## NEWSLETTER

## **ISLAMIC ACADEMY OF SCIENCES**

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HIS HIGHNESS THE AMIR
OF KUWAIT PATRONIZED IAS-KFAS JOINT
CONFERENCE ON NEW
TECHNOLOGIES AND
DEVELOPMENT OF THE
MUSLIM WORLD

Under the patronage of H.H. Sheikh Jaber Al-Ahmad Al-Jaber Al-Sabah, The Amir of Kuwait, Chairman of the Organization of the Islamic Conference, the conference on "New Technologies and Development of the Muslim World" jointly organized and sponsored by IAS and the Kuwait Foundation for the Advancement of Science (KFAS), was held in Kuwait City during the period 4-7 Jamadi-Al-Ula 1409 H., corresponding to 2-5 December 1989.

In His Highness's inaugural address read by H.E. Prof. Dr. Ali Al-Shamlan, Minister of Higher Education and Fellow of IAS, The Amir said that civilization develops and flourishes when it relies on science and technology as was the case with Arab-Islamic civilization in its golden age. Science and technology, The Amir added, are the most effective means to guard independence and preserve sovereignity and that Muslim nations suffered due to their lag in the domain of S&T which subjected them to domination by foreign

powers and paralysed their progress and development.

H.H. The Amir emphasized that it behooves us Muslims to develop a studied scientific plan alongside our economic, social and educational plans to help mobilize the effective forces of progress that would propel the Ummah towards constructive participation in contemporary scientific and technological endeavors and help overcome our isolation. It is not possible however, The Amir stressed, to achieve any such progress without reliance on science, its methodology and its technological applications, nor it is possible for scientific awareness to become a national phenomenon without its roots extending back to our Islamic heritage.

In his message to the conference, read by Prof. Dr. Razziuddin Siddigi, Former President of Pakistan Academy of Sciences, IAS Founding Fellow, His Excellency Mr. Ghulam Ishaq Khan, President of the Islamic Republic of Pakistan Patron of IAS, commended IAS-KFAS efforts to convene such an important conference as it is universally recognized that science and technology are the key inputs for progress and development. H.E. The President added that it is imperative for the Ummah to seak to harness the newly-emerging technologies for its own advancement and that is the only hope if we



His Highness The Amir of Kuwait

are to live with respect and dignity in this increasingly complex, competitive and fast moving world.

The President emphasized that the Muslim World can't remain oblivious to the changes regarding new advances and breakthroughs resulting from growth of scientific and technological knowledge. It is therefore, essential that the Muslim World build a better, bigger and stronger base of S&T to be able to participate in this new scheme of expanding opportunities. H.E. Mr. Ishaq Khan added.

At the end of his message, His Excellency wished the conference success and said that he will be looking forward to its outcome.

His Royal Highness Prince Al-Hassan Bin Talal, Crown Prince of the Hashemite Kingdom of Jordan, Patron of IAS also sent a message to the conference. In H.H. message read by Prof. Dr. Adnan Badran,

Former Minister of Education, Fellow of IAS, Crown Prince Al-Hassan said that the topics of the conference are urgently needed for the development of the Muslim World in the nineties and that the impact of new technologies on the socio-economic status is getting obvious day after day. H.H. The Crown Prince added that the future is for those who possess the capability to absorb, adapt and develop the new technologies and utilize them for speeding up the process of development. H.H. emphasized that reliance on such new technologies shall become a fundamental aspect and not an Academic curiosity for meeting the basic needs of people and this would require a collective Islamic effort for incorporating the adoption and utilization of new technologies. The Crown Prince went on the say that it is imperative for Islamic countries to specify their developmental needs prior to investing in new technologies and increase their expenditure on research and development to reach a level that will facilitate the handling of new technologies. H.H. also called for scanning the present capabilities of Islamic countries and the utilization of the comparative advantages of the specific Islamic country which is the responsibility of Muslim scientists.

In his opening statement at the inaugural session of the conference, Prof. Dr. Mumtaz A. Kazi, IAS President expressed gratitude of IAS Fellows to H.H. The Amir of Kuwait for inaugurating and supporting the conference and thanked IAS Patrons for their enlightening messages. He also expressed appreciation to IAS Fellow Prof. Dr. Ali Al-Shamlan, Minister of Higher Education and Director General of

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Scence From The Inaugural Session of IAS-KFAS Joint Conference.

# IAS DECLARATION ON NEW TECHNOLOGIES AND THE DEVELOPMENT OF THE MUSLIM WORLD

At the conclusion of IAS-KFAS joint conference on "New Technologies and the Development of Muslim World", IAS issued a Declaration which was adopted by the participants and IAS General Assembly.

The Declaration notes with concern that the world has entered into an era of new technological revolution in which the Muslim World is still a receiver rather than a partner and that the gap between the Muslim World and advanced countries is widening dramatically. The Declaration also points out that the thin spread of resources allocated to R&D in new technologies in the Muslim World has resulted in the absence of critical mass needed to produce an impact on the development of these technologies.

The Declaration appeals to the

leaders and policy makers of the Muslim World to take tangible steps for entering selected fields of new technologies including the commitment of appropriate resources to develop competent human base and infrastructural facilities to make the Muslim World a full partner in the generation and development of these technologies. The Declaration also calls for the acceleration of efforts to establish instruments for the promotion of regional cooperation with the ultimate goal of establishing a Muslim common market and removal of barriers that constrain movement of capital, scientific manpower and technological goods among Islamic countries.

IAS is intending to widely distribute the Declaration to reach leaders, policy makers, planners and the scientific community at large with the objective of enhancing awareness of the role of new technologies for development of the Muslim World and to stress the importance of implementing the proposed measures.

# H.H. THE AMIR OF KUWAIT RECEIVES IAS DELEGATION

His Highness The Amir of Kuwait received in his court an IAS Delegation comprising IAS Council Members, IAS Fellow Dr. Ali Al-Shamlan, and IAS Senior Staff. President of IAS Dr. M. Kazi thanked H.H. The Amir for inaugurating the joint IAS-KFAS conference and for his support to joint Islamic efforts. Dr. Kazi briefed H.H. on the background of founding IAS and its achievements since its existence. Dr. M.K. Mahmoud, IAS Vice-President spoke of future plans and activities expressing hope that H.H. will continue to support IAS. Dr Ali Al-Shamlan, Kuwaiti Minister of Higher Education and Founding Fellow of IAS briefed H.H. The Amir on the joint conference and its outcome as well as the main objectives of the Academy in promoting S&T in the Muslim World.

H.H. The Amir thanked IAS Delegation and expressed hope that IAS activities will benefit the Muslim Ummah emphasizing the role of S&T in strengthening the Ummah's capabilities. His Highness said that the State of Kuwait will spare no effort in supporting the tools of joint Islamic action including IAS.

At the end of meeting, IAS President presented to His Highness the shield of IAS and a special copy of its recent publication on S&T Policy.

## IAS G.A. HELD ITS 4TH MEETING

The General Assembly (G.A.) of the Islamic Academy of Sciences held its 4th meeting in Kuwait under

#### EDITORIAL LETTER

The Conference on "New Technologies" which was held in Kuwait on 2-5 December 1989 provided an effective forum for the exchange of the latest knowledge on the state of Microelectronics, Informatics, Biotechnology, New Materials and Energy-Related High Technologies. Emphasis on the application of these subjects in the Muslim World was discussed. The Muslim Scientists summarized the existing potential, facility and current programmes concerning different technologies in the Muslim World. About Sixty Scientists representing organizations and institutes from within and outside the Muslim World took part in this activity, which was the first of its kind.

High technologies are the product of expensive activities in research and develoment, and thier prices will be extremely high unless the Muslim World tries to build bigger and better bases of science and technology with greater speed to meet developmental needs and requirements, as said by IAS President.

Individually every Islamic country may still feel weak, but collectively they will have enormous potential which they can use for the common good and development of Islamic countries. Some points of the declaration of IAS on New Technologies and Development of the Muslim World read:

- Noting the disturbing fact that the Muslim World is about to miss another opportunity that is more promising than the past science and technologies revolutions, thereby risking the potential future of the Muslim World. There by, scientists appeal to the leaders and policy makers of the Muslim World:
- To take tangible steps for entering selected fields of new technologies including the commitment of appropriate resources to develop competent human base on infrastructural facilities with the objective of making the Muslim World a full partner in the generation and development of these technologies and to integrate all this in the development plans of their respective countries.

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the Chairmanship of IAS President Dr. M.A. Kazi during the period 2-5 December 1989 along with the IAS-KFAS joint conference on New Technologies and Development of the Muslim World.

Thirty five IAS Fellows attended the meeting. The G.A. discussed the items on its agenda and took the appropriate decisions. Among the items discussed and approved were the IAS activities progress report, financial report and report of the Secretary General on election of new fellows. The G.A. approved results of election and two new fellows were formally inducted.

The G.A. reviewed progress made in implementing IAS programme as well as reports of Standing Committees. The G.A. evaluated the conference on New Technologies and approved some recommendations for the next conference.

As for 1990 conference, the G.A. adopted the theme "Transfer of Technology". The conference shall be held in Turkey in November 1990.

Progress of IAS Scientific Journal was discussed following a report submitted by chief editor Dr. N. Bor. The G.A expressed satisfaction with the progress the Journal of which issue No. 3 of Volume 2 has been published and distributed.

#### IAS-KFAS JOINT CONF.

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KFAS for his efforts in hosting the conference in Kuwait. Prof. Kazi said that there is a great enthusiasm among scientific communities in the Muslim World for achieving a collective strength and for widening the base of S&T to solve major problems and achieve contemporary competence and excellence

as they have both the history and tradition of Islam and Islamic civilization. The size of science in many Islamic countries is so small that it can hardly make any impact on their socio-economic structure or development process, Prof. Kazi added. IAS President emphasized that in order to have early foothold in the frontier technologies such as biotechnology and genetic engineering, micro-electronics, new materials and others, the Muslim States will have to make an extra effort within their own countries and collaborate and cooperate with each other to take a joint action in this direction. Prof. Kazi went on to say that any slackness or procrastination on our part can prove to be a costly mistake and in consequence can put the clock back for the Ummah to catch up with the rest of the World

On behalf of KFAS, Dr. Abbas Ali-Khan, Director of Symposia and Cultural Affairs, read the opening statement welcoming the participants and commending the cooperation between IAS and KFAS. Dr. Ali-Khan gave a brief account on KFAS, its founding, objectives and activities under the Chairmanship of H.H. The Amir of Kuwait. He also emphasized the importance of the conference in light of the needs of the Islamic countries.

In his opening statement, Prof. Dr. Mustafa Doruk, Fellow of IAS, Chairman of the Scientific Committee of the conference, said that the theme of the conference and its topics have been selected in view of the challenges facing the Muslim World. Prof. Doruk called for dedicated work to further develop educational methods fostering a spirit of scientific quest into the minds of the new generation to create a technology-minded society.

Twelve main papers and seven commentary papers were presented and discussed in the four-day conference. The papers dealt with the state of the art of selected new technologies such as biotechnology, new materials, energy, space mapping of natural resources, microelectronics, informatics, etc. as well as the present potential of the Muslim World in these fields.

Over sixty scientist and researcher including IAS Fellows participated in the conference representing 17 Islamic countries, 5 Non-Islamic countries and 5 International organizations as well as representative of Inter-Islamic Networks.

The conference included a panel discussion which focussed on ways and means of enhancing cooperation and coordination among Islamic institutes as well as promotion of exchange of scientific information between Islamic and International institutes. The participants also deliberated on mechanisms of strengthening the S&T capability of the Muslim Ummah.

The Conference ended by issuing a Declaration on New Technologies and Development of the Muslim World which is covered under a separate title.

## IAS COUNCIL HELD ITS 7TH MEETING

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The seventh meeting of IAS Council was held in Kuwait during the period 2-5 December 1989 along with the conference on New Technologies and G.A. meeting.

The Council discussed and approved several issues on its agenda. Executive Director General (EDG) presented a report on the activities of the Secretariate.

The Council deliberated in length on the finanical status of IAS and ways and means of securing funds for IAS programme. The Council decided to activate and expand the Financial Committee and formed a three-member committee to review IAS programme and propose a set of projects for which the Financial Committee will try to seek funds. the Council also formed the Scientific Committee for 1990 Conference on "Transfer of Technology" to be hosted by Turkey.

The Council adopted some measures regarding IAS Fellowship and representation of scientific communities from all Islamic countries in IAS in light of the resolutions of G.A.

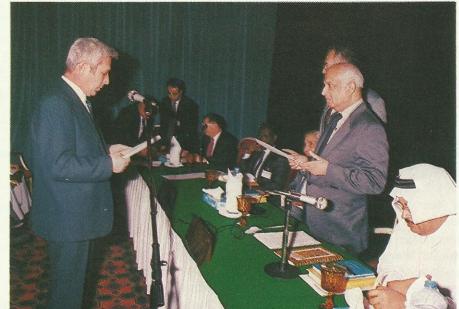
# IAS COUNCIL AND G.A. PAYS TRIBUTE TO LATE COUNCIL MEMBER PROF. IBRAHIM

IAS Council and G.A. expressed deep sorrow for the death of IAS. Founding Fellow and Council Member Prof. Dr. M. Ibrahim Former President of Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Diosorders who died in September 1989. The Council and G.A. recalled with appreciation the contributions of Prof. Ibrahim in promoting the S&T base in his country as well as at the Ummah's level. IAS Fellows recited FATIHA on his soul and expressed deep sympathy with his family.

## NEW COUNCIL MEMBER ELECTED

In its 4th meeting, the G.A. of the Islamic Academy of Sciences





Induction Ceremony of IAS New Fellows

deliberated on the issue of filling the position of Council Member which became vacant after the death of Dr. M. Ibrahim. Dr. Shamsher Ali (Bangladesh) was nominated and elected as of the 5th of December 1989. Dr. Ali became a Fellow of IAS in 1988. He is a professor of Physics at Dhaka University. The Editors take this opportunity to congratulate Dr. Ali on this assignment and wish him every success.

## NEW IAS FELLOWS ELECTED

Results of election of new IAS fellows were approved by the G.A. in its 4th meeting held in Kuwait in December 1989. Two new Fellows Prof. Dr. Adnan Badran (Jordan and Dr. Salambek Khadjiev (Chechen) were elected and formally inducted by IAS President at a simple ceremony arranged through the first session of G.A.

meeting. The G.A. welcomed the joining of the two new Fellows.

At the begining of the induction ceremony, IAS President Dr. Kazi requested the newly elected fellows to subscribe IAS Fellowship obligation and sign IAS Fellows Charter Book. Following that, IAS President handed them the emblem of IAS and announced them Fellows of IAS requesting them to take their seats among IAS Fellows. Dr. Badran and Dr. Khadjiev expessed gratitude to IAS Fellows and vowed to support the Academy and its objectives.

With the induction of Dr. Badran and Dr. Khadjiev, the number of IAS Fellows became (50) existing Fellow.

## BOOK ON S&T POLICY ISSUED

IAS has issued its second book on S&T Policy for Self-Reliance in the Muslim World. The high quality book is a record of the proceedings of the Academys' second conference on Science and Technology Policy for Self-Reliance in the Muslim World which was held in Islamabad in December 1988.



The 450-page book highlights the main issues regarding science and technology policy as well as the status of S&T in the Muslim World and presents remedy measures

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- To accelerate the efforts and establish instruments to strengthen the positive steps that have been taken in the field of regional cooperation with the ultimate goal of establishing a Muslim common market.
- To adopt the strategy of producing technologies oriented to export markets.
- To remove barriers that constrain the movement of capital, scientific manpower and technological goods among the Muslim countries.

IAS hopes that this declaration will be followed up by IAS Fellows and those who participated in the conference so that it reaches the widest possible audience, and generates the sought impact.

Two facts were obvious at the conference. The first is that the Muslim World is still well behind in many areas of new technologies and the second is that the future is for those who possess the capability to generate, adapt and utilize these technologies.

towards strengthening the S&T capability of the Muslim Ummah. Selected country experiences are also reviewed to promote sharing of experience and exchanging of views on the crucial issue of S&T policy.

The book should be useful to national, regional and international organizations as well as to policy makers, planners and researchers in both developed and developing countries.

# ARABIC VERSION OF FOOD SECURITY BOOK ISSUED

IAS has published an Arabic translation of its first book on "Food Security in the Muslim World" which was first published in English in 1988.

The translation and publication of this book was sponsored by the Kuwait Foundation for the Advancement of Sciences (KFAS) which also sponsored the Englishversion publication.

# NEW ISSUE OF IAS SCIENTIFIC JOURNAL ISSUED

Issue No. 3 of Volume 2 of IAS Scientific Journal has been issued and distributed. The issue comprises (19) research paper in various scientific disciplines and (3) commentary articles.

### IAS NEWSLETTER

The Newsletter is published by the Islamic Academy of Sciences, (IAS).

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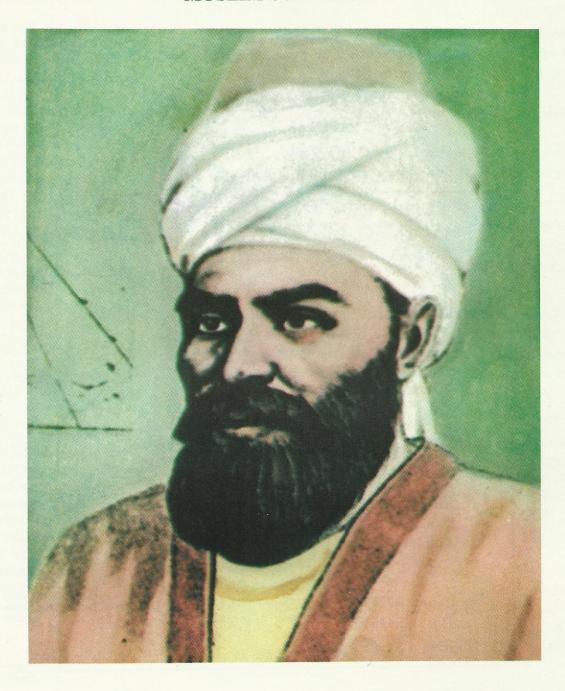
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### **MUSLIM SCHOLARS**



#### ABU'L ABBAS AL-FARGHANI

Born in Farghana, Transoxiana, he was of the most distinguished astronomer. He wrote "Elements of Astronomy" but his best work was Al-Jawami (The Elements'). He died in 860 A.D.

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