



# Brazilian Academy of Sciences

A BRIEF NOTE

# Message from the President

The Brazilian Academy of Sciences (BAS)  
will soon become 100 years old.

These years witnessed an enormous advance in Science,  
Technology and Innovation in the World as well as in Brazil.



I am happy to say that, the Academy has decisively contributed to the main events that have made Brazil one of the most productive nations that participate in the scientific development of our globalized world. Among them, the creation of our National Research Council and, more recently, the creation of the Sectorial Funds that substantially changed the Brazilian System of Science, Technology and Innovation (STI) through quite innovative financial instruments.

In the international landscape BAS became a very significant player taking part in the main international scientific fora such as the Global Network of Science Academies (IAP), the Inter-Academy Council (IAC), the STS Forum, the Academy of Sciences for the Developing World (TWAS), the International Council for Science (ICSU) and the World Science Forum (WSF).

Altogether, our Academy is deeply committed not only to the development of Science, Technology and Innovation in Brazil but also to the strengthening of a global knowledge-based society. In both cases the Academy is committed with the sustainable development of the planet, with social inclusion and with the eradication of poverty and hunger, thus contributing towards a better quality of life for all.

It is worth mentioning that in the past decade the Academy adopted a proactive posture seeking to provide solutions to important problems and aiming to contribute effectively to the design of public policies geared towards improving the quality of life in Brazil. These actions are conducted by working groups composed by Academicians and by recognized outstanding specialists whenever needed.

## *The Academy is committed to the sustainable development of the planet, with social inclusion and with the eradication of poverty and hunger*

These contributions address main issues in different strategic areas, reflecting the position of the scientific community related to the process of sustainable development in its three pillars: economic growth, social inclusion and conservation of the environment. The results have been most appreciated by our society and, we hope, it might be of interest to the world as well.

With this booklet we provide a glimpse at our Academy's multiple activities, both at local and global scenarios.

**Jacob Palis**

## A Brief History

BAS was founded in May, 1916, in Rio de Janeiro, at the time the capital of the Federal Republic. It was named Brazilian Society for Sciences and comprised three sections (Mathematics, Physical-Chemical Sciences and Biological Sciences).

*The BAS today*





### Past

#### First headquarter

The main objectives of the Society were to encourage its members to pursue scientific research and to diffuse the notion of science as a factor promoting prosperity and the development of the Country. Although support and aid from the government were expected, the Academy was structured as a private, legally independent organization, responsible to appoint its own administrative officers and to draw up its own rules.

It is adequate to say that the history of the Academy can be divided into three periods: from its foundation to 1951 when the landmark was the publication of a regular scientific peri-



### Future

#### New building

odical (*Anais da Academia Brasileira de Ciéncias*) that exists until today. The second period was marked by the role of the Academy in influencing the federal government to create an institutional framework to support scientific activities, in disseminating scientific education and in recognizing outstanding scientists in the Brazilian incipient scientific community. The third period, which started in the early 70's, was marked by the increasing recognition by the Brazilian government and society of the importance of BAS as a unique think tank that plays an important role as a Science adviser to the government and Brazilian society.

# Mission

The mission of the Brazilian Academy of Sciences - BAS is to promote Science, Technology and Innovation in the Country through the recognition of merit of top Brazilian researchers, as well as through the enhancement of scientific activities in all the fields of knowledge.

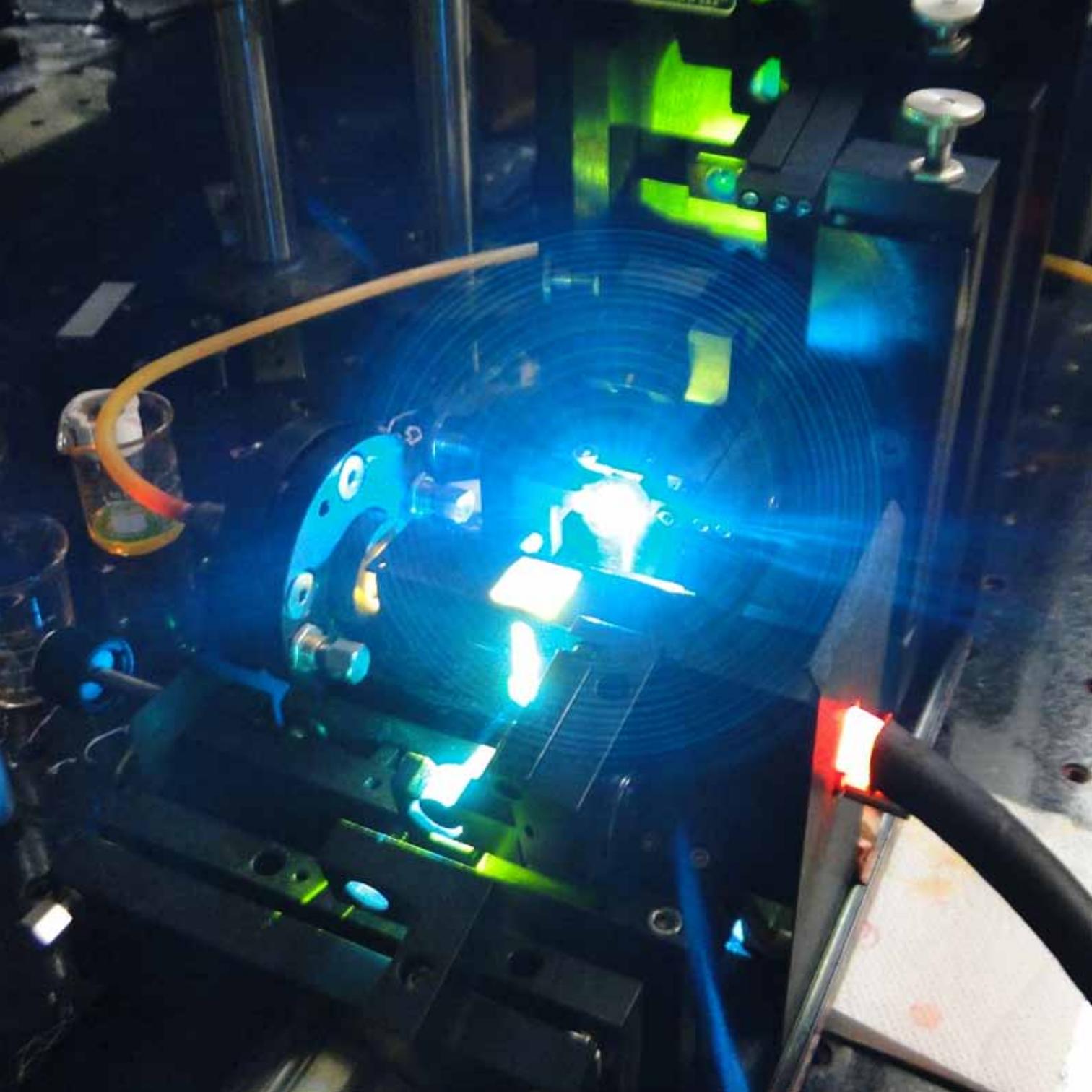
*Universal health care, water resources and nanotechnology are some of the present concerns of BAS*



The Academy adopts a proactive posture seeking to provide solutions to important problems that affect Brazilian society, aiming at effectively contributing to the establishment of national public policies based on sound Science. These contrib-

utions derived from specific approaches of different strategic areas based on scientific evidence and on sound methods, thus reflecting the position of our scientific community related to the process of sustainable development.



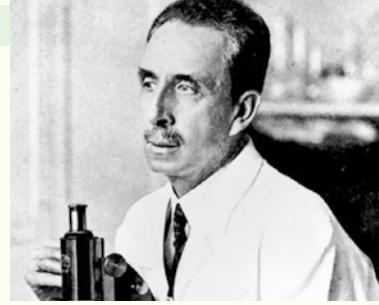
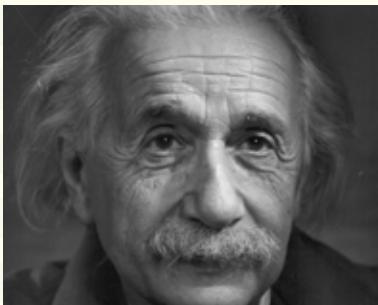


# Membership and Organization

BAS congregates scientists in ten areas: Physical Sciences, Mathematics, Chemical Sciences, Earth Sciences, Biological Sciences, Agricultural Sciences, Biomedical Sciences, Health Sciences, Engineering Sciences and Social Sciences.



Santos Dumont (previous page), Albert Einstein, Marie Curie and Carlos Chagas were distinguished members of BAS.



Full Members are elected by their own colleagues in one of the specialized areas. Each year Full Members are invited to recommend candidates for election as Full and Corresponding Members. New members are annually elected by the General Assembly, which is the supreme body of the Academy, taking into account the recommendations of the Selection Committee. Among the most prestigious national members we may mention Oswaldo Cruz, Carlos Chagas, Santos Dumont and other personalities.

Other categories of membership are: Corresponding Members, foreign sci-

entists who have effectively contributed to the development of Science in Brazil, such as Marie Curie, Albert Einstein, Rita Montalccini, Guglielmo Marconi, Daniel Bovet, Jacques-Louis Lions and Bernardo Houssay, as well as Collaborating Members, persons who have rendered conspicuous services to the cause of National Science. Another category is Corporate Members, created for enterprises that support the activities of the Academy.

Finally a newly established category - Affiliate Members - was created to incorporate in the membership talented young scientists of

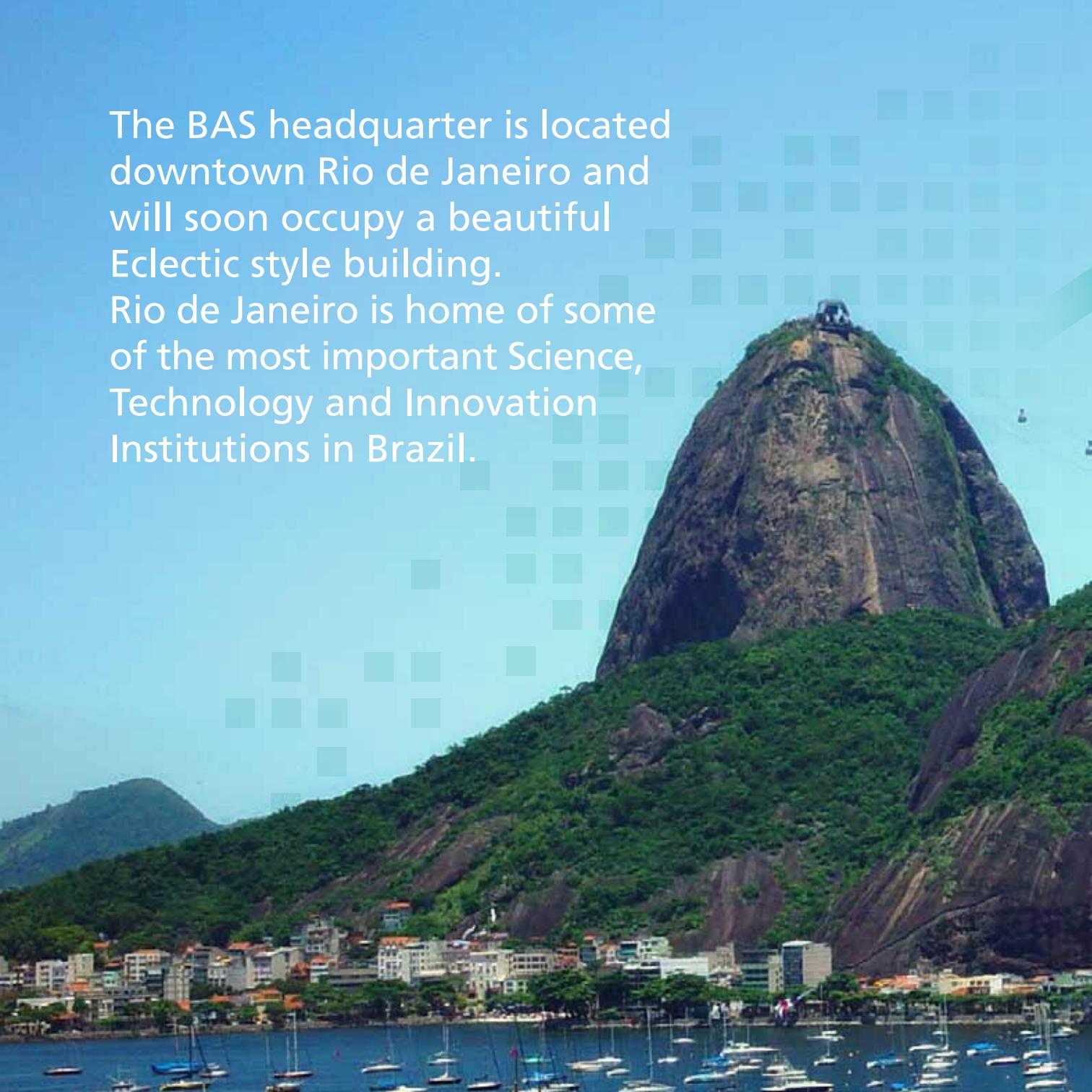
the different regions of the Country, appointed by the Regional Vice Presidencies, and elected for a period of five years non renewable.

The Academy is led by a Board of Directors composed by a President, a Vice-President, five directors and six Regional Vice Presidents.

The Board is elected every three years with reelection being allowed. Aside from the Board of Directors the institution has two others institutional instances: the Audit Council, elected for a three years term and the Advisory Council formed by 25 members.

The BAS headquarter is located downtown Rio de Janeiro and will soon occupy a beautiful Eclectic style building.

Rio de Janeiro is home of some of the most important Science, Technology and Innovation Institutions in Brazil.





# National & Regional Activities and Programs

The most important event of the BAS' calendar is the Magna Meeting, which is convened every May associated to the induction of the new members. In this occasion the Academy holds a three days scientific seminar with multidisciplinary and comprehensive themes.

*Progress and Prospects of Science in Brazil, Latin America and the Caribbean and Prof. Yuan T. Lee in our Magna Conference's poster*



*The annual attendance of the BAS Magna Meeting is of circa 600 participants*

This event is an excellent opportunity for the interaction among all members and for their dialogue with authorities and the high level representatives from the private sector as well as representatives of the scientific and technological realm. The annual attendance of the meeting is of circa 600 participants. Another regular annual meeting is the conference "Progress and Prospects of Science in Brazil, Latin America and the Caribbean".

In order to contribute to the sustainable development of the Country, BAS created several working groups that are related to the most important issues for our Society. The current study groups may be classified according to the following areas: Environment, Health, Education and New Technologies.

In the environmental area the current study groups are: Amazon, Water Resources and Global Change. In the field of Health, BAS study groups not only tackled peculiar problems of the developing world, such as neglected diseases, but also addressed issues that are present all over the world, like non-communicable diseases. Concerning Education, the present study groups and programs are related not only with Science Education but deals with other general issues of the Brazilian educational system, covering from early childhood learning processes to graduate courses structures. The Academy is also concerned with issues related to new technologies and the frontiers of science. At present there are study groups in the areas of Biofuels, Nanomaterials and Information and Communication Technologies.

## International Relations

BAS is an active participant in several central international organizations in the area of Science and Technology. It is the National Representative at the International Council for Science (ICSU) and a member of the World Science Forum (WSF) Steering Committee.





The Brazilian Academy was one of the sponsors of the creation of one of the most prestigious international organizations involving Science Academies: IAP (the Global Network of Science Academies) and its subsidiary bodies: IAC (International Council for Sciences) and IAMAP (Interacademy Medical Panel).

Our Academy also participates in the panel of Academies that plays the role of an advisory group for the G8+5 head of states annual meeting, along with the Academies of China, India, Mexico and South Africa.

Apart from the institutional participation in the above mentioned organizations, members of the Academy are quite active in the Academy of Sciences for the Developing World (TWAS) and the Science and Technology for Society Forum (STS). At the regional level BAS is part of the Interamerican Network of Academies of Sciences (IANAS) and hosts the Regional Office of TWAS.



# Publications and Communication

The Academy has a refereed journal published since 1929 without interruptions - *Anais da Academia Brasileira de Ciências* - and a journal dedicated to Antarctic research: *Pesquisa Antártica Brasileira*.

The Academy also publishes a collection named Science and Technology for the National Development: Strategic Studies that disseminates the results of the work of the Study Groups.

*Neglected Diseases, Early Childhood Education, Amazon and Basic Education in Science*

The Academy also publicizes its activities through an electronic weekly newsletter. In the homepage of the Academy the contributions of speakers or participants in all meetings are available.



## Awards & Medals

BAS is one of the sponsors of a few significant prizes in environmental and gender related issues such as The Ruschi Prize for Ecology and the L'Oréal Grant for Women in Science, respectively.

The Brazilian Academy of Sciences also participates in the jury of important national Science prizes like the National Medal of Science & Technology (Alvaro Alberto), the Moinho Santista Prize and the Conrad Wessel Foundation Award.

At an international level, the Academy nominates Brazilian scientists for many remarkable scientific prizes, such as Mexico Prize, TWAS Prize and Ernesto Illy Prize.

*National Science and Technology Prize: Álvaro Alberto medal and L'Oréal Grant for Women in Science Prize*



# Looking to the Future

Together with other emerging countries, Science in Brazil has experienced great progress in recent years. At the same time, the Brazilian Academy of Sciences has been playing an active role in the international scenario, representing our national scientific community in major scientific organizations and forums. This action is strongly supported by the Brazilian government, through the Ministry of Science, Technology and Innovation. The support received from private companies that become associated to BAS as institutional members is also worthy of notice.



*Statue of the Christ Redeemer, one of the most important symbols of Rio de Janeiro*

As a consequence of the role played by the Academy, we have the opportunity and honor to host two major international meetings in 2013: the IAP Conference & General Assembly (24-27 of February), and the World Science Forum (25-27 of November).

As stated in the document 'The Future We Want', signed by the heads of State and Governments in Brazil on June 2012, "eradicating poverty is the greatest global challenge facing the world today and an indispensable requirement for sustainable development. In this regard we are committed to free humanity from poverty and hunger as a matter of urgency". When IAP organizes its triennial Conference electing as its focus "Grand Challenges and Integrated Innovations: Science for Poverty Eradication and Sustainable Development", it sends a clear message to society, reflecting the commitment of the Science Academies of the world to play a proactive role in mobilizing the international scientific community to develop innovative solutions for human well-being and sustainable development.

Similarly, as endorsed by universal applause at WSF's closing session held in Hun-

gary's Parliament Building on November 2011, "more than ever before, the world will be shaped by science." Notwithstanding, despite the exponential scientific and technological progress observed on a global scale in recent decades, societies are still characterized by strong disparities. Being held for the first time out of Budapest, the 2013 edition of the WSF will focus on "Science for Global Sustainable Development". This meeting will have the challenge to discuss not only how Science can help shape a better world, but how Science can contribute to reduce regional inequalities. As a major global forum for dialogue among leading scientists, policy-makers, non-governmental organizations, educational institutions and research bodies, leaders of culture and industry, and the general public, the WSF has a role to play on calling the different actors to work together towards sustainable and inclusive societies.

BAS is most honored to host these two meetings. It is our hope that these meetings will discuss, in a productive manner, topics of utmost importance, building propositions that can help shape a better future for our planet.

## Contact Information

### Office Address

Academia Brasileira de Ciências  
Rua Anfilófio de Carvalho, 29 - 3º andar  
20030-060 - Rio de Janeiro - RJ  
Brasil  
Phone + 55 21 3907-8100  
Fax + 55 21 3907-8101

[www.abc.org.br](http://www.abc.org.br)

[abc@abc.org.br](mailto:abc@abc.org.br)



[/abciencias](#)



[@abciencias](#)



[/academiabrasciencias](#)



This booklet was printed with the support of  
The Conrado Wessel Foundation

FUNDAÇÃO CONRADO WESSEL  
**FCW**

## Brazilian Academy Of Sciences

Board 2010-2013

### President

Jacob Palis

### Vice President

Hernan Chaimovich

### Regional Vice President

Adolpho Melfi (São Paulo)

Cid Bartolomeu de Araújo  
(Northeast & Espírito Santo)

Elisa Reis (Rio de Janeiro)

Francisco Salzano (South)

Maria Carolina Nemes (Minas & Midwest)

Roberto Dall'Agnol (North)

### Directors

Antonio Carlos Campos de Carvalho

Evando Mirra

Iván Izquierdo

Luiz Davidovich

Reynaldo Luiz Victoria

## Editorial Committee

Elisa Oswaldo-Cruz Marinho

Fernanda Wolter

Fernando Veríssimo

Gabriella Mello

Marcia Graça Mello

Marcos Cortesão Barnsley Scheuenstuhl

## Collaborators

Ana Beatriz de Souza Siqueira

Ana Luisa Barreto Issa

Davi Padilha Bonela

Luiz Gustavo de Oliveira Alves

Madiano Marchetti

Nathalia Mariano Dumit de Oliveira

Nathália Thaisa Calazans

Vitor Vieira de Oliveira Souza

## Graphic Design

Pedro Armando



Membros Institucionais



Ministério da  
Ciência, Tecnologia  
e Inovação