

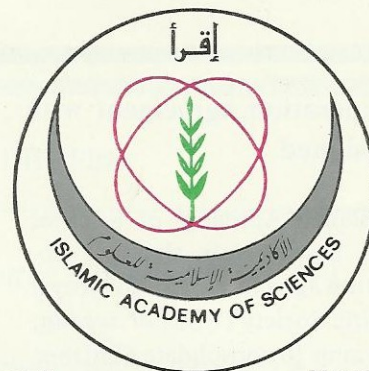
Newsletter

ISLAMIC ACADEMY OF SCIENCES

May-June 1994

Volume 8

Number 19



Diouf patronises Seventh Conference

Health, Nutrition and Development in the Islamic World

Academy patrons send messages

The Islamic Academy of Sciences has concluded its seventh international conference which was held in Dakar (Senegal), 22-26 November 1993.

The conference which addressed the topic of "Health, Nutrition and Development in the Islamic World," was patronised by His Excellency Mr Abdou Diouf, President of Senegal and Chairman of the Organisation of the Islamic Conference (OIC).

The conference aimed to assess the present state of population health in the various OIC regions, and to review the nutrition problems of developing countries so that appropriate strategies can be formulated to overcome them.



A good part of the deliberations was allocated towards highlighting the major epidemics and diseases that confront the Islamic and developing worlds, and assess the national strategies adopted by countries in combating such diseases.

An objective of the conference was to recommend some collective remedial measures that need to be adopted by governments with the help of NGOs in order to eradicate the serious health and nutrition problems confronting the Third World, and to facilitate the exchange of views on health and nutrition strategies.

A further objective of the conference was to establish ways of incorporating health and nutrition

considerations into national S&T policies, as well as defining areas of importance in health R&D.

A total of fourteen main theme papers were presented at the conference. Three free-submission papers were also included.

The conference which was conceived as a joint activity between the Islamic Academy of Sciences (IAS) and the University Cheikh Anta Diop of Dakar (UCAD), was co-sponsored by the Islamic Development Bank (IDB), the World Bank, the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the Islamic Educational, Scientific and Cultural Organisation

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Co-operation agreement with RSS signed

The Islamic Academy of Sciences (IAS), has recently signed a co-operation agreement with the Royal Scientific Society (RSS) of Jordan, which aims to consolidate academic ties that already exist between the IAS and the RSS.

The two institutions have agreed to grant each other access and facilities to all data, documents and studies and to provide each other with every assistance in the form of staff activities and/or services.

The two parties have also agreed to invite each other's representatives to sessions of general assemblies, conferences, seminars or any similar activities that each might organise.

The agreement was signed by the President of the IAS, Prof. Mumtaz Kazi and Dr Hani El-Mulki, the RSS President.

The Royal Scientific Society is Jordan's main research and development institution, which was founded in 1970 as a research and development establishment specialising in fields related to the development process in Jordan.

The main objective of the RSS is to conduct scientific and technological research and development activities particularly in the industrial sector and extend significant technical consultations and services to institutions of the private and public sectors as well as forging scientific and technological links with Arab and International Institutions.

Moreover, the RSS is considered to be a national centre that is administratively and financially independent. In December 1987 the RSS became one of the Centres of the Higher Council of Science and Technology of Jordan.



HRH Crown Prince Al-Hassan, IAS Council and Staff and Dr Oren Ihlas and IAS sign agreement

A Co-operation agreement has recently been signed between the Academy and the Ihlas Gazetecilik Holding of Turkey.

Dr Enver Oren, Chairman of the Board of Directors, Ihlas Gazetecilik Holding Inc., who is a well-known Turkish businessman with a keen interest in S&T development signed the agreement on behalf of Ihlas with Prof. Mehmet Ergin, Academy Vice-President, representing the Academy. Prof. Ergin, along with Professors Ozdas, Bor and Ucisik had met Dr Oren and briefed him on the Academy as well as its activities and programmes.

As a result, Dr Oren had generously agreed to have the Science Journal of the Academy printed at his own printing press, for he is the owner and chief executive of "Turkiye," the wide-circulation newspaper.

The Academy and the Holding, which has also made a contribution

to the IAS Endowment Fund, hope that this agreement marks the start of a long-term relationship of co-operation for development, between the two organisations.

Oren elected Honorary Fellow

The General Assembly of the Academy, at its most recent meeting which was held at Dakar (Senegal), had elected Dr Enver Oren as an Honorary Fellow of the Islamic Academy of Sciences.

Dr. Oren, who is 55, is a graduate of the Faculty of Sciences at Istanbul University, the same university at which he became an instructor later on.

In 1970, Dr Oren entered the world publishing which has been his line of work ever since.

Dr Oren is at present Chairman of the Board of Directors, Ihlas Gazetecilik Holding Inc., Owner and Chief Executive Officer, Turkiye Gazetesi.

IAS issues new book

The Islamic Academy of Sciences has recently issued the fifth volume of its publications series, "Science and Technology Manpower for the Development of the Islamic World."

The book comprises the proceedings of the conference which was held in Amman, (Jordan), during 16-19 December 1991, and organised by the Islamic Academy of Sciences, and sponsored by the World Bank, the UNESCO, the IDB, the IFSTAD as well as the Royal Scientific Society of Jordan.

The book which was edited by Dr Fakhruddin Daghestani, Dr Hani El Mulki and Dr Arafat Altememi contains 14 major papers in 3 main sections. One section addresses issues related to science and technology manpower including the state of S&T manpower in the Islamic World. Another section includes 3 papers that describe the role of organisations in S&T manpower development. The third section highlights the experiences of some selected countries in science and technology manpower development (Muslim states in the former USSR, Japan, Korea, Turkey, Bangladesh, Senegal, UAE, Sudan, Egypt and Algeria).

The varied experiences and data presented in the book can be considered as an excellent basis for policy and decision makers in the OIC member countries, upon which an appropriate appraisal of national S&T manpower policies can be based.

Copies of this book, and all Academy Proceedings can be ordered from IAS Secretariat, Amman, Jordan.

Women and Development: An Overview (1)

The pivotal role women have in the development of a country is a concept which was highlighted at the last two conferences of the Islamic Academy of Sciences which respectively were on "Environment and Development" and "Health and Nutrition."

Yet sadly, most planners in developing countries seem to be indifferent to the real advantage of having a specific policy for the development of the women sector.

In the areas of Environment and Health, at least, it is clearly obvious that a pre-requisite for the success of any policy in these two areas would be, for example, to take simple low profile measures to minimize the number of illiterate women in society.

It is generally accepted that such a policy would positively affect the environmental and health state of affairs in many developing countries.

The UNDP Human Development Report of 1993 states that upto the early eighties, most NGO involvement work in Third World countries was indifferent to male/female development gaps. That was infact also true for other developmental agencies.

The situation has changed slightly, the Report continues, due to mounting public opinion female pressure in some countries.

It therefore becomes clear that for OIC-member to rapidly come out of their general present state of developmental stagnation, they need to adopt particular policies that are specifically designed to push forward women's development at a rapid rate.



Khartoum host for '94

The President of Sudan had in late 1993, extended an invitation to the Academy to convene its Eighth Conference in his country. The invitation came as a result of a meeting that the Secretary General of the Academy had had with the President.

The Academy Council approved a short-list of themes at its Dakar meeting which was communicated to the authorities in the Sudan. The Secretariat was subsequently informed that the theme chosen by the host government was *Water Resources in the Islamic World*. The first half of December 1994 was the time suggested for the conference.

Based on this, the first meeting of the Science and Organising Committees was held at the National Centre for Research (Khartoum) on 26-27 March 1994. The meeting was attended by Prof. Subhi Qasem

FIAS, Prof. Sulieman Gabir FIAS, Eng. Mounneef R Zou'bi, Technical Affairs Director, as well as Prof. Faysal Tag El-din Abu Shama from Sudan. A group of local academics as well as protocol officials attended part of the meeting which was held over two days.

The Committee agreed that the theme for the conference would be *Water in the Islamic World: An Imminent Crisis*, and finalised a short-list of agencies that might be requested to join the Academy, in organising/sponsoring the conference.

The Committee agreed on the objectives of the conference and discussed, at some length, a list of possible conference papers and academic contributors.

The visiting team were also briefed on the various arrangements that the Sudanese authorities will make to ensure the success of the conference.

IAS participates in COM-STECH Meeting

COMSTECH, the OIC Standing Committee on Scientific and Technological Co-operation organised its sixth meeting in Islamabad during late September 1993. The meeting was inaugurated by His Excellency Wasim Sajjad, the then President of the Islamic Republic of Pakistan.

Many OIC countries took part in the meeting including Bangladesh, Brunei, Egypt, Iran, Iraq, Jordan, Sudan, Syria and the UAE, the delegations of which were led by their ministers.

The Pakistan delegation was led by Lt. Gen. (Retd.) Mohammad Shafiq, Minister for Science and Technology.

A number of OIC organisations, including the Islamic Academy of Sciences which was represented by its Technical Affairs Director, participated in the meeting including the IFSTAD, the IDB, the ISESCO as well as the ICTVTR.

The meeting discussed the implementation report on activities, the proposed programme and budget of COMSTECH for the next biennium, draft statutes and rules of procedure of COMSTECH and new project proposals that were received from the member countries and the Executive Committee of COMSTECH.

The meeting also reviewed the activities of the various OIC organisations.

CONDOLENCES

The Fellows of the Islamic Academy of Sciences, the Academy Council and executive staff are sad to announce the demise of Professor Salimuzzaman Siddiqui, Fellow of the Islamic Academy of Sciences, Co-Director of the H.E.J Research Institute of Chemistry, Karachi University, Pakistan.

Professor Siddiqui was a distinguished Muslim scholar who served his country and Academy with dedication. He will be greatly missed by his family, friends and fellow scientists.

May Allah endow him with His Rahma.



(Continued from page 1)

(ISESCO), the United Nations' Environment Programme (UNEP), as well as the Islamic Foundation for Science, Technology and Development (IFSTAD).

The conference was concluded with the publishing of the 1993 Dakar Declaration on Health, Nutrition and Development in the Islamic World.

The Declaration highlighted the importance Islam attaches to health and nutrition and the well-being of man, and noted some of the more serious health problems that exist within the Islamic World.

The Declaration, articulated some of the important measures that need to be adopted by the decision-makers in the Islamic World and called for a multifaceted international effort in order to improve the general state of population health in developing countries.

His Excellency Mr Abdou Diouf

In his address at the opening session of the conference, President Diouf welcomed the Fellows of the Academy and the conference participants and expressed his happiness at the convening of the Academy Conference in Dakar.

President Diouf praised the Academy for addressing major contemporary issues that face the Ummah, foremost among which was the issue of, "Health, Nutrition and Development in the Islamic World."

The President went on to highlight some of the basic problems that face the Ummah in this field, "Food shortages and imbalance, low life expectancy, child and infant morbidity and mortality to the tune of 196 for 1,000 and 172 for 1,000 respectively in African and South Asian countries-such is

the bleak picture in these nations where the majority of people are Muslim."

The President emphasised some of the major areas in which the Muslim countries faced serious problems, namely; basic health care, potable drinking water, high birth rate, infant and maternal mortality, illiteracy and unemployment. These challenges which permanently face the Ummah call for attention and solidarity from the entire human race.

The President went on to urge decision makers to take measures that affect the necessary adjustments, not merely as a token of kindness, but as the best way to serve the interest of all. This represented the only way forward, particularly if it was coupled with the strengthening of institutions such as the Academy to enable it and others to influence the general development policies in the various OIC countries, he added.

Referring to Senegal, the President highlighted his country's strategy in the area of Health pointing out that his country was making a considerable effort to promote health although government efforts were not adequate to the needs of the people, yet significant improvements had been achieved.

The President went on to elaborate on the significant contributions that Muslim scholars have made in the field of medicine, and emphasised the importance Islam ascribed to the health and hygiene of the human body.

President Diouf congratulated the Academy on choosing the theme of Health and Nutrition for its conference, as such a theme encompassed a lot of the problems that face the Ummah in its stride to achieve progress, indicating that he looked forward to the outcome of the conference with great interest.

His Excellency President Leghari

In his message to the conference which was delivered by Prof. Naeem Ahmad Khan FIAS, President Sardar Farooq Ahmad Khan Leghari, President of Pakistan and Patron of the Islamic Academy of Sciences, pointed out that the majority of Muslim countries were seized with a multitude of problems like over-population, poor environment and unsatisfactory state of nutrition.

Such countries diverted a sizable percentage of their income to improve the health of their populations, thus starving their development effort of much needed support. This, the President added, demanded that political decisions at the highest level are taken both in judicious planning and proper implementation to ensure that primary and secondary health care is provided to people.

President Leghari highlighted some of the priority issues that needed to be addressed including malnutrition, water borne diseases and sanitation. "Malnutrition is a reflection of a multitude of factors such as traditions based on socio-economic considerations, poverty, high fertilization, unhygienic conditions, ignorance of principles of diet and in some cases real shortage of food. These factors affect infants and their mothers and often result in high child and maternal mortality rates. Water borne diseases take a heavy toll of population. Supply of safe drinking water must therefore be given the highest priority in Muslim countries."

The President noted with interest and satisfaction that both AIDS and the research and development aspects pertaining to science and technology policies were on the



agenda of the conference, specifically mentioning the area of Biomedical research.

The Academy Patron went on to say that some of the problems cited required concerted efforts for self reliance and self sufficiency in the Muslim Ummah.

This can be achieved through "co-operation based on equitable sharing of expertise, available technologies and resources."

"There are a number of Muslim countries which are poor in physical resources but have a wealth of world class intellectual resources who are eager to contribute towards technology development of the Ummah. As individual countries, they may not have the required professional expertise available to them but by pooling their intellectual resources they could form a formidable team to tackle problems of applied nature in science and technology. By utilizing their qualified human resources the Ummah would also curtail the brain drain of its trained and talented medical scientists," he concluded.

His Royal Highness Prince Al-Hassan

In his message to the conference, which was delivered by Prof. Mohammed Hamdan FIAS, HRH Prince Al-Hassan thanked the President and people of the Republic of Senegal for hosting the Academy Conference. HRH wished the participants well in their deliberations and hoped that the proceedings of the conference would be published, and distributed to all decision making bodies in the Islamic World.

HRH also extended his thanks to all the people who had contributed towards the convening of the conference.



Prof. Hamdan then made a short presentation in which he detailed the importance that needed to be attached to Health and Nutrition which, "have not only remained the target areas in the development policies of countries, but have also become realistic indicators of success and/or failure of the development planning process."

Prof. Hamdan went on to highlight some of the problems that face the Islamic countries in these fields and to suggest some of the remedies that must be adopted to overcome them.

Prof. Hamdan specifically highlighted the question of co-operation between countries and touched upon revitalising the role of international NGOs so that, "their terms of reference do not overlap or conflict."

Prof. Hamdan concluded by emphasising the importance of incorporating Health and Nutrition considerations into S&T policies of countries, and also the great importance that needs to be attached to human rights in the Islamic World within the context of Health.

His Excellency Prof. Mumtaz Kazi

In his address, Prof. M A Kazi, President of IAS and Co-ordinator General of COMSTECH, thanked His Excellency Mr Abdou Diouf, President of Senegal and Chairman of the Organisation of the Islamic Conference (OIC), for gracing the conference and addressing its opening session. He also thanked the two patrons of the IAS, HRH Prince Al-Hassan Ibn Talal and His Excellency Mr Sardar Farooq A Khan Leghari, President of the Islamic Republic of Pakistan for the messages they had both sent on the occasion.

Prof. Kazi firstly highlighted some of the major health and hygiene issues that called for immediate attention and prompt action.

"Resurgence of communicable diseases, especially those of the food and water borne infection, poor standards of environmental sanitation, high rates of infant and maternal mortality, rapid rise in deadly coronary ailments, unchallenged existence of diabetes, hypertension, cancer and large number of other chronic diseases continue to take heavy toll of human life in many parts of the Islamic World. An equally serious health problem which is responsible for low human productivity in many Muslim societies is the propagation of protozoan and helminth parasitic diseases on account of the prevalent unhealthy living conditions."

Prof. Kazi went on to say that the problems the Ummah faced in health sector were legion and countless, and that the research output in medical sciences was far from satisfactory inspite of the sizable trained technical manpower available in the Islamic World.

He added that the role of health sector had to be taken in a much broader sense and should be given the priority it deserves through diverting a substantial portion of resources towards improving the health of people.

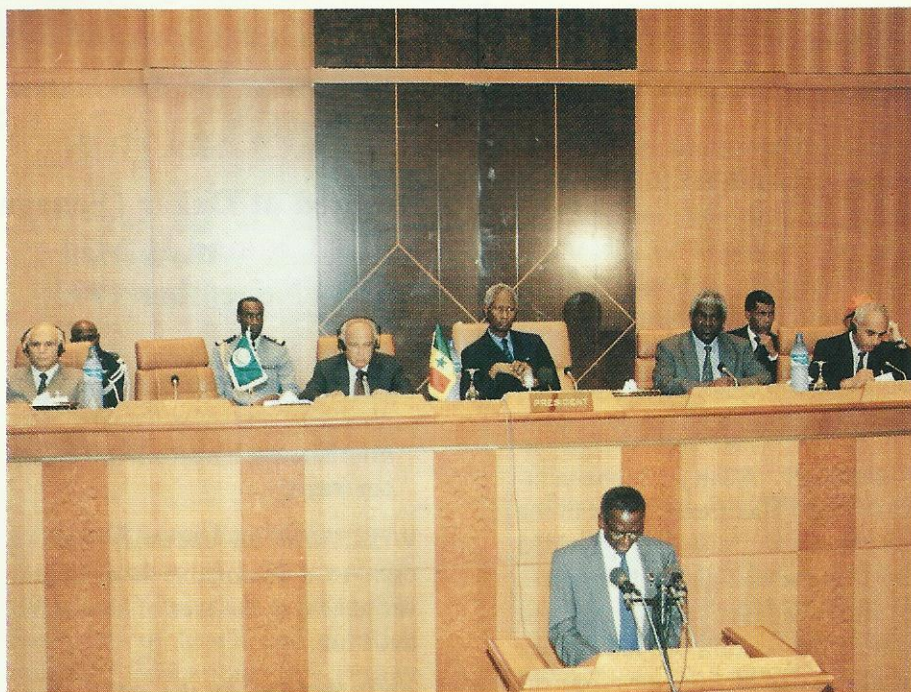
The President went on to say that some of the problems which needed immediate attention were malnutrition, water borne diseases and the lack of proper sanitation.

The President said that AIDS had started to appear as a serious problem in a number of Islamic countries of the African region and it was about to reach threatening proportions in some Asian countries. To combat such a disease, a multi-disciplinary control strategy involving social workers, educators and religious leaders needed to be considered.

Dr Kazi went on to say that the twentieth century had seen momentous changes occurring in the world. "We have witnessed massive destruction, political disruption and an atmosphere of mistrust and incipient conflict between nations. We must therefore, re-evaluate our priorities, re-activate our thought process and re-determine the parameters of the kind of future we want as Muslims in the new century," he stated.

It is only through the power and potential of knowledge, wisdom and skill and by no other means and methods that we would be able to gain the right to live as a free self-reliant, equal and sovereign people who are masters of our resources and destiny, Prof. Kazi concluded.

At the end of his address, Prof. Kazi thanked the IAS Science Committee for their excellent work in organising the conference, the Senegalese Ministry of Foreign Affairs as well as the sponsors of the conference.



Prof. Souleymane Niang FIAS

In his statement to the conference, Prof. Souleymane Niang FIAS, Academy Council Member and Chairman of the Organising Committee of Conference '93, presented the background to the founding of the Academy and described its objectives and activities.

Prof. Niang emphasised the role which the Academy undertook in the promotion of science and technology within OIC member countries, and highlighted some of the academic linkages it had established with the various international organisations among which were some of the sponsors of the 1993 Conference which included the IDB, the World Bank, the ISESCO and the UNESCO.

Prof. Niang, who is Vice

Chancellor of the Cheikh Anta Diop University of Dakar, briefed the participants on the various previous activities that the Academy had undertaken including its conferences of 1987, 1988, 1989, 1990, 1991 and 1992 which was held in Malaysia.

Prof. Niang thanked the President of Senegal for patronising the conference and the various local authorities which had contributed to its coming about.

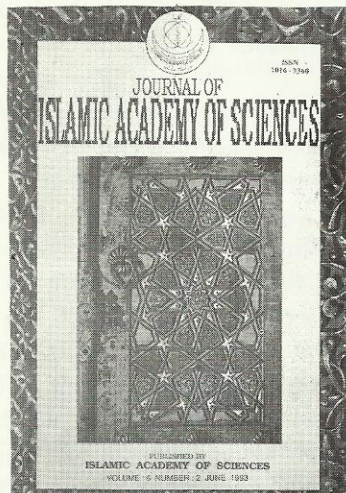
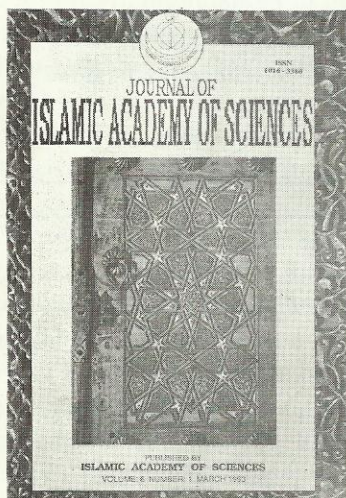
Prof. Niang concluded by saying that the Academy would at the end of the conference issue the Dakar Declaration on Health, Nutrition and Development in the Islamic World. The Declaration would represent a policy statement on the issue and would be distributed to all relevant parties and decision-makers in the Islamic World and beyond.

New issues of Journal published

The IAS has recently published Volume 6, Number 1 of the Journal of the Islamic Academy of Sciences.

This issue contains more than 12 articles in Physics, Chemistry, Petrochemistry, Biochemistry, Pathology, Genetics, Radiopharmacy, Pharmacology, Agriculture and Agricultural Technology.

Volume 6 Number 2 of the Journal, which was published recently also, contains 12 different articles on Experimental Biology, Biochemistry, Pharmacology, Anatomy, Microbiology, Micology, Orthopedics, Pedodontics, Building Materials, Pathology, Entomology and Physiology.

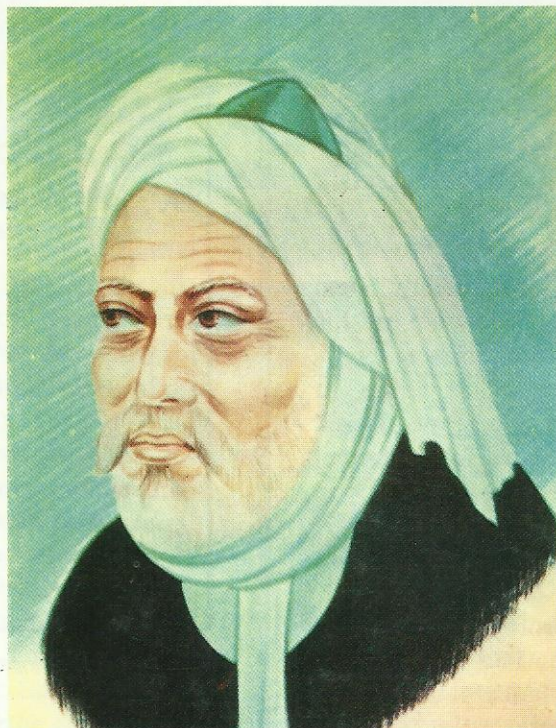


The Journal is the leading IAS publication and one which is edited and published in Turkey under the chief editorship of Prof. Naci M. Bor FIAS.

Details about the Journal and the

articles it contains as well as subscription procedure, can be obtained from the Editor; Prof. Naci M. Bor FIAS, Mithatpasa Cad., No. 66/5 Ankara, Turkey. Fax: (90.312.4259487).

Muslim Scholars



AL-TUSI (597-672 CE)

Abu Muhammad Ibn Muhammad Ibn Jafar Nasir Al-Din Al-Tusi was born at Tus (Khurasan).

Al-Tusi was one of the greatest scientists, philosophers, mathematicians, astronomers, physicians of his time as well as being a prolific writer. He wrote several treaties on different sciences and subjects including geometry, algebra, trigonometry as well as metaphysics.

As the chief scientist at the observatory established under his supervision at Maragha, he made significant contributions to astronomy. Al-Tusi produced new astronomical tables called "*Al Zij-Ilkhani*" which became the most popular tables among astronomers.

In mathematics, Al-Tusi developed the subject of spherical trigonometry including six fundamental formulae for the solution of spherical right-angled triangles.

In addition, Al-Tusi's influence was significant in the development of sciences notably in mathematics and astronomy. His books were widely distributed and were translated into Latin and other European languages.

(Taken from: *Personalities Noble*, National Science Council of Pakistan, edited by Hakim Mohammed Said).

* Reference was made to "*Arab and Islamic Scientific Heritage*" by Prof. Ali Abdullah Daffa' FIAS.