

# TWAS...

## ... honours scientific achievement

### • TWAS Prizes

The Academy awards prizes of USD15,000 to scientists from developing countries who have made outstanding contributions to the advancement of biology, chemistry, mathematics, physics as well as agricultural, earth, engineering and medical sciences.

### • The Ernesto Illy Trieste Science Prize

TWAS and illycaffè award a USD100,000 prize annually to an eminent scientist in a developing country who has made significant contributions to global science.

### • Prizes to young scientists in developing countries

The Academy offers financial assistance to academies and research councils in developing countries for the purposes of awarding prizes to young scientists in their countries.

### • AU-TWAS Young Scientist National Awards

The African Union (AU) and TWAS offer support to African countries to institute national awards to honour their young scientists.

### • TWAS-AAS-Microsoft Award for Young Computer Scientists

In collaboration with Microsoft Research and the African Academy of Sciences (AAS), TWAS awards three prizes each year to young researchers in computer sciences. Each award carries a Euro 7,000 prize.

## ... addresses the needs of scientists and research groups

### • TWAS Research Grants

The Academy awards grants in biology, chemistry, mathematics and physics for research projects carried out by either individual scientists or research units in the 80 S&T-lagging countries that have been identified by TWAS. A maximum of USD15,000 can be granted to individuals and USD30,000 to research units.

### • Regional Conferences of Young Scientists

In cooperation with its regional offices, TWAS organizes annual conferences of young scientists from the developing world.

## ... promotes South-South exchanges

### • Postgraduate and postdoctoral fellowships

TWAS offers some 300 postgraduate and postdoctoral fellowships in collaboration with its partner organizations in China, Brazil, India, Kenya, Malaysia, Mexico, Pakistan and Thailand. TWAS provides travel support. The collaborating institutions cover living expenses.

### • Fellowships for advanced training and research

TWAS provides travel support to scientists in developing countries enabling them to spend between 3 and 12 months at a research institution in a developing country other than their own. Fellowships include a stipend of up to USD300 per month. Local sources cover living expenses.

### • Associateships

Established by TWAS together with UNESCO and centres of excellence in the South, this programme enables researchers from the South to visit collaborating centres for research collaboration twice in three years. Over 100 centres currently participate in the scheme. TWAS provides travel support and a monthly contribution of up to USD300. The host centres cover living expenses.

## ... fosters international collaboration

### • TWAS General Conferences

Every three years, TWAS holds a general conference in a developing country to review the current status and future prospects of science and technology in various regions of the South. Conferences have been organized in Brazil, China, India, Kuwait, Nigeria, Senegal, South Africa and Venezuela. The next general conference will be held in 2012 in China. TWAS members, ministers of science and technology, presidents of academies and research councils and representatives of international organizations from both the South and the North attend.

### • Support for International Scientific Meetings

The Academy encourages the organization of international scientific meetings in developing countries by providing up to USD5,000 for travel grants for speakers from abroad and/or participants from the region.

### • TWAS-UNESCO Visiting Scientists

By sponsoring visits of renowned scientists to institutions and research groups in developing countries – especially those in the least developed countries with limited outside contacts – this programme provides an opportunity for research communities in the South to establish long-term links with leaders in science both in the North and the South.

### • TWAS Research Professors in Least Developed Countries

Upon request of prospective host institutions in least developed countries, TWAS members are offered appointments as TWAS Research Professors for five years. During their appointment, they are expected to visit the host institution three times for a minimum stay of one month each time. TWAS provides travel support. The host centre cover living expenses.



## ... disseminates information

### • TWAS Newsletter

Quarterly publication containing news about TWAS and its partner organizations

### • TWAS Year Book

Profiles of TWAS members

### • TWAS Annual Report

Highlights of the Academy's activities

### • TWAS Reports

Monographs on such topics as safe drinking water and scientific capacity-building in the South

### • Excellence in Science

Case study publications highlighting successful scientific institutions in the South, published in collaboration with Science Initiative Group (SIG), the Commission on Science and Technology for Sustainable Development in the South (COMSATS) and others

### • Profiles of Institutions for Scientific Exchange and Training in the South

Detailed information about the resources available at the best research and training institutions in the South

# twas



Promoting *Scientific Excellence*  
for *Sustainable Development*  
in the South

For additional information and application forms, visit

## www.twas.org

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TWAS gratefully acknowledges the financial support of the:

- Government of Italy
- Swedish International Development Cooperation Agency (Sida)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- illycaffè S.p.A.
- Kuwait Foundation for the Advancement of Sciences (KFAS)
- OPEC Fund for International Development

In addition, the Academy gratefully acknowledges the contributions to the TWAS Endowment Fund received from the governments of developing countries as well as from individual TWAS members.

# TWAS in brief

**TWAS, the academy of sciences for the developing world**, is an autonomous international organization founded in 1983 in Trieste, Italy, by a distinguished group of scientists from the developing world under the leadership of Nobel laureate Abdus Salam of Pakistan. It was officially launched as the 'Third World Academy of Sciences' by the secretary general of the United Nations in 1985.

- TWAS's mission is to promote scientific capacity and excellence for sustainable development in the South.
- The Academy's membership consists of Fellows and Associate Fellows representing the world's most distinguished scientists: Fellows are citizens of the South; Associate Fellows are citizens of the North who were either born in the South or have made significant contributions to the advancement of science in the South. At present, TWAS has nearly 1,000 members in some 90 countries. Fellows living and working in the South represent 85 percent of the membership.
- A Council, elected by members every three years, provides guidance for the Academy's activities. The secretariat, which is located on the premises of the Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste, Italy, is responsible for administering and coordinating TWAS's programmes.
- In 1991, the United Nations Educational, Scientific and Cultural Organization (UNESCO) assumed responsibility for administering



TWAS's funds and staff. Since its inception, TWAS's expenses have largely been covered by generous contributions from the Italian government. In January 2004, the Italian government passed a law that ensures permanent funding for the Academy's operations. Representatives of the Italian government and UNESCO sit on TWAS's steering committee, which meets annually to discuss financial matters.

- Since 1986, TWAS has supported scientific research in some 100 countries in the South through a variety of programmes. More than 2,000 eminent scientists worldwide, including TWAS members, have peer-reviewed proposals for research grants and fellowships as well as nominations for awards submitted to the Academy by scientists and institutions from developing countries.
- TWAS has developed joint activities with UNESCO, ICTP, the International Council for Science (ICSU), the United Nations Development Programme's Special Unit for South-South Cooperation (UNDP-SSC), the United Nations University's Institute for Advanced Studies (UNU-IAS) and the International Centre for Genetic Engineering and Biotechnology (ICGEB).

## TWAS Objectives

- Recognize, support and promote excellence in scientific research in the South.
- Provide promising scientists in the South with the research facilities necessary for the advancement of their work.
- Facilitate contacts between individual scientists and institutions in the South.
- Encourage South-North cooperation between individuals and centres of scholarship.
- Promote scientific research on major challenges faced by developing countries.

## TWAS Council

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- In 1988, TWAS facilitated the establishment of the Third World Network of Scientific Organizations (TWNISO), a non-governmental alliance of some 150 scientific organizations in the South. In 2006, the foreign ministers of the Group of 77 and China endorsed the transformation of TWNSO into the **Consortium on Science, Technology and Innovation for the South** (COSTIS). COSTIS's goals are to help build political and scientific leadership in the South and to promote sustainable development through South-South and South-North partnerships in science and technology. TWNSO's activities will be continued under COSTIS. These activities include, for example, the creation of networks of centres of excellence involved in research and development in such areas as renewable energy, dryland biodiversity, medicinal plants and safe drinking water.

- TWAS also played a key role in the establishment of the **Organization for Women in Science for the Developing World** (OWSD, formerly the Third World Organization for Women in Science, TWOWS). The organization was officially launched in Cairo, Egypt, in 1993. Some 3,200 women scientists from more than 90 countries in the South are members of OWSD, making it the largest organization of women scientists in the world. Its main objectives are to promote the leadership of women in science and technology in the South and to strengthen the participation of women in science-based development and decision-making. The secretariat of OWSD is hosted and assisted by TWAS.

- Since 2000 TWAS has provided the secretariat for **IAP, the global network of science academies**. Established in 1993, IAP, which unites more than 100 science academies worldwide, provides high-quality independent information and advice on science and development to policy-makers and the public; supports programmes on scientific capacity building, education and communication; and leads efforts to expand international cooperation in science.

- In 2004, the secretariat of the **InterAcademy Medical Panel** (IAMP), an association of the world's medical academies and medical divisions of science academies, relocated from the US National



Academy of Sciences' Institute of Medicine in Washington, DC, USA, to the TWAS headquarters in Trieste. IAMP is committed to improving human health worldwide through the coordinated action of its 69 members.

- TWAS has established some 20 national chapters. These chapters meet to discuss issues of common concern, including the role of science in sustainable development. The chapters also enable scientists involved with TWAS research grants and fellowship programmes to link to their nations' wider scientific communities.

## TWAS Regional Offices

To help TWAS design, disseminate and implement its activities throughout the various regions of the developing world, the Academy has established five regional offices. These are hosted by the Chinese Academy of Sciences in **Beijing**, China; the Jawaharlal Nehru Centre for Advanced Scientific Research in **Bangalore**, India; the Bibliotheca Alexandrina in **Alexandria**, Egypt; the African Academy of Sciences in **Nairobi**, Kenya; and the Brazilian Academy of Sciences in **Rio de Janeiro**, Brazil.

Each year, the Regional Offices select up to five young scientists from their region to serve as TWAS Young Affiliates for a period of five years.

