

ISLAMIC WORLD ACADEMY OF SCIENCES

Newsletter

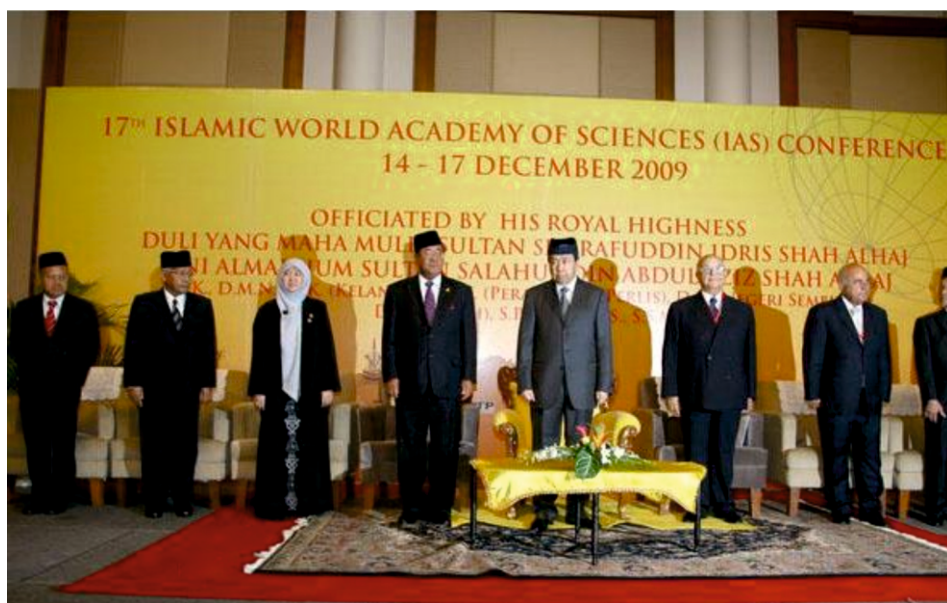


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**Under the patronage of His Royal Highness Sharafuddin Idris Shah,
Sultan of the State of Selangor, Malaysia:
IAS convenes 17th Conference in Shah Alam
under the title:**

*Towards the Knowledge Society in the Islamic World:
Knowledge Production, Application and Dissemination*



HRH the Sultan, Selangor State Officials with IAS President and IAS Treasurer

Under the patronage of His Royal Highness Sharafuddin Idris Shah, the Sultan of the State of Selangor, Malaysia; the Islamic World Academy of Sciences (IAS) convened its seventeenth science conference in Shah Alam, the capital of Selangor, from 14 to 17 December 2009.

The conference addressed the theme: *Towards the Knowledge Society in the Islamic World: Knowledge Production, Application and Dissemination*.

Held at the Concorde Hotel in Shah Alam, the conference was preceded by a 'Science Youth Forum,' which was held at the University of Industry of Selangor (UNISEL), Shah Alam.

Over 150 participants representing over 25 countries participated in the conference including the representatives of no less than 15 academies of sciences; IAS, TWAS, Arab Academy of Sciences, Pakistan Academy of Sciences, Bangladesh Academy of Sciences, Bosnian Academy of Sciences, Academy of Sciences of South

Africa, US Academy of Sciences, Academy of Sciences Malaysia, Egyptian Academy of Sciences, Tatarstan Academy of Sciences, Iranian Academy of Sciences, Sudan National Academy of Sciences, Indian National Science Academy and the Indonesian Academy of Sciences.

Alongside the conference, meetings of the IAS Council, IAS General Assembly, and the General Assembly of the Network of Academies of Sciences in Islamic Countries were also convened.

The conference was organised and sponsored by the following organisations:

- Islamic World Academy of Sciences (IAS), Amman, Jordan;
- International Islamic Academy of Life Sciences and Biotechnology (IIALSB), Shah Alam, Malaysia;
- University of Industry Selangor (UNISEL), Shah Alam, Malaysia;

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**His Majesty King Abdullah II of
Jordan**

The Islamic World Academy of Sciences (IAS) has received the annual grant of the Hashemite Kingdom of Jordan for 2010.

The grant which is allocated to cover the local expenses of the IAS Amman Headquarters, has been provided by Jordan annually ever since the Academy was founded in 1986, and reflects the commitment that His Majesty King Abdullah II (pictured above) and the government of Jordan have to supporting the Organisation of the Islamic Conference (OIC), and the IAS.

It is worth noting that Jordan is one of a number of countries that actually includes international financial contributions in its national budget, thus facilitating the release of grants to recipients once the budget is approved by parliament.

IAS Director General has communicated his thanks to H E Mr Nasser S. Judeh, Minister of Foreign Affairs of Jordan and H E Dr Mohammad Abu Hammour Minister of Finance, who have instructed the release of the grant.

- OPEC Fund for International Development (OFID), Vienna, Austria;
- Islamic Development Bank (IDB), Jeddah, Saudi Arabia;
- OIC Ministerial Committee on Scientific and Technological Co-operation (COMSTECH), Islamabad, Pakistan;
- Jordan Phosphate Mines Company, Amman, Jordan;
- Arab Potash Company, Jordan;
- United Nations Educational, Scientific and Cultural Organisation (UNESCO), Paris, France; and
- Perdana Leadership Foundation, Putrajaya, Malaysia.

The aim of the conference was to promote the watchword that knowledge was becoming a major component in production processes, and that a new economic paradigm was emerging in which the most important factor was not the availability of capital, labour, raw materials or energy, but the intensive use of knowledge and information.

The conference also aimed to highlight the fact that knowledge has become a pillar of the wealth and power of nations.

At the OIC level, the conference re-examined the actions that were required to invigorate; (a) knowledge production, (b) knowledge application and (c) knowledge dissemination; and to help OIC countries build knowledge societies and achieve rapid socioeconomic development.

The conference was organised around the above three themes, and aimed to achieve the following main objectives:

- To engender the awareness of the public and decision makers of the concept of knowledge society;
- To assess the role of women as knowledge producers in science and the scientific enterprise in OIC and developing countries;
- To highlight the hurdles facing R&D in OIC countries (knowledge workers' views);
- To strengthen private sector science linkages (knowledge application);
- To strengthen the linkages between science and the scientific community and the media (knowledge dissemination); and
- To engage the youth of OIC countries in science, technology and innovation (STI) (knowledge for the future).

Prior to the conference, the IAS and UNISEL organised a special session for the youth at UNISEL, which was called the 'Science Youth Forum.' Over 150 young science students were invited to what turned out to be an interactive session during which they listened to informal talks by some of the young scientists participating in the conference as well as some senior Fellows of the IAS on the value of science and why some of them had taken up careers in science.

In the first session of the conference proper, and in addition to a memorable invited address entitled; *The Leadership*

Omar Ibn Abdul Rahman FIAS; Former Science Advisor to the Prime Minister of Malaysia; Founding President, Academy of Sciences; on *Human Capital Development for the Knowledge (Innovation) Economy*, represented a rare opportunity for the participants to appreciate the role of women scientists in the context national human capital that societies have/need to bring about the innovation economy.

The OIC Secretariat is collaborating with Demos and Nature to produce a study of science and technology-based innovation across the Islamic world. This project will gauge the changing landscape of



HRH the Sultan of Selangor with the Director General, IAS

and Policy Components for the Knowledge Society: *A Proposed Best Practice for OIC Countries*, by the former Prime Minister of Malaysia Tun Dr Mahathir Mohamad Hon. FIAS; Professor Wolfgang Schürer (Switzerland), Vice-President of the Council for Lindau Nobel Laureate Meetings, presented a keynote address entitled; *Educate, Inspire and Connect the Lindau Nobel Laureates Meetings as a Cross-fertilising Platform*.

This was followed by a presentation by Prof. Atta-ur-Rahman FIAS, Co-ordinator General COMSTECH on; *Building a Knowledge Society in the Islamic World: Challenges and Opportunities*.

The afternoon session of the first day was devoted to the subject of 'Women and Science.'

The IAS has long realised that women scientists form an important constituent of the knowledge production community, a constituent that is undervalued and underutilised. It is for this purpose that this session was organised. The fact that the session included a keynote by Tan Sri Prof.

science and innovation across some OIC countries. An overview of this project was presented in a special session. That was followed by an exciting session in which two private-sector entrepreneurs participated; Mr Qusai Sarraf, Chief Executive Officer, IVIS Group, UK; who presented a paper entitled; *Opportunities and Challenges in Creating a Knowledge-Based Economy: A Viewpoint from the International Private Sector*; and Michael Grimes, of EnvironTeq in Thailand, who presented a paper entitled; *Knowledge Workers in a Globalised World: From America to South East Asia*. This session concluded with a talk by the Chief Minister of Selangor on plans to turn the state of Selangor into high-tech and education hub.

Knowledge Society: The Policy Aspects, was the title of a major session in which Prof. Adnan Badran FIAS, Former Prime Minister of Jordan, presented an overview quantitative paper on; *Science and Technology Landscape of the OIC: The Arab States in Focus*.

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New IAS Fellows elected

Membership of the IAS is made up of Founding and elected Fellows. IAS Fellows are eminent scientists with sizeable contributions to the development of science and technology and related topics, in their countries and internationally.

The Headquarters of the Academy organises an election every year through which existing Fellows nominate and then elect new members to the Academy Fellowship. Since its establishment in 1986, 82 Fellows have been elected through annual postal ballots, the results of which are ratified and then announced at the end of year General Assembly of the IAS.

At its Selangor meeting, the General Assembly of the Islamic World Academy of Sciences ratified the results of the 2009 Fellowship elections. The elections resulted in a number of candidates obtaining the required number of votes and as such joining the IAS as newly elected Fellows of the Islamic World Academy of Sciences.

The newly elected IAS Fellows are:

1. Prof. Abdallah Daar Oman/ Canada.
2. Prof. Ameenah Gurib-Fakim Mauritius.
3. Prof. Malek Maaza Algeria.
4. Prof. Munir Nayfeh Jordan/ United States.
5. Prof. Robert Nigmatulin Tatarstan/ Russia.
6. Prof. Jawad Salehi Iran.

With the 2009 Fellowship election over, the number of IAS Fellows stands at present at 105. This after the passing away of Prof. Pulat Khabibullaev (Uzbekistan) and Prof. Mohammed A. Waqar (Pakistan), earlier this year.

The Editorial Board congratulates the new members of the IAS on their election and wishes them success in the service of the Islamic World Academy of Sciences (IAS), and the cause of 'science and technology for development' in general. Below are the photos of two of the winners. The other four are featured in this Newsletter.



**Prof. Ameenah
Gurib-Fakim FIAS
(Mauritius)**



**Prof. Robert
Nigmatulin FIAS
(Tatarstan/ Russia)**



Dr Mahathir Mohamad Hon. FIAS presents keynote address

Malaysians have an extremely important role of mastering English to acquire knowledge at a faster pace to ensure there is no 're-colonisation' of the country, said Tun Dr Mahathir Mohamad. Without good command of English, the former prime minister noted, the people would not acquire knowledge quickly.

He said this would, in turn, open doors to knowledgeable people to dominate and influence them, either directly or indirectly.

"English is the language of the knowledge age. Countries which do not master English will not only be left behind but risk being colonised, either directly or indirectly."

"Without knowledge, countries will be oppressed and even invaded," Dr Mahathir said after delivering his keynote address entitled, "The Leadership and Policy Components for the Knowledge Society: A Proposed Best Practice for Organisation of the Islamic Conference (OIC) Countries," at the 17th Islamic World Academy of Sciences (IAS) Conference, Shah Alam.

The conference, jointly organised by the IAS, Universiti Industri Selangor (UNISEL) and International Islamic Academy of Life Sciences and Biotechnology (IIALSB), was opened by the Sultan of Selangor Sultan Sharafuddin Idris Shah.

Dr Mahathir said the people would not lose their identity by seeking knowledge in English.

"English is not only for English people but (it is) a universal language. I am not an Englishman but I speak English," he said.

Dr Mahathir said that countries should not 'ignore success' by abolishing the teaching of Science and Mathematics in English and reverting to the local language; Bahasa Malaysia.

The above policy was implemented in phases, beginning with Year One, Form One and Lower Six students in 2003, under Dr Mahathir's administration.

Earlier, when delivering his keynote address, Dr Mahathir said knowledge was expanding rapidly, especially in science, and books and writings on this subject were in English.

He said that possibilities were there to override past beliefs in the field of science, which could not be done in geography and history.

"Knowledge in science is not static, unlike geography and history where facts are structured and limited."

"In science, we can always go back and question the scientific principles and decide whether they are right or not," he said, adding new discoveries were coming out in torrents in English.

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In the same session, Mr Mehmet Fatih Serenli of SESRIC, the statistical arm of the OIC, presented a paper on: *R&D and Knowledge Economy (KE) Performance of OIC Member Countries*. That was followed by presentations by Dr Mustafa El-Tayeb of UNESCO on *Science and the Information Society*; Dr John Boright of the US National Academy of Sciences on the *Role of Academies of Sciences in Building the Knowledge Society: The Approach of the US National Academy of Sciences*; and the youngest speaker in the 17th IAS Conference, Dr Hussam Salama, who talked about *Hubs of Knowledge and Information Flows in Islamic Countries: Challenges and Potentials*.

After a one-day break, the conference resumed on the morning of Thursday 17 December 2009 with two parallel 'Open Science Fora.' These are sessions in which IAS Fellows and other participants present papers on general science topics or research findings.

The session that followed was dedicated to *Science and the Media*. It started with an exciting presentation by Prof. Maqsudul Alam, Chief Executive Director, Centre for Chemical Biology, Universiti Sains Malaysia on; *Genome-based Discovery Platform Uncovers Biotechnology Potential of Papaya and Rubber Genomes*. That was followed by a number of statements by IAS Fellows on the importance of developing an OIC stance on Genetically Modified Organisms (GMOs).

The Least Developed Countries (LDCs) of the OIC were represented in this session by Prof. Muhammadou M. O. Kah, Vice Chancellor of University of the Gambia; who presented a paper entitled; *Towards the Knowledge Society: The Gambia as an OIC Country Starting-up*.

The ultimate session of the conference which was entitled; *Knowledge Production for Development*, was devoted to a number of top research scientists in the OIC who were eager to share ideas on scientific publishing.

At the conclusion of the four-day conference, the Academy adopted the IAS 2009 Selangor Declaration entitled: *Towards the Knowledge Society in the Islamic World: Knowledge Production, Application and Dissemination*.

The declaration emphasized that the quest for knowledge is a pillar of the Islamic Code of Belief and that knowledge and its pursuit have assumed augmented importance in an increasingly knowledge driven world. It reiterated that

Science, Technology and Innovation (STI) are the primary force behind the advancement of human civilisation and that productivity gains and achievements of humankind have been derived chiefly from innovation based on scientific exploration as well as extensive application of S&T.

In responding to the growing demands of the Knowledge-based or K-Economy, the declaration suggested that a fresh-look is needed to re-examine the infrastructure and delivery of higher education in OIC and developing countries in terms of quality and relevance.

Furthermore, the obstacles to science and technology in OIC-Countries, including, inter-alia, lack of comprehensive Science, Technology and Innovation (STI) policies, and strategies emanating therefrom should be addressed.

The declaration appealed to OIC decision makers to implement specific actions such as sizeably increasing R&D expenditure, promoting the central role of the university as originator of scientific output, and promoting scientific and technological cooperation among developing countries.

Moreover, it called for the creation of links between knowledge generation and enterprise development and for prompt action to ensure that young scientists cultivate a sense of hope and purpose so that they may contribute to shaping a sustainable future. It added that "future generations in OIC countries must be educated and not indoctrinated, they must learn - and not be taught - to work hard and learn to work together as teams rather than as individuals."

The IAS also called for measures to help the sizeable women science community of the OIC to contribute to the development of the Ummah.

At the university level, the IAS reiterated, attempts should be made to integrate rather segregate students especially from the science and literary streams so that all future leaders appreciate

the value of science as a means of socioeconomic advancement.

The declaration also addressed the question of science advisory structures in the various countries and stated that the advisory processes should be able to gauge public opinion about science, technology, and innovation and that appropriate mechanisms should be worked out by the IAS to provide advice to OIC heads of state, parliamentarians and other decision-makers with sound science-based advice.

The declaration concluded by expressing its concern for the safety and well-being of all Iraqi scientists, academics and educationalists both inside and outside Iraq.

The IAS moreover extended its appreciation to the His Royal Highness the Sultan of the State of Selangor and the State of Selangor for hosting the conference; to the University of Industry of Selangor (UNISEL) and the International Islamic Academy of Life Sciences and Biotechnology (IIALSB) for coordinating local arrangements; the Islamic Development Bank, COMSTECH, OPEC Fund for International Development (OFID), Perdana Leadership Foundation, United Nations Educational, Scientific and Cultural Organisation (UNESCO), Arab Potash Company, and the Jordan Phosphate Mines Company for generously sponsoring this international scientific congregation.

As part of the follow-up action to the conference, the Academy will circulate the declaration to concerned individuals and relevant agencies throughout OIC and developing countries, so that measures are taken to implement the ideas proposed at the conference.

The IAS will also publish the complete proceedings of the conference in a quality volume that will be distributed internationally.

Through IAS Fellows, personal contact and correspondence, the IAS will promote the concepts promulgated at the conference among the decision making circles of the Islamic world, and will provide whatever help it can to get the various recommendations implemented.

IAS General Assembly convenes at Shah Alam, Malaysia

Alongside the 17th IAS Science Conference, and under the chairmanship of Prof. Abdel Salam Majali FIAS, IAS President, the General Assembly of the Islamic Academy of Sciences held its eighteenth regular meeting at the Concorde Hotel, Shah Alam, Selangor, Malaysia, on 13 December 2009. The meeting was attended by over 30 IAS Fellows as well as the Director General, IAS.



The General Assembly after approving the minutes of the previous meeting took note of the very detailed report presented by the IAS Director General of the various activities implemented by the IAS Headquarters in Amman.

It went on to discuss an extensive agenda that included a review of financial statements, the status of the Medical Journal of the Academy, IAS programme, as well as a number of organizational matters related to the IAS.

The DG talked in brief about the finances of the IAS in 2009. This was followed by a detailed presentation by Prof. Adnan Badran, IAS Treasurer, that included a detailed review of the Statement of Accounts of 2007 and 2008 and a detailed run-down of the financial statements of the IAS as they stood at 30 September 2009.

The General Assembly also discussed a number of programmes that could be implemented by the IAS in the future including the convening of science conferences in countries outside the Islamic world.

The General Assembly after reviewing the procedure for the election of the IAS Council decided to hold the elections to elect new Council Members in accordance with the Bye-laws governing the procedure and promptly formed a 3-member committee made up of Prof. Mohammad Hamdan FIAS, Prof. Adnan Hamoui FIAS and Prof. Kemal Hanjalic FIAS, to oversee matters.

The elections were held in accordance with the procedure and Prof. Majali was given a fresh mandate as president for another 4-year term. The new Fellows that joined the Council were; Prof. Kamal Batanouny (Egypt), Prof. S M Qaim (Germany), Prof. Khatijah Mohd Yusoff (Malaysia), Prof. Amdulla Mehrabov (Azerbaijan) and Prof. Najih El-Rawi (Iraq).

The General Assembly of the IAS concluded by ratifying the results of the 2009 Fellowship Elections as presented by the IAS Council.



IAS Council holds 34th Meeting

On 13 December 2010, the 34th Meeting of the IAS Council was held at the Concorde Hotel, Shah Alam, Selangor, Malaysia. All Council Members attended except Prof. Naci Bor who was not able to join due to illness as well as professors Marrakchi and Ali due to travel delays.

In his report to the Council, IAS; DG Moneef Zou'bi, talked about the various activities that the IAS was involved in including organising the 17th IAS Conference, maintaining the IAS's Medical Journal, and a number of outreach activities that the IAS has been involved in.

The IAS Council undertook a thorough review of the activities of the IAS during 2009 and discussed a number of new projects that could be implemented.

It acknowledged the excellent work done by Prof. Naci Bor, the Chief Editor of the IAS Medical Journal and expressed its hope that Prof. Bor would enjoy a speedy recovery.

The IAS Council instructed the Director General to establish contacts with a number of countries to secure an invitation for the IAS to convene its scientific conferences of 2011 and 2012.

