

TWAS, the academy of sciences for
the developing world:
Mechanisms for support



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Headquarters



- Located at the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy
- Administered by the United Nations Educational, Scientific and Cultural Organization (UNESCO)
- Core funding from the Government of Italy.



Membership

- **More than 900 Members in 90 countries**
- 85% 'Fellows' in 73 countries in the South
- 15% 'Associate Fellows' in 17 countries in the North
- 15 Nobel Laureates



Objectives

- Recognize, support and promote **excellence** in scientific research in the South
- Respond to the **needs of scientists** working under unfavourable conditions
- Support **South-South** scientific exchange and collaboration
- Promote **South-North** cooperation between individuals and centres of excellence
- Promote **dissemination of scientific information** and sharing of innovative experiences

Promoting Excellence



- Academy membership granted to the most distinguished scientists in the South
- TWAS prizes given for significant contributions by scientists in the South
- Prizes for young scientists awarded on behalf of TWAS by organizations in the South



2011 TWAS-AAS-Microsoft Research awards for young computer scientists in Africa:

Mohamad Abou El-Nasr, professor and head of the Computer Engineering Department, Arab Academy for Science, Technology & Maritime Transport (AASTMT), Alexandria, Egypt.



Hein Venter, head of the Information and Computer Security Architectures (ICSA) research group, Department of Computer Science, University of Pretoria, South Africa.



Adesina Simon Sodiya, senior lecturer at the Department of Computer Science, University of Agriculture, Abeokuta, Ogun State, Nigeria.



Responding to Needs



- Merit-based competitive research grants in basic sciences given to young scientists – in 81 S&T-lagging countries;
- TWAS research units in S&T-lagging countries;
- TWAS-COMSTECH grants to young scientists in OIC member states in specific areas:

ICT is one of the thematic areas

Grants to Research Units

Mudogo, V.

Department of Chemistry, University of Kinshasa, Congo, D.R.

“Investigation in the structure, properties and reactivity of macromolecules”
- in particular, those extracted from indigenous medicinal plants with potential antimalarial or anti-sickle cell anaemia effects.



Tolofoudye, A.

Faculté des Sciences et Techniques (FAST), University of

Mali, Bamako, Mali

“Improving drinking water quality via photovoltaic-driven nanofiltration and reverse osmosis treatment of brackish water”

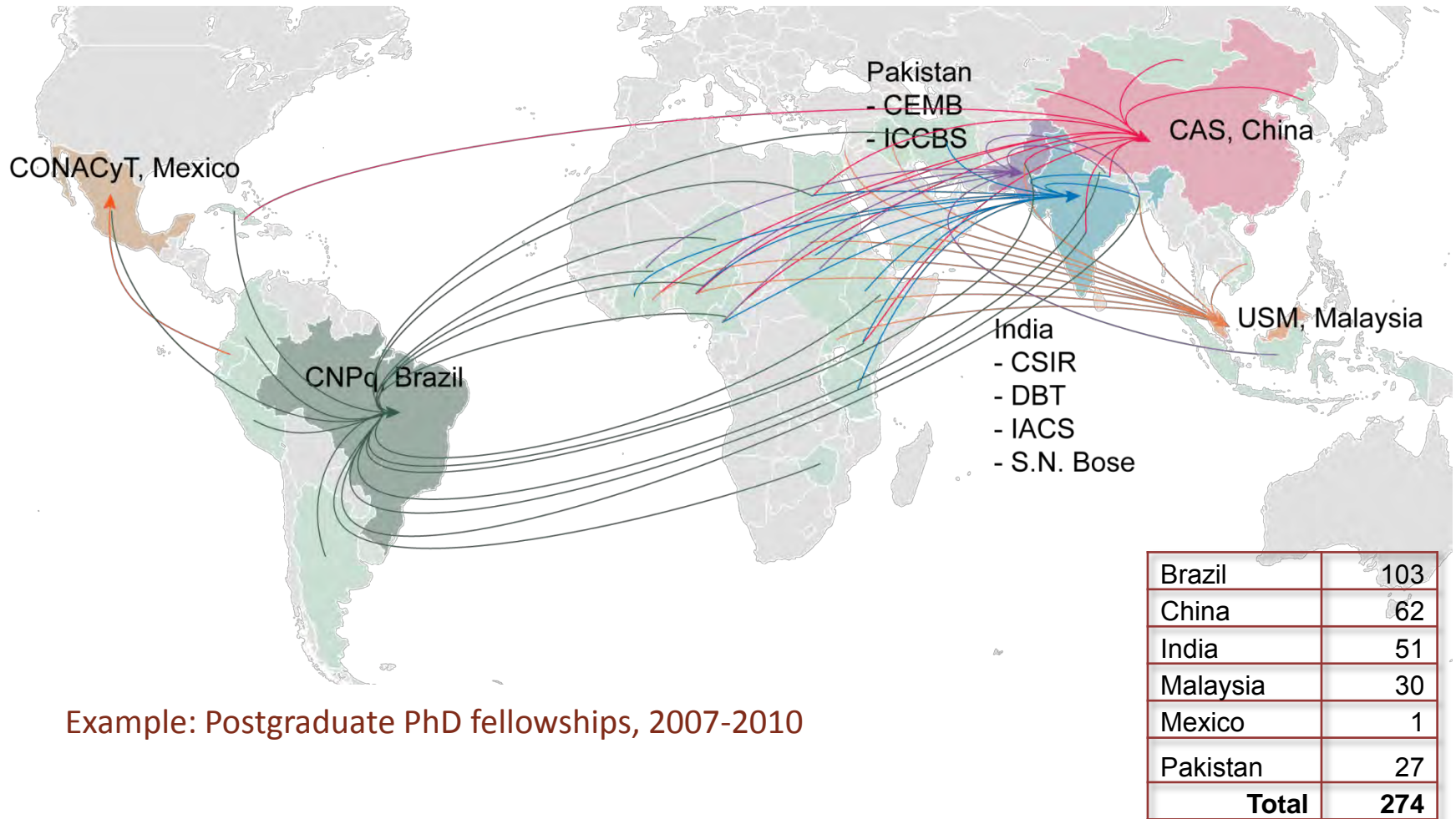
Supporting South-South Collaboration



Dr. H.M.I. Ahmed from Egypt at the Universidade Federal de Viçosa in Brazil
(CNPq Fellowship for Postdoctoral Research)

- Postgraduate and postdoctoral fellowships for young scientists (Brazil, China, India, Kenya, Malaysia, Mexico, Pakistan and Thailand)
- Associateships for regular visits to centres of excellence in the South (with UNESCO)
- New since 2010 – TWAS-DFG collaboration for postdoc research in Germany.

Supporting South-South Collaboration



Example: Postgraduate PhD fellowships, 2007-2010

Supporting South-South Collaboration

- With funds from the Swedish International Development Cooperation Agency (Sida), OWSD offers **fellowships** for postgraduate training to young **women** scientists from **sub-Saharan African and Least Developed Countries** (LDCs) at centres of excellence in the South.
- More than **70 graduates** to date.



www.owsdw.org – Organization for Women in Science for the Developing World

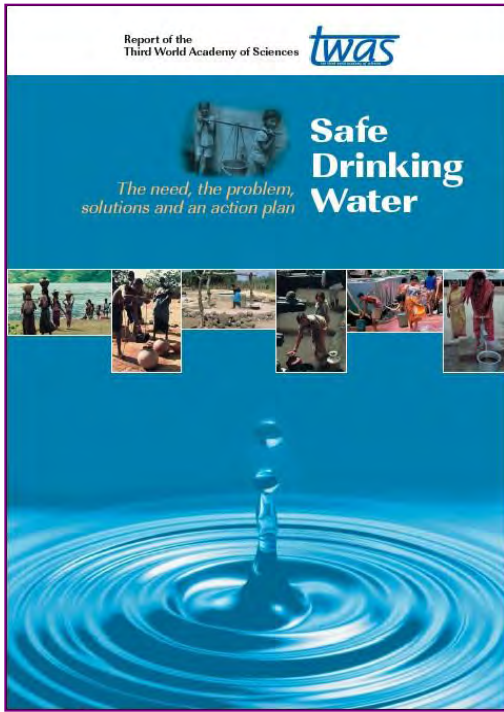
Supporting South-South Collaboration

- Support international meetings held in the South;
- Support for computer science meetings in Africa (TWAS-AAS-Microsoft Research);
- Support visits of internationally renowned scientists to institutions in the South.



Sharing and Disseminating Information

- Quarterly newsletter, Annual Report, website
- Dedicated reports
- Sharing Innovative Experiences



Sharing and Disseminating Information

- Link to open access publications
- TWAS-OWSD Thesis Repository
- Partner in EuroAfrica-ICT project

The screenshot shows the TWAS website homepage. At the top, there is a blue header with the TWAS logo and the tagline "the academy of sciences for the developing world". To the right of the logo is a search bar and a "Search" button. Below the header is a navigation menu with links for Home, About TWAS, TWAS Members, Programmes, Publications, Links, and Contact Us. On the right side of the header, there are links for "Site Map" and "Contact".

The main content area is divided into several sections:

- LATEST NEWS on science, technology & the developing world.**
 - Cycle paths in developing world 'not so healthy'**: Although using bikes in cities is good for health, in the developing world air contamination can lead to health problems. [More...](#) 14 November 2011 | Source: SciDev.Net
 - Egyptian scientist sues Nature**: An Egyptian scientist is suing Nature for publishing an article that he says damaged his reputation, and the case has begun in the UK. [More...](#) 14 November 2011 | Source: BBC Online
 - Pigeon pea genome sequence could boost yields**: The sequencing of the pigeon pea genome will allow researchers to find higher-yielding varieties of the crop in a shorter time. [More...](#) 14 November 2011 | Source: SciDev.Net
 - Sustainable innovation: the key to global development**: Next year's Rio+20 meeting must put science-based innovation at the heart of the
- TWAS is an autonomous international organization, based in Trieste, Italy, that promotes scientific excellence for sustainable development in the South.** [Read more](#)
- News**
 - TWAS General Meeting in Trieste**: 14 November. TWAS will hold its 22nd General Meeting in Trieste, Italy, on 21-23 November. More than 250 people from 30 countries are expected to attend. [Read More...](#)
 - TWAS-AAS-Microsoft 2011 Award**: 10 November. Three African scientists have been awarded the 2011 TWAS-AAS-Microsoft Award for Young Computer Scientists, given by TWAS, the African Academy of Sciences (AAS) and Microsoft Research. [Read More...](#)
 - Women in science in Cuba**: 4 November. Over the past half century, Cuba has
- log in**
- leggi in italiano**: Archivio degli articoli in italiano
- TWAS's 22nd General Meeting**: will be held in Trieste, Italy, from 21 to 23 November 2011. [Read More](#)
- TWAS's 21st General Meeting**: was held in Hyderabad, India, from 19 to 22 October 2010. [Read More](#)
- TWAS's 11th General Conference and 20th General Meeting**: took place in Durban, South Africa, from 20 to 23 October 2009. [Read More](#)
- Upcoming deadlines**: TWAS supports researchers in developing countries through a variety of [Read More...](#)

Thank you

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