

By Azim Kidwai

Gradually, over the years, this small but beautiful city of Northern Italy, Trieste, has turned into a centre for scientists of the developing world. The latest in this ancient Adriatic Coast habitation of a quarter million souls was the formation of an organisation that is to forge gainful linkages between their richly-endowed peers — the black American scientists of the USA — and the have-not black scientists of Africa.

It is now a 30-year endeavour behind these unique experiments in present day human history that has created a big viable complex for scientific intellect with many dimensions for the have-nots in the world of science. They can now have high level interactions in physics and mathematics which are not available in their lands with low level activity in science.

Perhaps the best and most loud recognition of the endeavour in recent years came a few weeks back from another ancient city-Edinburgh of Scotland — and the sedate Times of London (The Times, rather), reporting the event with a 4-column headline, "First Class Science for the Third World", had this to say: "Abdus Salam, the Pakistani born Nobel prize winner, was yesterday honoured for his 30 year campaign to help scientists from impoverished Third World countries to participate in expensive, high-technology work at the frontiers of knowledge..... Inspired by his work, Scotland itself is looking to set up an international science centre."

The occasion was the award of the first Edinburgh Medal to Professor Salam as part of the city's first Science Festival.

The first institution that crys-



A centre for the Third World scientists

talised as an international forum for continuing scientific contacts between scientists from the developing and the developed world (also fostering original research in the process) at Trieste, was the ICTP (International Centre for Theoretical Physics), headed by Professor Salam.

When he had put up the proposal at the IAEA (International Atomic Energy Agency) in 1962, the Australian delegate's remark was a shade sarcastic: "Theoretical Physics is the Rolls Royce of Sciences, Developing countries do not need Rolls Royces, they only need donkey carts."

Nevertheless, the Centre was created in 1964 and has flourished since with the assistance of UNESCO and the Italian Government.

A measure of its success is that in 1987 some 4,200 physicists visited

the Centre on different counts — high level courses workshops, conferences, meetings and consequential interactions and debates and dialogues. Out of these, 2,200 had come from the developing countries, mostly for 3 to 10 week courses in such subjects as fundamental physics, physics of condensed matter, plasma physics, nuclear physics, mathematics, applied physics etc. Till date, some 38,000 have attended the courses/conferences held at the Centre, 20,000 being the number of those coming from the developing countries.

Between 35 and 45 courses/workshops/conferences are held at the ICTP every year in pursuit of high level interactions.

With the flowering of the ICTP, follow-ups in other dimensions with the object of promoting science in the developing countries

were engineered.

An institution called the Third World Academy of Sciences (TWAS) was created at the ICTP complex in 1983. It was formally launched by the United Nations Secretary General, Mr. J. Perez de Cuellar, in 1985 and is the first international forum to bring on one platform distinguished men and women of science from the Third World. Its main objective is: "To give recognition to high-calibre scientific research performed by individual scientists from developing countries, to facilitate their mutual contacts, to strengthen their scientific research work and to foster it for the benefit of human welfare and the development of the Third World." Professor Salam is its President.

There are 97 Fellows and 39 Associate Fellows of the Academy. Forty-three Third World countries

are represented in the Academy's Fellowship.

TWAS awards Fellowships to scientists of proven research ability to pursue research and/or undertake lecturership in developing countries other than their own.

There are also other schemes for visits to ICTP and some other institutions.

And then there are TWAS Italian Awards for research and training in Italian laboratories.

Support is also given to international scientific activities held in developing countries in the form of grants.

It gives awards to individual scientists in developing countries who have made outstanding contributions to the advancement of science.

Yet another significant organisation created at the ICTP complex by Professor Abdus Salam is what is called the Third World Network of Scientific Organisations. While the Academy represents the Third World countries through some of their elite in science, the Network is a cross-sectional representation of their scientific organisations.

Ninety-nine scientific organisations from 60 developing countries are Members of the Network.

Representing the various national science academies, research councils and science ministries, it is to act as a non-political group, both internally and externally, "to espouse the cause of developing countries science".

And finally, an organisation of Third World women scientists is in the making at Trieste in the crucible of the Third World Academy of Sciences.

Two hundred and fifty women scientists from Third World countries met under the aegis of TWAS in October last. The presence of two women Nobel laureates from two developed countries showed that the fair sex was in real earnest to provide muscle to the proposed organisation. Its constitution has since been drafted and is being circulated among the 250 women scientists who participated in the October conference.