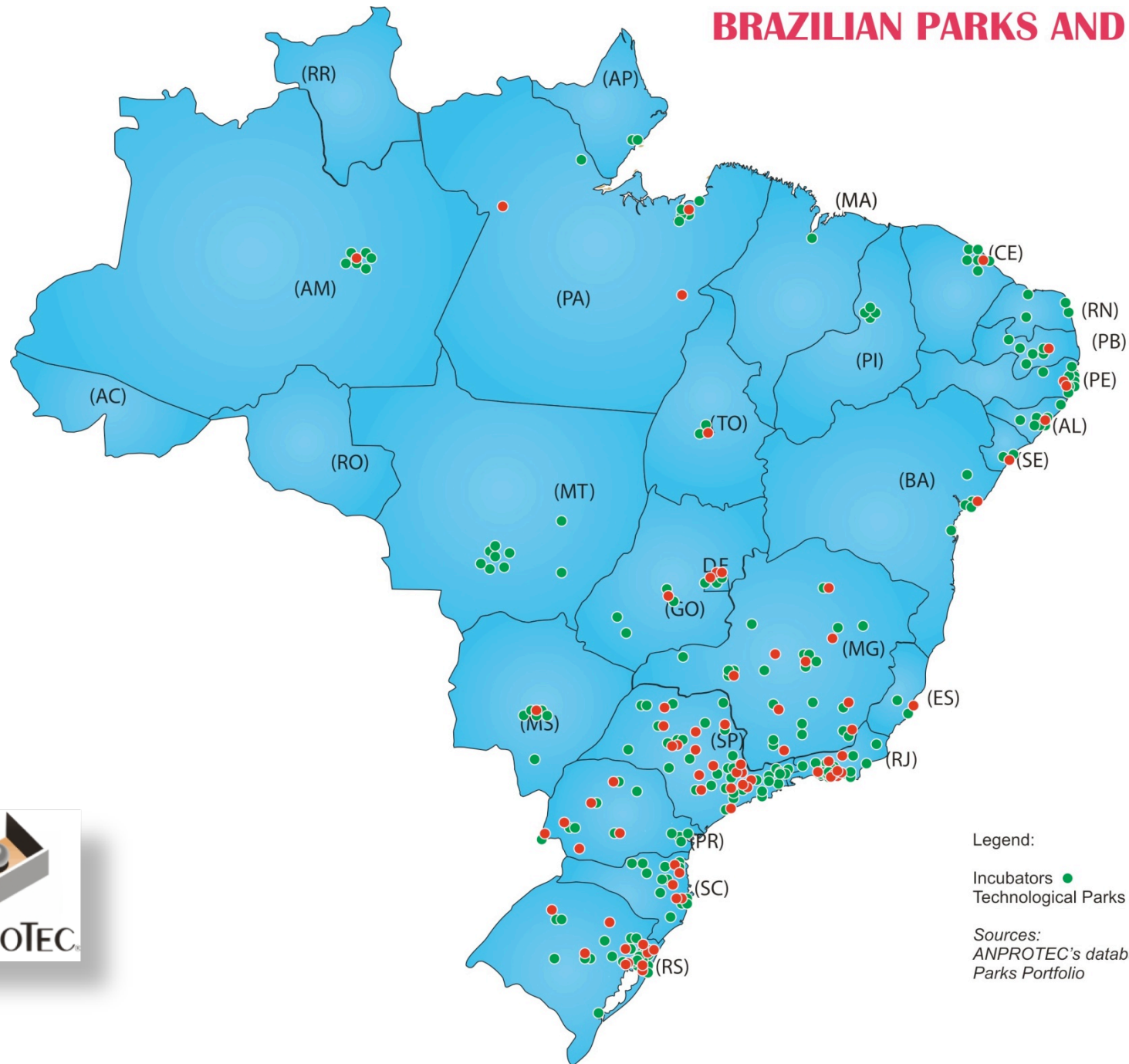
# Innovation Habitats: Business Incubators



- ✓ 8k firms
- ✓ US\$ 3 MM/y revenues
- ✓ Serial winners of coveted innovation prizes
- ✓ 35 k workplaces (high qualification)
- ✓ Return on taxpayers money
  - US\$ 300 M total investment (20y)
  - US\$ 265 M taxes paid yearly



# BRAZILIAN PARKS AND INCUBATORS



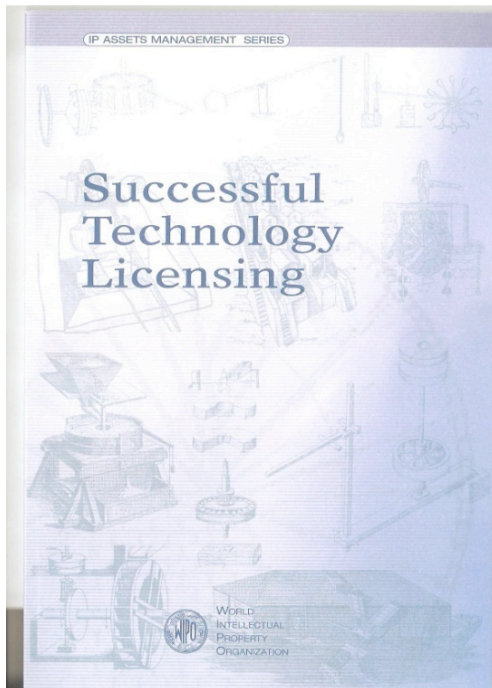
Legend:

- Incubators ●
- Technological Parks ●

Sources:  
ANPROTEC's database;  
Parks Portfolio

# IP&TT Managers & Staff Capacity Building

## WIPO & INPI Contribution



**STL: 06 Editions with 300 participants** in cooperation with Institutions such as: **INPI, FINEP, PUC-Rio, PETROBRAS, Rio de Janeiro R&D Network, FIEBA.**

✓ Special editions, including important Brazilian enterprises, such as:

**EMBRAER, VALE, BRASKEN, NATURA, OURO FINO, BIOBRAS, EMBRAPA, FURNAS, CODEVASF, ELETROBRAS, and others.**



### Enterprises Participation:

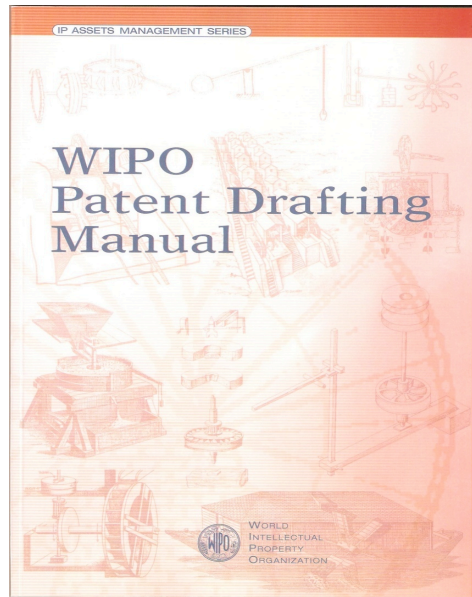
1<sup>st</sup>. Edition: 20%

6<sup>st</sup>. Edition: 40%

STL - First Edition in Brazil: December 2005

# IP&TT Managers & Staff Capacity Building

## WIPO and INPI Contribution



**Patent Drafting:** 03 Editions in Brazil, 02 of them at PUC - Rio, including long distance learning technology, and one network of the participants, and an enormous demand.



### IP Long Distance Education

DL 001 Introduction to IP

DL 101 IP Basic and General Course

Long Distance Course on PCT

DL 101PBR General IP Course for Brazil

IP Advanced Long Distance Courses in English



**Enviar dinheiro para o Brasil.**



**ENVIAR AGORA**



## REDE DE COOPERAÇÃO EM REDAÇÃO DE PATENTES

informação do grupo

Perfil do grupo    Configuração    Membros    Mensagens    Mural    Enquetes    Disco virtual    Divulgação    Blog do grupo    SMS    Estatísticas

### acesso



\*usuário:  
\*senha:

sempre identificado  
Esqueci minha senha

### grupo



### REDE DE COOPERAÇÃO EM REDAÇÃO DE PATENTES

 30 assinaturas  
 6 mensagens (mês)

**assine o grupo**

**Moderado/Restrito:**  
Para participar deste grupo, usuários necessitam da aprovação de seus administradores

**Visível:**  
Este grupo é visível no diretório de grupos

[+ detalhes](#)

**Para soluções corporativas**



### Descrição

Esta rede de cooperação, nasce da necessidade de troca de experiências, percebida pelos participantes do Treinamento em Redação de Patentes, organizado pela OMPI, em Cooperação com o INPI, com o apoio Petrobrás e REDETEC-RJ, realizado no Rio de Janeiro entre 14 a 24 e agosto de 2007.

**Category :** Ciência & Tecnologia : Associações & Clubes

### Configurações:

**Moderado/Restrito:**  
Para participar deste grupo, usuários necessitam da aprovação de seus administradores

**Discussão:**  
Todos os membros enviam mensagens

**Visível:**  
Este grupo é visível no diretório de grupos

### Anúncios Google

**Mande dinheiro ao Brasil**  
Dinheiro disponível em minutos. Saque de dinheiro em Reais.  
[www.xoom.com/brazil](http://www.xoom.com/brazil)

**Ver televisão online**  
Veja televisão ao vivo no seu PC. Completamente grátis.  
[www.tvdirecto.com.pt](http://www.tvdirecto.com.pt)

**Telas Veneza - SP**  
Telas Mosquiteira, Redes Proteção, Cadeiras e barras p/ banho 26217163  
[www.telasveneza.com.br](http://www.telasveneza.com.br)

**MSc in Communication**  
Techs for Human Communication  
Univ. of Lugano, Switzerland  
[www.mtec.unisi.ch](http://www.mtec.unisi.ch)



## INPI Academy administers:

- **Basic, Intermediary and Advanced IP Courses** given all over Brazil;
  - **Master Degree Course** in IP and Innovation in its 5<sup>th</sup>. Edition;
  - **Doctorate Course in IP and Innovation** beginning in 2013.
- 
- **IP Long Distance Education - DL 101PBR General IP Course** adapted to the Brazilian Law and administered by the INPI Academy:
    - ✓ 1<sup>st</sup>. edition: **2.369 participants**;
    - ✓ 2<sup>nd</sup>. Edition: **2.464 participants**.

## NÚMERO DE PESSOAS CAPACITADAS POR REGIÃO (2005 – 2012)

NORTE	
Básico	226
Básico EaD	75
Intermediário	98
Avançado	90
Oficinas/Outros	30
<b>Total</b>	<b>519</b>

CENTROESTE	
Básico	459
Básico EaD	139
Intermediário	198
Avançado	149
Oficinas/Outros	140
<b>Total</b>	<b>1085</b>

NORDESTE	
Básico	707
Básico EaD	399
Intermediário	360
Avançado	280
Oficinas/Outros	103
<b>Total</b>	<b>1849</b>

Ano	Cursos	Participantes
2005	15	574
2006	57	1695
2007	37	1184
2008	34	891
2009	32	1011
2010	34	1176
2011	52	1611
2012*	57	2698
<b>Total</b>	<b>318</b>	<b>10840</b>

SUL	
Básico	495
Básico EaD	416
Intermediário	313
Avançado	231
Oficinas/Outros	438
<b>Total</b>	<b>1893</b>

SUDESTE	
Básico	2118
Básico EaD	962
Intermediário	839
Avançado	618
Oficinas/Outros	939
<b>Total</b>	<b>5476</b>

\* Inclui Ensino à Distância (EaD)

Thank you!

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