

THE INTER-AMERICAN NETWORK OF ACADEMIES OF SCIENCES

IANAS IS MEMBER AFILLIATED OF





North America

<u>The Academies of Arts, Humanities and Sciences of Canada</u>
<u>US National Academy of Sciences</u> Mexican Academy of Sciences

Central America and Caribbean

• Cuban Academy of Science

Academy of Sciences of the Dominican Republic
Academy of Medical, Physical and Natural Sciences of Guatemala
National Academy of Sciences of Costa Rica
Nicaraguan Academy of Sciences
APANAC, Panama

South America

Brazilian Academy of Sciences

Chilean Academy of Sciences

National Academy of Exact, Physical and Natural Sciences of Argentina

Academy of Physical, Mathematical and Natural Sciences of Venezuela

National Academy of Sciences of Peru

National Academy of Sciences of Bolivia

Colombian Academy of Exact, Physical and Natural Sciences

Academy of Science or Uruguay

Academy of Sciences of Ecuador

Regional Members

<u>Latin American Academy of Science</u> <u>Caribbean Academy of Sciences</u> <u>Caribbean Scientific Union</u>



Our strength: 23 Academies of Sciences

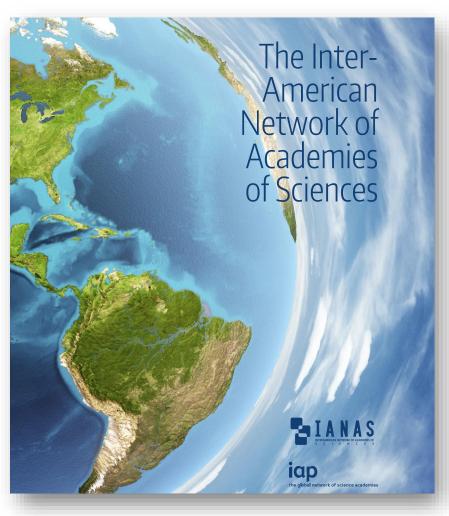
Hundreds of scientists actively collaborating with IANAS.

- » The mission of IANAS is to strengthen science communities in the hemisphere and to provide an independent source of science policy advice to governments on key challenges.
- » Since its inception IANAS has initiated active programs in Science Education, Water Resources, Energy, Women for Science and Academy Capacity Building.
- » Four new Academies from Ecuador, Honduras, Uruguay and the Academy of Cordoba (accorded observer status) and one Scientific Association APANAC (Panama) are now part of IANAS



IANAS General **Assembly and** Scientific Conference "Impacts of Climate **Change, Disasters** and Hazards" 16 - 18 July 2013

Capacity Building







The IANAS General Assembly 2016

Hosted by the **Brazilian Academy of Sciences** here the Presidents of the Academies of Sciences of the Americas with Co-chair **Juan A. Asenjo**, new elected Co-chair **Jeremy McNeil** and past Co-chair **Michael Clegg**.

Hosted by the Brazilian Academy of Sciences on its 100th Anniversary

Capacity Building The Food and Nutrition Security for the Americas

This initiative was proposed and supported by the **German** National Academy of Sciences-**Leopoldina and by IAP**.

80 scientists and experts met in Mexico City to finalize the contents of **two publications** -a book and an executive report.

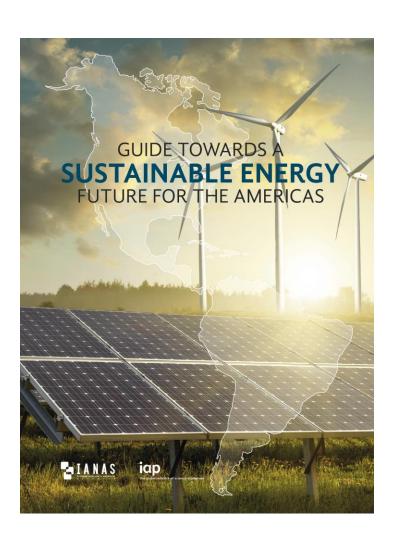
These publications will present the challenges and opportunities the Americas will face in the following 50 years.

Chapter Coordinators Meeting Lima, 13-16 March, 2017

Peruvian Academy of Sciences



The Energy Program



- The publication was presented during the General Assembly May 2016 in Rio de Janeiro
- It is available at ianas.org
- The Program met in Arizona, 24-26 April 2017



Energy Meeting at the Beckman Center Irvine, California, September 3 – 5, 2013

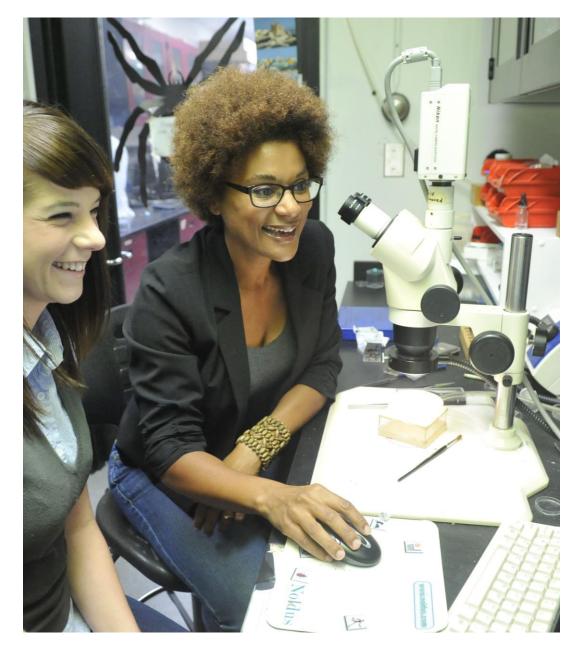
The Energy Program prepared a book on sustainable energy futures to highlight the critical role of science in energy sustainability and to also incorporate social, environmental and economic perspectives. The book expands on the public awareness of the role of science in current energy security, supply, cost, the role of women in the energy economy and climate change issues

Science Education Program

Academy of the Dominican
Republic, the Program met in
October 2016 (9-10) to discuss
the publication of a text
examining the experiences
working with IBSE and other
methodologies in the Americas
over the last decade.

The publication is in the final stages.

At the meeting the Focal Points met with local teachers and science professors and had a workshop sharing common experiences.



Working with Big Ideas of Science Education

Edited by Wynne Harlen

with Derek Bell, Rosa Devés, Hubert Dyasi, Guillermo Fernández de la Garza, Pierre Léna, Robin Millar, Michael Reiss, Patricia Rowell and Wei Yu



10 ideas of science

- 1. All matter in the Universe is made of very small particles.
- 2. Objects can affect other objects at a distance.
- 3. Changing the movement of an object requires a net force to be acting on it.
- 4. The total amount of energy in the Universe is always the same but can be transferred from one energy store to another during an event.
- 5. The composition of the Earth and its atmosphere and the processes occurring within them shape the Earth's surface and its climate.
- Our solar system is a very small part of one of billions of galaxies in the Universe.
- 7. Organisms are organised on a cellular basis and have a finite life span.
- 8. Organisms require a supply of energy and materials for which they often depend on, or compete with, other organisms.
- 9. Genetic information is passed down from one generation of organisms to another.
- The diversity of organisms, living and extinct, is the result of evolution.



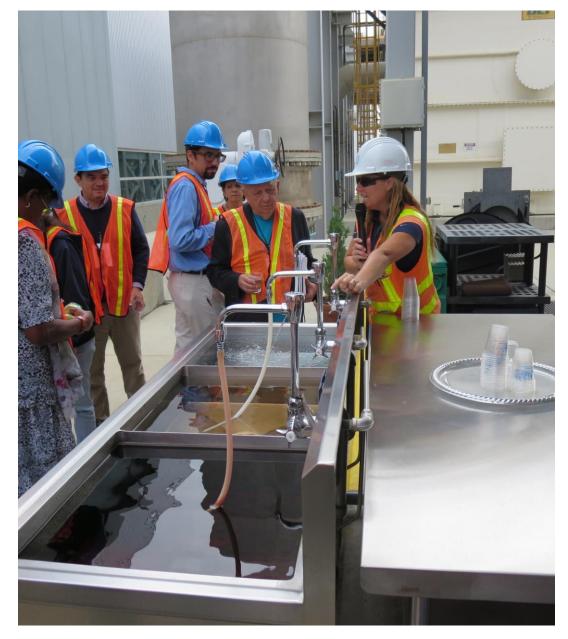
In 2007 18 Academies of Science of the Asia-Pacific Region met in Bangkok, Thailand to launch the FASAS/AASA Asia-Pacific regional network of science education programme in the IAP framework.



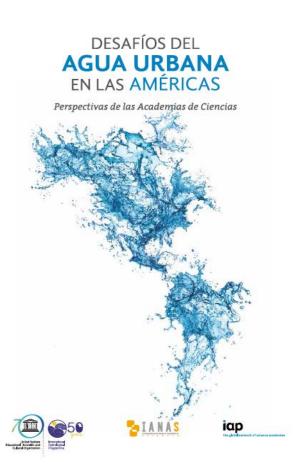
The Water Program

Hosted by the Centre of
Science and Technology of
Antioquia, the Water Program
met in November 2016 (21-26)
in Medellin Colombia to review
the advances of the report on
Water Quality in the Americas
and to deliver the Executive
Summary on Urban Waters in
the Americas.

The IANAS Focal Points were invited to give different talks at the National Symposium on Water organized by the host institution.



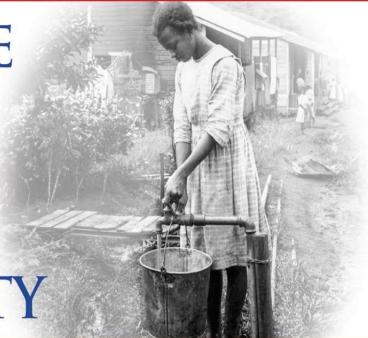
Urban Water Challenges in the Americas: a View form the Academies of Sciences



- Release of the book "Urban Water Challenges in the Americas: A view from the Academies of Sciences" in March 2015. The publication has been presented at public events in various countries and is available at most of the Academies of Sciences.http://www.ianas.org/index.ph p/books
- Approximately 200 scientists from the Americas contributed to this volume.
- Book partially supported by UNESCO IHP, IAP and the Mexican Academy of Sciences.

NASAC/IANAS: SCIENCE for the WORLD

SCIENCE FOR URBAN WATER SECURITY



October 15-18, 2014 • Panama City, Panama















The Women for Science Program



IANAS Women for Science



A wonderful publication of short biographies on **young to mid career women** scientists in the Americas in both English and Spanish was released on International Women's Day March 8, 2016 entitled "Young women scientists: a bright future for the Americas"



A Prize for young women scientists honoring our inspiring WfS leader "Anneke Levelt Sengers"

IANAS WfS Focal Points Meeting in Santiago with participation of ASSAf





WfS meeting at the NAS at Irvine, CA, 26-29 March 2017





- Organized by the Brazilian Academy of Sciences (BAS), the National Academy of Medicine of Brazil (NAM) and the Oswaldo Cruz Foundation (Fiocruz)
- Supported by IAP for Health and the Inter-American Network of Academies of Sciences (IANAS), among others



Opening Ceremony



Audience

- November 7-8: The Zika Menace in the Americas: Challenges and Perspectives
- November 8-10: One year after the announcement of the national public health emergency in Brazil: lessons, achievements and challenges

IANAS: Tangible results 2013-2017

- IANAS Reports and other publications
- Diagnóstico del Agua en las Américas. Spanish version released on March 2012/ ISBN 978-607-9217-04-4
- Women Scientists in the Americas. Their inspiring Stories. March 2013 / ISBN Pending
- Mujeres Científicas de las Américas. Sus historias inspiradoras. March 2013 / ISBN Pending
- Cambio Climático. Evidencias, Impactos y Opciones. July 2013 / Rights granted by NAS to IANAS for free public dissemination)
- Diagnosis of Water in the Americas. June 2013 ISBN 978-607-96209-2-9
- Urban Water Challenges in the Americas: A perspective from the Academies of Sciences. March 2015/ISBN 978-607-8379-12-5
- The Inter American Network of Academies of Science: An example of Science-Based cooperation in the Americas. AAAS Science & Diplomacy. 03.30.2015. Clegg, M. T., J. A. Asenjo and A. de la Cruz. 2015
- Survey of Women in the Academies of Sciences. May 2015/ ISBN Pending

Key support – IANAS does a lot with a relatively small amount of funds but key contribution of individual Academies and its Members

- IAP
- Mexican Academy of Sciences
- US National Academy of Sciences
- UNESCO IHP
- Academies that have hosted various IANAS events
- Adriana de la Cruz, Executive Director, and office staff in Mexico
- ICSU-ROLAC

Thank-you, Gracias, Obrigado, Merci

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