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## NEWS

### Curtain raiser to the forthcoming Third World Academy of Sciences' 8th General Conference in New Delhi

India is the venue for the forthcoming Third World Academy of Sciences' (TWAS) 8th General Conference and the 7th General Meeting of the Third World Network of Scientific Organizations (TWNISO). The meeting is scheduled to be held during 27–31 October 2001 in New Delhi. The TWAS has currently as President, Chintamani Nagesa Ramachandra Rao, who is a founding fellow of TWAS and a distinguished solid state chemist.

TWAS was founded in 1983 by a group of eminent scientists under the leadership of the late Nobel Laureate Abdus Salam. It was, however, officially launched in 1985 with its headquarters in the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy. In May 2001, its membership stood at 588 from 76 countries (62 of which belong to the developing world). Fellows are elected from amongst scientists who are citizens of developing countries and Associate Fellows, from citizens of industrialized countries who have originated from developing countries, else have distinguished themselves to the cause of Third World science.

TWAS in its mission of 'promoting scientific excellence and capacities in the South for science-led development' has since its inception, nurtured a high-level of scientific research tempo in the Third World. The TWAS has an agenda of five key activities. These are:

*Capacity building for research:* Grants of up to US\$ 10,000 are given to young scientists from developing countries in the fields of biology, chemistry, mathematics and physics. Out of a total of 106 research grants awarded in the year 2000, the break-up by region is as follows: Africa/Arab nations: 23, Asia/Pacific: 41, Latin America/Caribbean: 42. In the period 1985–2000 out of 1434 research grants awarded, the region-wise distribution was as follows: Africa/Arab nations: 356, Asia/Pacific: 484, Latin America/Caribbean: 594. The overall distribution of research funding for all regions with respect to the different scientific fields is – biology: 666; chemistry: 240; mathematics: 108, and physics: 420.

TWAS, in its 'capacity building for research', also helps laboratories in developing countries augment their research efforts by purchasing spare-parts for scientific equipment, so as to help scientists perform experiments with minimal interruption. Since 1986, ICTP/TWAS Donation Programme has distributed books, journals, etc. from donors to institutions in developing countries. Through this programme, entire libraries and collections belonging to private or institutional donors have been shipped.

*Fellowship and associateship:* TWAS has the following schemes:

*South–South fellowship:* These fellowships help to promote mutual interaction

between scientists in developing countries. Most of them are tenable for a period of 1–3 months, however, in the case of some countries in the Third World, visits up to one year are possible. In the period 1986–2000, region-wise break-up of fellowships awarded is: Africa/Arab nations: 122; Asia/Pacific: 212 and Latin America/Caribbean: 214.

*Joint associate membership scheme:* There are 88 centres of excellence from 21 Third World countries who participate in this scheme. Through this scheme, an associate appointed for three years can visit a centre twice for research collaboration.

#### *Meetings and lectures*

*Support for international scientific meetings:* Financial assistance is rendered for organizing meetings and conferences, related to topics of interest to the Third World. These meetings serve to promote regional and international cooperation for nurturing science in the developing countries. In the year 2000, a total of 43 such scientific meetings have been supported by TWAS. In the period 1986–2000, out of a total of 574 meetings assisted, 139 were in Africa/Arab nations region, 211 in the Asia/Pacific region and 224 in the Latin America/Caribbean region. Grants are offered in all areas of natural sciences, except physics and

mathematics. Physics and mathematics are covered under a similar programme sponsored by the ICTP.

*Joint lectureship/professorship programme:* The lectureship programme enables eminent scientists, worldwide, to deliver five lectures in developing countries. This gives an opportunity for scientists from the Third World to interact with them. This programme of TWAS is in collaboration with International Council of Scientific Union (ICSU) and the United Nations Educational Scientific and Cultural Organization (UNESCO). In the year 1994, the professorship programme was initiated, through which a distinguished scientist could visit thrice, a chosen institution over a period of five years.

#### *Awards and prizes*

Outstanding contributions to the advancement of science are recognized through awards to individual scientists from developing countries. These are the TWAS Awards in Basic Sciences, TWNSO Prizes in Applied Sciences, TWAS History of Science Prize, TWAS Medal Lectures, The Abdus Salam Medal for Science and Technology and prizes for Young Scientists in developing countries.

#### *Information services*

TWAS has several publications that include a quarterly 'Newsletter', Annual Report on TWAS activities, Proceedings of TWAS General Conferences and specialized meetings, Year Book, Profiles of Institutions for Scientific Exchange and Training in the South, booklets on science, technology and development in the South and various other information about TWAS' programmes.

In addition, TWAS collaborates with TWNSO and the Third World Organization for Women in Science (TWOWS). Collaboration with TWNSO has been in the areas of (a) sustainable utilization of biodiversity in arid and semi-arid zones, (b) promoting best practices for sustainable use of medicinal and indigenous food plants in developing countries, and (c) promoting best practices for conservation, management and sustainable use of water resources in the South. With the formation of TWOWS, the project undertaken is 'Postgraduate training to female students from sub-Saharan Africa'.

About TWNSO: Established in 1988 with the help of TWAS, its goal is 'to help build political and scientific leadership in the South for science-based economic development and promote sustainable development through South-

South and South-North partnerships in science and technology'.

About TWOWS: Facilitated by TWAS and launched in Cairo in 1993, it has now more than 2000 members from over 80 countries in the South. Its goal is to 'promote women's leadership in science and technology in the South, with a view to strengthening their effective participation in science-based development and in decision-making processes'.

The forthcoming TWAS' 8th General Conference and the 7th General Meeting of TWNSO in Delhi would consist of the Council Meeting of TWAS, meetings of the various committees of TWAS, the TWAS 13th General Meeting, presentation of TWAS and TWNSO awards, TWAS Medal Lectures, Induction Ceremony of New Members and Symposia and Special Lectures. This meeting, the first of its kind to be held in India since TWAS was founded, would be of particular interest to the scientific community in India and also others around the world, especially for those in the developing countries.

For more information on the TWAS log on to their website at [www.twas-online.org](http://www.twas-online.org).

**Nirupa Sen**

## **A public-private partnership agreement signed in the area of bioinformatics, and announcement of the complete genomic sequencing of Indian isolate of hepatitis-C**

On 25 August 2001, an agreement was signed in New Delhi between the Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad, represented by S. E. Hasnain and J. Gowrishankar and the Tata Consultancy Services (TCS), Secunderabad, represented by M. Vidyasagar. Under this three-year agreement, stated to be 'the first of this magnitude and value between public and private sectors' in the area of bioinformatics, the level of fruitful interaction is slated to increase. This is proposed in the form of a three-pronged strategy. Firstly, CDFD would be organizing training programmes of nine-months duration, every year for a period of three years. The programme would consist of

training a batch of about twenty-five persons with backgrounds in either engineering or biology. These trainees would be employees of TCS. Secondly, research and development in the area of bioinformatics is to be undertaken at CDFD, with funds provided by TCS. Finally, both sides would identify and develop niche software packages in bioinformatics, that TCS would market globally. All intellectual property, generated as a consequence of this agreement would rest jointly with both TCS and CDFD. As a first instalment under this agreement, TCS presented a cheque of Rs 12.5 lakhs to CDFD.

Vidyasagar, spoke of TCS being the largest Information Technology (IT)

company in Asia and the fourth largest growing company in the world. He stated that TCS was moving out of the traditional confines of IT, and that the quantum of support provided for bioinformatics by TCS under the agreement was unprecedented in the annals of such collaboration.

There was also an announcement of the complete genomic sequencing of the Indian isolate of hepatitis-C. Hepatitis-C virus (HCV) is termed the 'silent killer'. In the world today, there are estimated to be about 170 million carriers of HCV; of them about 12.5 million are in India. Mainly transmitted through blood transfusion, HCV is responsible for human