

TWAS-ARO (THE ACADEMY OF SCIENCES FOR THE DEVELOPING WORLD-ARAB REGIONAL OFFICE) IS ONE OF FIVE REGIONAL OFFICES ESTABLISHED BY TWAS TO HELP DECENTRALIZE THE ACADEMY'S ACTIVITIES. TWAS-ARO REPRESENTS ALL 22 ARAB COUNTRIES. IN THE FOLLOWING ARTICLE, MOHAMED M. EL-FAHAM, DIRECTOR OF THE CENTER FOR SPECIAL STUDIES AND PROGRAMS (CSSP), AND LARA ELMALLAKH, CSSP RESEARCH SPECIALIST, AT *BIBLIOTHECA ALEXANDRINA*, DESCRIBE THE ACTIVITIES OF TWAS-ARO.

TWAS-ARO operates from the Center for Special Studies and Programs (CSSP), one of eight research centres affiliated with *Bibliotheca Alexandrina* (BA). CSSP's mission has much in common with the goals of TWAS: to promote international collaboration, support activities that enhance the careers of scientists, sponsor scientific research and increase public awareness of science and technology.

Bibliotheca Alexandrina, the new library of Alexandria, was inaugurated on October 2002, just 200 metres from the site of the famed ancient library of Alexandria, which was destroyed in the 3rd century C.E. The latter was not only a renowned center of knowledge,

housing 7,000 manuscripts in all branches of history, philosophy and science, but also a place

TWAS in the Arab Region

where such prominent thinkers as Euclid, Archimedes, Hipparchus and Eratosthenes conducted research.

Following in the tradition of the ancient library, BA is not only a library – a repository for books – but also a cultural centre that encourages and supports creative endeavours in science, art and the humanities. Its mission is to be a center of excellence for the production and dissemination of knowledge, as well as a place of dialogue, learning and understanding between cultures. Each year, the BA welcomes some 1.4 million visitors and holds more than 700 events. Ismail Serageldin (TWAS Fellow 2001 and former Vice President for the Arab region) serves as the library's director.

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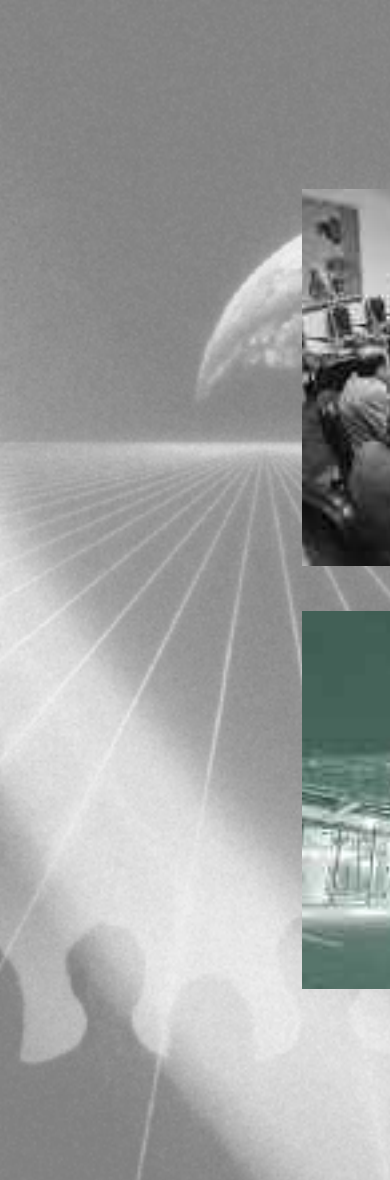
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REGIONAL MATTERS

Launched in 2005, TWAS-ARO is the youngest TWAS regional office. Despite its brief history, it has pursued a broad range of activities to advance science in the Arab region.

In November 2005, five months after the launch of TWAS-ARO, BA hosted TWAS's 16th General Meeting, which was inaugurated by Egypt's President Hosni Mubarak. In his speech, President Mubarak stressed the importance of bridging the gap between developed and developing countries through South-South collaboration in science.

Each year, TWAS-ARO holds an annual meeting, organized by the CSSP at Bibliotheca Alexandrina. The meeting has recently been accompanied by a special event designed to raise the profile of the office and its activities. For example, in 2007, a conference, "A New Dawn: Arabs Looking East", drew a large audience of prominent people, including leaders in politics, business, science, technology, culture and civil society from both Arab countries

and Japan. Discussions focused on potential scientific and technological collaborations and possible avenues for inter-cultural dialogue.

In 2008, the TWAS-ARO annual meeting served as an opportune time to launch the Arab Network of Networks for Science & Technology (ANNST). The network seeks to link scientific institutions and academies across the Arab region for the purposes of strengthening regional scientific exchange and capacity building.

In addition to its high-profile events, TWAS-ARO also seeks to identify outstanding scientists from the Arab world worthy of nomination for membership to TWAS. Sixty-one scientists from the region are currently members of TWAS (three new members were elected in 2009). In addition, three TWAS-ARO members currently serve on the TWAS Council, having been elected at the TWAS General Meeting held in South Africa, last autumn. The Council members from the Arab region are: Adel El-Beltagy from Egypt; Fayzah M.A. Al-Kharafi from Kuwait, who is also vice president for the Arab region (having replaced Ismail Serageldin); and Mohamed H.A. Hassan from Sudan, long-time executive director of TWAS, who is now treasurer.

FOCUS ON YOUTH

TWAS-ARO places strong emphasis on supporting and encouraging young scientists. TWAS Affiliates, promising young scientists under 40 years of age, are appointed for five years. As part of their membership, they receive TWAS publications as well as financial support to

attend TWAS's annual meeting. The recognition afforded by the appointment helps these promising young scientists to gain greater esteem in their home countries.

The office's commitment to supporting women scientists is attested to by the fact that four of the 13 TWAS Affiliates from the region are females. In upcoming years, TWAS-ARO aims to select more young women researchers as a means of encouraging female participation in S&T in the Arab region.

Another TWAS programme dedicated to young scientists is TWAS/BioVisionAlexandria.NXT (TWAS/BVA.NXT), which was launched in 2008, during the biennial conference, BioVision-Alexandria. TWAS and TWAS-ARO provide funds for young scientists from developing countries to attend BioVision conferences, which are held on alternating years in Alexandria and Lyons, France. The conference has become a major international event for the biological sciences, attracting a diverse group of participants from government, universities and the private sector.

The young scientists who attend not only have an opportunity to network with their peers but also to hear presentations from eminent scientists and administrators from around the world. Recent speakers at BioVision have included Joel Breman, senior scientific advisor, Fogarty International Center, National Institutes of Health, USA; Indridi Benediktsson, directorate-general for Research, Health, European Commission, Brussels; and Adel El Zaim, senior program specialist, International Development Research Center-IDRC, Canada.

The upcoming TWAS/BVA.NXT 2010, to be held in Alexandria in April, will focus on the critical issue of "Publishing Scientific Papers in the Developing World". Some 100 young scientists from developing countries, including those in the Arab region, will be selected to participate in the event. Plans also call for representatives from international publishing companies to attend.

In 2009, TWAS-ARO established the Young Arab Scientists (YAS) Prize to recognize the achievements of young scientists from the region and to encourage other young scientists to strive for excellence in their research. The first YAS prize was given to Walid El-Sharoud, assistant professor of microbiology at Mansoura University Mansoura, Egypt. His work focuses on microbiology, food safety and bacterial physiology.

TWAS REGIONAL PRIZE

In 2009, the TWAS Regional Prize, recognizing achievements in the building of scientific institutions in the Arab region, went to Adnan Badran, former





Prime Minister of Jordan and currently president of Petra University. Badran was honoured for his leadership in establishing a number of eminent scientific institutions in Jordan, including the Higher Council for Science and Technology (HCST), which helps to guide all scientific institutions in the country. He also spearheaded efforts to expand two private universities in the country – Philadelphia and Petra Universities.

In 2008, the TWAS Regional Prize for Development of Educational Material and School Science Curricula, was given to Saouma BouJaoude, professor of education at American University of Beirut, who received the award for his outstanding publications on the subject of science education. The TWAS Regional Prize 2007 for Public Understanding of Science went to Adnan Hamoui, professor of mathematics, Department of Mathematics and Computer Science at Kuwait University, and editor-in-chief of the Arabic edition of Scientific American, who was recognized for his outstanding work in translating scientific journals into Arabic.

PUBLIC ENGAGEMENT

One of the primary responsibilities of TWAS-ARO is to promote science, not just within the scientific community but also among the larger public. To achieve this goal, the regional office, in partnership with the CSSP, organizes a broad array of lectures, seminars, workshops and conferences on topics ranging from public health, to information technology, to environment and agriculture. Participants at these events come from a wide spectrum of

THE SUPERCOURSE PROJECT

In January 2009, the Bibliotheca Alexandrina and the World Health Organization (WHO) Collaborating Centre in Pittsburgh, Pennsylvania, USA, launched the Science Supercourse project. The initiative is designed to build an internet archive of power-point presentations in four main scientific fields: medicine and public health, agriculture, engineering and the environment. The presentations are compiled from the internet through a system designed by the BA's information and communications technology department. The primary goal of the Science Supercourse project is to provide free-of-charge the most up-to-date information to educators, scholars and scientists in developing countries. A DVD, containing more than 3,600 lectures, is being distributed worldwide. To date, more than 10,000 people have viewed the lectures. For additional information, see www.pitt.edu/~super1.



society. Some events are designed for youngsters and others for adults. More specialized activities are held for the scientific community and government officials.

In early 2009, for example, TWAS-ARO, again in partnership with the CSSP, organized a conference on bioethics for public officials from Egypt. The goal was to lay the groundwork for creating a national committee on this important issue. A pair of workshops on intellectual property rights and development and copyright protection in the digital age were held later that year.

SCIENCE IN SOCIETY

The important role that scientific capacity building plays in development cannot be ignored, especially in the Arab region. Yet, advocates of science must recognize that we live in tumultuous times and that this is nowhere more evident than in the Arab region. As a result, advocates must accept that efforts to promote science may have to take a back seat to more pressing issues.

Other matters of immediate import, whether economic, social or political in nature, pose a daunting challenge for institutions such as TWAS and Bibliotheca Alexandrina. That's because day-to-day circumstances present significant obstacles to those seeking to raise the profile of science in their countries and regions. Nevertheless, long-term solutions to the problems that undermine progress will not be devised without the insights that only science can provide. The work of TWAS-ARO may sometimes go largely unappreciated, but that doesn't diminish its significance. ■

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For additional information on TWAS-ARO,

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