TWAS, the academy of sciences for the developing world, and its affiliated organizations
Establishment

- Founded in 1983 in Trieste, Italy, by Abdus Salam and 40 other eminent scientists from the South (incl. 10 Nobel Laureates)
- Inaugurated in 1985 by the Secretary General of the United Nations, Javier Perez de Cuellar
Headquarters

- Located at the Enrico Fermi Building, Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy
- Administered by the United Nations Educational, Scientific and Cultural Organization (UNESCO)

• International Atomic Energy Agency (IAEA) until 1990

• United Nations Educational, Scientific and Cultural Organization (UNESCO)
Regional Offices

- Beijing: Chinese Academy of Sciences
- Alexandria: Bibliotheca Alexandrina
- Nairobi: J.N. Centre for Advanced Scientific Research
- Bangalore: J.N. Centre for Advanced Scientific Research
- Rio de Janeiro: Brazilian Academy of Sciences
- Bangalore: J.N. Centre for Advanced Scientific Research
- Alexandria: Bibliotheca Alexandrina
- Beijing: Chinese Academy of Sciences
- Nairobi: J.N. Centre for Advanced Scientific Research
- Bangalore: J.N. Centre for Advanced Scientific Research
- Rio de Janeiro: Brazilian Academy of Sciences
Membership

- 841 Members in 89 countries
  - 711 “Fellows” in 73 countries in the South
  - 130 “Associate Fellows” in 17 countries in the North
  - 15 Nobel Laureates
  - > 25% in physical sciences
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
Promoting Excellence

- Prizes for young scientists awarded on behalf of TWAS by organizations in the South
- Trieste Science Prize
Responding to Needs

- Merit-based competitive research grants in basic sciences given to young scientists in the South
Responding to Needs

- TWAS research units in LDCs
- Spare parts for scientific equipment supplied to laboratories in need
Supporting Exchange

- Postgraduate and postdoctoral fellowships for young scientists in collaboration with Brazil, China, India and Pakistan
Supporting Exchange

- Associateships for regular visits by senior scientists to centres of excellence in the South (in collaboration with UNESCO)
- Fellowships for advanced training and research
Promoting South-North Cooperation

- Support international meetings held in the South
- Support visits of internationally renowned scientists to institutions in the South (with ICSU, UNESCO and UNU)
TWAS General Conferences/Meetings

- To review status and prospects of science in the South and promote strategies for South-South and South-North cooperation

9th General Conference held in China in October 2003 to celebrate TWAS’s 20th anniversary
TWAS General Conferences/Meetings

China 1987
Venezuela 1990
Kuwait 1992
Nigeria 1995
Brazil 1997
Senegal 1999
Iran 2000
India 2002
China 2003
Egypt 2005
Brazil 2006
Mexico 2008
Dissemination of Information

- Quarterly newsletter, TWAS Research Updates, proceedings
- Reports
- Innovative experiences
Main Sponsors

- Directorate General for Development Cooperation, Ministry of Foreign Affairs, Italy
- Department for Research Cooperation (SAREC), Swedish International Development Cooperation Agency (Sida)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- Kuwait Foundation for the Advancement of Sciences (KFAS)
- OPEC Fund for International Development
TWAS and Affiliated Organizations

**TWAS** (1983)
841 individual members

**TWNSO** (1988)
149 member organizations

**TWOWS** (1989)
2,669 individual members

**IAP** (1993)
94 member academies

**IAMP** (2000)
64 member academies
TWAS and Affiliated Organizations

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**TWAS** *(1983)*
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Affiliated Organizations: TWNSO

Third World Network of Scientific Organizations

• Founded in Trieste in 1988 at the initiative of TWAS

• 149 members in 77 nations of the South:
  – 38 ministries of science and technology and higher education
  – 48 science academies
  – 38 national research councils
  – 25 other S&T organizations
Affiliated Organizations: TWNSO

• TWNSO helps to
  – Build joint **political support** for science-based economic development
  – Develop and **share** innovative **experiences** in the application of S&T to sustainable development
  – Promote **joint research** with LDCs
  – Develop thematic networks of centres of excellence to **address** specific development-oriented **problems**
Affiliated Organizations: TWNSO

Address Specific Problems

• Conservation, management and sustainable use of water resources in the South

• Application of innovative renewable energy technologies in the South

• Sustainable utilization of biodiversity in arid and semi-arid lands

• Sustainable use of medicinal and indigenous food plants in developing countries
Sharing Innovative Experiences
Affiliated Organizations: TWNSO

Sponsors

- Global Environment Facility (GEF), Washington
- Special Unit for South-South Cooperation (SSC), United Nations Development Programme (UNDP), New York
- United Nations Environment Programme (UNEP), Nairobi
- World Meteorological Organization (WMO), Geneva
- OPEC Fund for International Development, Vienna
- United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris
• January 2007: TWNSO to become the "Consortium on Science, Technology and Innovation for the South"
• Established by the Ministers of S&T and endorsed by the Foreign Ministers of the Group of 77 (2006)
TWAS and Affiliated Organizations

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149 member organizations

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64 member academies
Established in 1993, the Third World Organization for Women in Science unites nearly 2,700 women scientists and more than 80 institutions in 87 developing nations and 27 countries in the North.
Affiliated Organizations: TWOWS

- With funds from the Department for Research Cooperation (SAREC) of the Swedish International Development Cooperation Agency (Sida), TWOWS 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.
TWOWS Postgraduate Fellowships

• **1998**: TWOWS launches postgraduate fellowships for women
• Since 1998, 1,475 applications have been received from 47 Least Developed and Sub-Saharan African countries.
• Since 1998, 295 fellowships have been awarded to women scientists from 43 countries (1% in physics).
• Since 1998, 45 young women researchers have graduated with TWOWS support.
TWAS and Affiliated Organizations

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64 member academies
Affiliated Organizations: IAP

- Launched in 1993, the InterAcademy Panel on International Issues is a global network of 94 science academies in 90 countries.
Affiliated Organizations: IAP

- IAP promotes:
  - Cooperation between member academies on science-related issues of global concern
  - Role of academies as independent, credible advisors to governments on policies and decisions based on S&T
  - Capacity building for academies in developing countries
  - Regional networks of academies in Africa (NASAC), Asia (FASAS, AASA), the Americas (IANAS), the Caribbean (CSU) and OIC countries (NASIC)
Affiliated Organizations: IAP

- IAP issues statements on topics of global concern (e.g., human cloning, biosecurity, evolution)
Affiliated Organizations: IAP

- Organizes general conferences every three years
  - Tokyo, 2000
  - Mexico City, 2003
  - Alexandria, 2006
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**TWAS (1983)**
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**IAP (1993)**
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64 member academies
Established in 2000, the InterAcademy Medical Panel is a global network of the world's medical academies or the medical divisions of science academies.
Affiliated Organizations: IAMP

• The 64 members of IAMP seek to:
  – Improve global health, especially among the world's poorest nations.
  – Build capacity of academies to address health-related issues.
  – Provide independent scientific advice to national governments and international bodies for the promotion of health science and health care policy.
Affiliated Organizations: IAMP

- 2nd Global Meeting of IAMP in Beijing, China, in April 2006, together with the launch of the publications of the Disease Control Priorities Project (DCPP)
- Workshop on Reducing Maternal and Perinatal Mortality, 14-15 December 2007
Thank you

www.twas.org
www.twnso.org
www.twows.org
www.interacademies.net
www.iamp-online.org