



# ISLAMIC WORLD ACADEMY OF SCIENCES (IAS)

International NGO active in Science and Technology for Development  
Founded in Amman, Jordan, 1986.

## *OVERVIEW 2024*

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## **1 BACKGROUND**

The establishment of the IAS was recommended by the OIC Standing Committee on Scientific and Technological Co-operation (COMSTECH), and approved by the Fourth Islamic Summit of OIC Heads of State, held in Casablanca, Morocco, in 1984.

The Academy, which commenced its activities in 1986, is an independent body that enjoys international status comparable to other international learned bodies of a similar nature throughout the world.

Today, the IAS boasts a membership of 96 Fellows who represent the scientific elite of OIC countries and communities worldwide. Nobel Laureates, Heads of State as well as top OIC business leaders and the Mustafa Prize Laureates are among its select group of Honorary Fellows.

By debating scientific issues with top decision-makers and the public, the IAS aims and has managed to influence science policy in many countries. It does this while closely guarding its treasured independence, and deriving its authoritative status from the contribution its Fellows make to the advancement of science worldwide.

The IAS has over the years grown to become a principal propagandist for science and technology in OIC political decision-making circles. It has moreover evolved into a decision support/analysis unit, especially on matters related to science and technology, education, health and the environment; within the OIC.

The IAS has been successful in bridging the divide between the fans of science and its inimitable foes by often convincing Heads of State within the OIC to pay more attention to science and technology, and to education; and to divert more resources to endeavours in these domains; and to empower executive decision-makers in their countries to do more in order to rise in the international science, technology and education ranks.

## **2 THE LAUNCH**

The decision to establish the Islamic Academy of Sciences (IAS) was taken at the 1984 Summit Conference of the OIC. The IAS was formally founded in 1986, with the patronage and support of Jordan and Pakistan, and under the inspired and farsighted leadership of the late Prof. M. A. Kazi FIAS; IAS Founding President from Pakistan.

Thirty-eight eminent scientists and academicians from various Islamic countries were invited to Amman (Jordan) in October 1986, to lay the constitutional and academic foundation of the Islamic World Academy of Sciences, as the Founding Fellows of the IAS. The Founding Conference was patronised by His Royal Highness Prince El-

Hassan Ibn Talal of Jordan. HRH accepted to be Founding Patron of the Academy together with General Zia Ul-Haq, the (late) President of Pakistan.

The IAS General Assembly at its annual meeting, held in Kuala Lumpur, Malaysia during March 2005, decided, following a proposal from the IAS Council and Secretariat, to change the name of the Academy so that it becomes the "Islamic World Academy of Sciences."

### **Box 1. Vision**

IAS's main purpose is to increase interaction among scientists from member states of the OIC and facilitate the exchange of views on the major contemporary issues affecting the development of the Islamic world.

### **Box 2. Mission**

IAS's mission is to provide a dynamic institutional set up that can assist in the utilisation of science and technology for the general development of Islamic countries and humanity at large.

### **Box 3. Objectives**

The main objectives of the IAS are to:

- (1) To serve as an advisory and consultative organization of the institutions and organizations of Member States of the Organization of Islamic Cooperation (OIC) and other countries and communities requiring its advice and guidance on matters related to the field of science and technology as well as their applications;
- (2) To initiate scientific and technological programs and activities in science and technology, and to encourage co-operation among research workers and groups in various Islamic countries on problems and projects of common interest;
- (3) To encourage and promote research on major problems of importance facing Islamic countries and to identify future technologies of relevance for possible adoption, adaptation, and utilization;
- (4) To formulate standards of scientific performance and attainment, and to award prizes, medals, fellowships, distinctions, and honors for outstanding scientific achievements; and
- (5) To promote continuing education and training courses to enhance capacity building of human resources with certification.

## **3 STRUCTURE**

### **3.1 General**

As a sovereign body, the IAS is governed by a General Assembly in which all founding and elected Fellows are members. The number of Academy Fellows was 96 on 1 July 2024. They represent more than 30 countries and many scientific disciplines. The Fellows of the Academy are eminent figures, each in his/her field has achieved a great deal and has contributed significantly both to his/her country's development and the global arena.

A Council, which is comprised of 11 IAS Fellows, is elected by the General Assembly for a 4-year term of office, oversees the management of the Academy.

### **3.2 General Assembly and Council**

The General Assembly and the IAS Council meets once every year, in concomitance with the scientific meeting, in which it draws up plans for future activities of the Academy and evaluates programs under implementation. Administrative and financial matters are also assessed and decided.

### **3.3 IAS Secretariat**

The Amman-based Secretariat is the IAS's executive arm responsible for maintaining its institutional set-up and implementing its programs within the guidelines set by the Council and General Assembly.

Jordan, as well as offering the IAS an annual maintenance grant, accorded it the diplomatic immunities and privileges normally given to non-governmental organisations that are based in Jordan.

The permanent headquarters of the Islamic World Academy for Sciences is located in Amman, Jordan with an estimated building area of around 2,733. m<sup>2</sup>. It was built with donations from various institutions and contributions from IAS Fellows.

The headquarters hosts a large auditorium fully equipped with visual and sound systems that can accommodate up to 200 people, conference and seminar halls equipped with teleconferencing technology and can fit 20-30 people, a library containing various publications of IAS and other institutions, offices for the staff, a meeting room and two cafeterias. It has a spacious outdoor terrace, exhibit areas and an adequate parking space on the basement level.



## **4 FINANCES**

The IAS receives an annual grant from the government of Jordan that covers its local and administrative expenses.

The IAS received a generous grant from the Arab Fund for Economic and Social Development (AFESD) which had been used along with other donations from different dignitaries including the IAS Fellows, corporations and organizations to build the IAS headquarters in Amman.

The programs of the Academy are partially supported through grants from the Higher Council for Science and Technology (HCST), Jordan, COMSTECH, and The Kuwait Foundation for the Advancement of Sciences (KFAS). Moreover, the Academy receives annual contributions from Corporate Members (such as the University of Petra) and occasional donations from local and international companies as well as charities in various countries.

## **5 PROGRAMS**

### **5.1 General**

The IAS program aims to highlight the significance of science and technology in societal transformation and economic development with backdrop of Islamic values and culture.

The program contributes to develop networking among scientists and interface their expertise with development stakeholders. It also contains elements in capacity building in science and technology that are aimed specifically at the science community. Another part of the program aims at bridging the scientist decision-maker divide and focuses on promoting government action in certain S&T areas. Such action can catalyse the overall process of socio-economic development in Islamic countries. Moreover, the program of the IAS contains a multi-form information dissemination element that aims to cultivate public interest in science and scientific activities and address the various components of the IAS's target audience.

### **5.2 Programs Outline**

The IAS has executed activities under the following domains:

#### ***5.2.1 Islam and Science***

The IAS had addressed this sub-program through:

*(a) Publication of books on Islamic Scientific Thought (Journal published, 1990-1995)*

The aim of this undertaking was to provide an objective assessment of the concordant relationship that exists between the components of each of the following topics:

- (1) The concept of knowledge in Islam.
- (2) Modern science and the Islamic Values System.
- (3) Islamic Thought and Modern Science (*book published in 1997*).
- (4) Qur'anic Concepts and Scientific Theories (*book published in 1999*).

*(b) Publication of books on contemporary scientific issues from an Islamic perspective*

The purpose of this activity was to examine current scientific issues facing the Islamic *Ummah*. These include for example various aspects of research in genetic engineering, organs transplants, sustainable natural resources development, environmental degradation etc...

### **5.2.2 Science, Technology and Innovation Development**

This constitutes the core of the IAS general program.

*(a) Providing an environment to induce OIC member states endeavour to adopt capacity-building schemes and/or policies that assure suitable ecosystem for flourishing science, technology and innovations in different contemporary change drivers as follows:*

- (1) Food and Agriculture (*Conference 1987*);
- (2) Microelectronics (*Conference 1989*);
- (3) New Materials (*Conference 1989/Conference 2002*);
- (4) Environmental Degradation (*Conference 1992 and Conference 2008*);
- (5) Tropical Medicine (*Conference 1993*);
- (6) Computer Technology (*Conference 2000*);
- (7) Genetic Engineering and Biotechnology (*Conference 2001*);
- (8) Biomedical Technology (*Conference 2001*);
- (9) Plant Genetics (*Conference 2001*);
- (10) Materials Science (*Conference 2002*);
- (11) Culture of Science (*Conference 2002*);
- (12) Lasers and Fibre Optics (*Workshop in Tunisia, 2002*);
- (13) Energy (*Conference 2003*);
- (14) Nuclear Technology (*Conference 2003*);
- (15) Remote Sensing (*Conference 2011*);
- (16) STI Landscape (*Conference 2020*);
- (17) Biodiversity (*Conference April 2021, and webinar September 2021*);
- (18) Agriculture Production and Food Security (*Webinar 2020-2021*);
- (19) Nanotechnology (*Webinar 2021*); and
- (20) STI under Ever Changing Events (*Conference 2021*).

*(b) Promotion of science and technology excellence in the Islamic world*

This part of the program aims to promulgate achievements, inventions and significant contributions in science and technology and disseminating contributions that impact the learning environment:

- (1) Publication of a specialised journal in medicine (*IAS Medical Journal has been published since 1988*);
- (2) Preparation of model school books (*Conference 1999*);
- (3) Prizes and medals (*IAS-COMSTECH Ibrahim Memorial Award*).

The IAS collective activities are instrumental in providing a forum for dialogue and knowledge sharing among scientists in OIC and abroad. Thus, conferences, webinars and training workshops have been organised and/or are planned in the following areas:

1. Food Security (*Conference 1987, webinar 2020 and conference 2024*);
2. Advanced Technologies (*Conference 1989*);
3. Pollution and Environmental Degradation (*Conference 1992*);
4. Nutrition (*Conference 1993*);
5. Water Resources Management (*Conference 1994*);
6. Science Education (*Conference 1999*);
7. Natural Resources Development;
8. Land Utilisation;
9. Desertification (*Conference 1992*);
10. The Exploitation of Ocean Resources;
11. Energy (*Conference 2003*);
12. Information Technology (*Conference 2000*);
13. Knowledge Society (*Conference 2009*);
14. Biodiversity (*Conference 2021*);
15. STI Landscape (*Conference 2020*); and
16. STI under Ever Changing Events (*Conference 2021*).

*(c) Co-operation with OIC-Member States in Science and Technology*

- (1) S&T Profiles of Islamic Countries (*Conference 1988*);
- (2) Industrial and Commercial Profiles of Islamic Countries;
- (3) The Status of S&T Education in the Islamic World (*Conference 1999*);
- (4) Energy Profile of Islamic Countries (*Conference 2003*); and
- (5) Food Profile of Islamic Countries (*Conference 1987*).

*(d) Co-operation with regional and international organisations*

The IAS has strong ties with a number of regional and international organisations. This has been achieved through the following means (which are covered in some detail in other parts of the report):

- (1) Exchange of literature (*Books, Proceedings, Journals, etc...*);
- (2) Co-operation agreements that set out modalities of collaboration;
- (3) Organising joint activities such as seminars and workshops; and
- (4) Participation in debates regarding issues raised by these organization.

### **5.2.3. Dissemination of Information**

- (1) The Academy disseminates its webinars, conferences and training workshops and collected information on different aspects of S&T to scientific communities and the public at large, through the following means:
  - (a) The IAS website <<http://www.iasworld.org>>;
  - (b) Technology information bulletins (*through e-mail*);
  - (c) Newsletter (*60 issues have been published*);
  - (d) IAS YouTube Channel; and
  - (e) Social media (Facebook and LinkedIn).
- (2) The IAS suggested forming task committees to bring focus on issues for further discussions in future conferences such as:
  - (a) Food Security.
  - (b) Health Security and Pandemics.
  - (c) Nanotechnology and Materials.
  - (d) Climate Change.
  - (e) Joint Vaccine Production Potential in OIC.
  - (f) Cross Border Issues; Water Shed, and Biodiversity.
  - (g) Higher Education.
  - (h) People Displacement and Migration.

## **6 ACTIVITIES**

### **6.1 General**

From the onset, the Academy has been implementing various activities that are in line with its mandate and fall within its strategy and action plan. The objective of all such activities has been to advance the science and technology in OIC and developing countries. The outcome of these activities is expected to generate interest and to foster support for STI with the hope that it will help in creating functional STI ecosystem in OIC member states.

The IAS has built itself into an action-oriented institution utilising most of its limited resources for activities that help to accelerate the development processes of OIC-Member countries.

The Academy is acting as a think tank for OIC through its valuable output including specialised scientific conferences; publishing a series of Conference Proceedings

(Policy Documents), journals, books, newsletters, and establishing a quality medical journal; as well as organising a number of quality training programs. The outcome of these activities is expected to exert desirable push that promote policies in favour of science and technology.

Most of all, the Academy has managed to define a very useful dual role for itself namely as a program implementation and policy-making body dedicated to contributing to the development of the *Ummah* and humanity.

Further, the Academy has established numerous contacts with a number of international non-governmental organisations and academies, as well as governments throughout the world.

Some activities of the IAS, over the last few years, are summarised below:

## **6.2 Co-operation with other organisations**

The IAS maintains mutual interactions and exchange of ideas and participates in forming international lobbying voice for issues in science, health and development aspects with more than one hundred similar organisations all over the world. These include:

- OIC General Secretariat, Jeddah, Saudi Arabia.
- OIC Standing Committee for Scientific and Technological Cooperation (COMSTECH), Pakistan.
- The Higher Council for Sciences and Technology (HCST), Jordan.
- Islamic Organization for Food Security (IOFS), Kazakhstan.
- United Nations Educational, Scientific and Cultural Organisation (UNESCO), Egypt and France.
- Islamic Educational, Scientific and Cultural Organisation (ICESCO), Morocco.
- The World Academy of Sciences (TWAS), Italy;
- InterAcademy Partnership on International Issues (IAP), Trieste, Italy;
- InterAcademy Medical Panel (IAMP), Trieste, Italy;
- International Union of Academies (IUA), Brussels, Belgium;
- Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA);
- Union for the Mediterranean (UfM), Spain;
- The International Science Council (ISC), France;
- Sustainable Health Equity Movement (SHEM);

## **6.3 Conferences, Seminars and Webinars**

The conferences and webinars of the IAS are designed to address relevant issues of common concern for OIC. These activities are instrumental in creating common

ground for discussion and knowledge exchange and sharing with the hope they constitute a strong basis formulating networking platform. Countries that host these conferences have the extra benefit of widening the exposure of their scientific constituents to novel opportunities for education and networking.

The Academy is used to convene in person annual international conferences every year that are usually held in different countries across OIC member states. The host country normally provides local accommodation and hospitality for the participants whereas the Academy and the other co-sponsors bear the burden of other expenses.

### ***6.3.1. Water-Energy-Food-Ecosystem Nexus for the Security of the OIC Countries, Islamabad, Pakistan, 22-24 July 2024.***

Under the high patronage of His Excellency President of Pakistan, IAS will convene its 25<sup>th</sup> international conference in Islamabad, Pakistan during 22-24 July 2024 jointly with the Pakistan Academy of Sciences (PAS). The Theme of the conference will be *Water-Energy-Food-Ecosystem Nexus for the Security of the OIC Countries*.

The conference will be held at the Pakistan Academy of Sciences (PAS) and will be co-sponsored by Higher Council for Science and Technology (HCST), Amman, Jordan and the Higher Education Commission (HEC), Islamabad, Pakistan.

### ***6.3.2. Challenges to Promote Science & Technology for Socio-Economic Development in OIC Countries, Karachi, Pakistan, 7-8 March 2023.***

Under the high patronage of His Excellency President of Pakistan, IAS convened its 24<sup>th</sup> international scientific conference in Karachi, Pakistan during 7-8 March 2023 in collaboration with the Organization of Islamic Cooperation Ministerial Standing Committee on Scientific and Technological Cooperation (COMSTECH), and the International Center for Chemical and Biological Sciences (ICCBS). The theme of the conference was *Challenges to Promote Science & Technology for Socio-Economic Development in OIC Countries*.

The conference was held at the International Center for Chemical and Biological Sciences (ICCBS) (H.E.J. Research Institute of Chemistry and Dr. Panjwani Center for Molecular Medicine and Drug Research), University of Karachi, Pakistan. It was an open activity in which around 150 local and international participants attended from 20 countries. Among the participants were Fellows of the IAS and local scientists from various universities and institutions. The conference was a hybrid event where some speakers and participants joined via zoom.

The conference was co-sponsored by; OIC Standing Ministerial Committee on Scientific and Technological Co-operation (COMSTECH), Islamabad, Pakistan, International Center for Chemical and Biological Sciences (ICCBS), Karachi, Pakistan and the Higher Council for Science and Technology (HCST), Amman, Jordan. Conference partner institutions from Pakistan were the Pakistan Academy of Sciences

(PAS), Dr. Panjwani Memorial Trust, the Husein Ebrahim Jamal Foundation and the Government of Sindh.

At the conclusion of the conference, the IAS adopted the IAS 2023 Karachi Declaration.

The Declaration has been distributed to the OIC Secretary General, IAS Fellows, academies of sciences as well as the international decision-making community.

The proceedings volume (ISBN 978-9957-412-32-6) of this conference has subsequently been published online.

### ***6.3.3. Science, Technology and Innovation (STI) Under Ever Changing Global Events, Rabat, Morocco, 18-19 October 2022.***

Under the high patronage of His Majesty King Muhammad VI of Morocco, the Islamic World Academy of Sciences (IAS) convened its 23<sup>rd</sup> international conference in Rabat (Morocco); on 18-19 October 2022, under the title “*Science, Technology and Innovation (STI) Under Ever Changing Global Events.*” The conference was a joint activity between the IAS and Hassan II Academy of Science and Technology.

The venue of the conference was the Academy of the Kingdom of Morocco in Rabat. The IAS Conference was an open activity in which around 100 local and international participants attended from 15 countries. Among the participants were Fellows of the IAS, international speakers and local scientists from various universities and institutions. After the conference, the 24<sup>th</sup> meeting of the General Assembly of the IAS as well as the 44<sup>th</sup> meeting of the IAS Council were convened.

The conference was co-financed by the following institutes:

- The Hassan II Academy of Science and Technology (Morocco),
- Kuwait Foundation for the Advancement of Science (KFAS) (Kuwait),
- Higher Council for Sciences and Technology (HCST) (Jordan),
- The OIC Standing Committee on Scientific and Technological Cooperation (COMSTECH) (Pakistan), and
- Pakistan Academy of Sciences.

At the conclusion of the conference, the IAS adopted the IAS 2022 Rabat Declaration which called for OIC member states to introduce into their educational curricula principles of critical thinking that can nurture curiosity.

The Declaration has been distributed to the OIC Secretary General, IAS Fellows, academies of sciences as well as the international decision-making community.

The proceedings volume (ISBN 978-9957-412-31-9) of this conference has subsequently been published online.

#### **6.3.4. Webinar on Biodiversity, 25 September 2021**

This webinar was organized with the Turkish Academy of Sciences (TÜBA), on 25 September 2021. Three distinguished scientists presented lectures during the webinar; Prof. Dr. İsmail Koyuncu – TÜBA Principal Member- İstanbul Technical University, Prof. Dr. Sezai ERCİŞLİ - Atatürk University, and Dr. Öğr. Üyesi Korhan ÖZKAN – Middle East University.

#### **6.3.5. Series of Webinars on Nanotechnology, (May-August 2021)**

The webinars were broadcasted via IAS Zoom platform in May 2021 and continued through August (one session/month), and discussed the following topics: Application of Nanotechnology in Medical Technology, Application of Nanotechnology in Pharmaceutical Technology, Application of Nanotechnology in Agriculture and Application of Nanotechnology in Industry.

#### **6.3.6. Biodiversity Conference, 1 April 2021**

Under the patronage of H.R.H. Prince El-Hassan bin Talal, IAS Founding Patron, and in cooperation with COMSTECH the IAS convened a conference on Biodiversity on 1<sup>st</sup> of April 2021. The conference aimed to raise awareness of Islamic countries of the global international frameworks and protocols governing access to genetic material and enabled active participation of OIC member states in further understanding the article of the Convention on Biological Diversity (CBD). The activity was held in preparation for the UN conference regarding CBD (COP15) in which CBD articles in Nagoya protocol concerning germ plasm trafficking will be amended and discussed. Over 90 participants joined the conference including H.R.H. Prince El-Hassan bin Talal, H.R.H. Princess Sumaya Bint El-Hassan and a number of eminent scholars.

#### **6.3.7. Training program on: Characterizing and Assessing Research Quality for Scaling the Impact for Innovation and Development, January 2021**

In January 2021 the IAS and AARINENA organized a virtual training program via IAS platform, under the title: *Characterizing and Assessing Research Quality for Scaling the Impact for Innovation and Development*. The audience of the training were researchers, professors, graduate students, project and program officers and policy makers in OIC countries.

#### **6.3.8. Series of webinars on Agriculture Production and Food Security under COVID-19 Pandemic, 2020-2021**

These seminars were organized in cooperation with AARINENA and the following topics were discussed; Challenges and Opportunities for Meeting Food Security in the Islamic World, the Debate on Future Strategies to cope with Agricultural Water Scarcity and Climate Change, Agriculture Production and Food Security of Turkey and Middle East under COVID-19 Pandemic Conditions and Organic Agriculture: The Challenge of Sustaining Food Production in the Era of COVID-19.



### ***6.3.9. Landscape of Science, Technology and Innovation in the Islamic Countries, December 2020, via zoom platform***

Under the patronage of H.R.H. Prince El-Hassan bin Talal, Founding Patron IAS, the IAS convened its 22<sup>nd</sup> Scientific Conference under the title: *Landscape of Science, Technology and Innovation in the Islamic Countries*. Under the COVID-19 pandemic situation the conference was held virtually on December 1, 2020, via zoom platform.

The deliberations and discussion in the conference had been a platform for exchanging experiences among participating countries in aspects related to STI agenda in their respective countries with regard to proper governance, partnership framework that ensure participation of all STI stakeholders including the private sector, governmental institutions (funding research and services), universities and research centers to ensure delivering science through technology development into commercialized products.

At the conclusion of the 22<sup>nd</sup> IAS Conference, the IAS adopted the IAS 2020 Declaration on *Landscape of Science, Technology and Innovation in the Islamic Countries*.

The proceedings volume (ISBN 978-9957-412-33-3) of this conference has subsequently been published online.

### ***6.3.10. Science, Technology and Innovation for Global Peace and Prosperity, Konya, Turkey, October 2017***

Under the Patronage of the President of the Republic of Turkey, the IAS convened its 21<sup>st</sup> international science conference in Konya, Turkey, during 8-11 October 2017. The theme of the conference was *Science, Technology and Innovation for Global Peace and Prosperity*.

The proceedings volume (ISBN 978-9957-412-27-2) of this conference has subsequently been published online.

### ***6.3.11. International Conference on Islamic Sciences in the Western World (Middle Ages-Renaissance) Exchanges, Transmission, Influence, Amman, Jordan, April 2017***

Under the patronage of H.R.H. Prince El-Hassan bin Talal, the IAS, in collaboration with the International Union of Academies (IUA) organised a two-day conference, hosted by Prof. Adnan Badran at the University of Petra in Amman during 25 -27 April 2017, in collaboration with the Royal Institute for Inter-Faith Studies (RIIFS), based in Amman (Jordan).

Inaugurating the event, H.R.H. Prince Hassan, who chairs the RIIFS, called for an approach to science which puts humankind at the centre of the equation of sustainability and development. He said that the physical world yearns for order in chaos, highlighting the necessity to establish peace. “The peace I am talking about is the one that starts from within, that reflects on addressing the shared responsibility in cooperation with science and politics; the medium- and long-term programs specially in discussing energy, food and water.”

### ***6.3.12. International Seminar on ‘Islamic Perspectives on Science’s Big Questions,’ Amman, Jordan, May 2016***

Under the patronage of H R H the President of the Royal Scientific Society (RSS), Amman, Jordan, the IAS convened an international seminar on Islamic Perspectives on Science’s Big Questions, on 5 May 2016 in Amman (Jordan).

This initiative sought to jumpstart a dialogue, disclosure, and debate on critical issues at the intersection of science and religion within Islamic countries and contribute to a process of scientific revival within the Islamic world.

The seminar was jointly organized by the Islamic World Academy of Sciences (IAS), the UN-ESCWA Technology Center (ETC), the Royal Scientific Society (RSS), the John Templeton Foundation, the Muslim World Science Initiative and the Turkish Society for the History of Science (TBTk).

### ***6.3.13. Science, Technology and Innovation: Building Humanity’s Common Future, Tehran, Iran, December 2015***

Under the patronage of His Excellency the President of the Islamic Republic of Iran, the IAS convened its 20<sup>th</sup> international science conference in Tehran (Iran), 26-27 December 2015. The conference addressed the theme of *Science, Technology and Innovation: Building Humanity’s Common Future*.

The proceedings volume (ISBN 978-9957-412-26-5) of this conference has subsequently been published online.

### ***6.3.14. Achieving Socioeconomic Development in the Islamic World through Science, Technology and Innovation, Dhaka, Bangladesh, May 2013***

Under the patronage of Her Excellency the Prime Minister of Bangladesh, the Islamic World Academy of Sciences (IAS) convened its 19<sup>th</sup> international science conference in Dhaka, the capital of the People’s Republic of Bangladesh, during 6-9 May 2013. The theme of the conference was ‘Achieving Socioeconomic Development in the Islamic World through Science, Technology and Innovation (STI).’

The conference which was inaugurated by the Prime Minister of Bangladesh on Monday 6 May 2013 was preceded on Sunday 5 May 2013, by a ceremony which was organised on the premises of the Bangladesh University of Health Sciences (BUHS), to honour one of the Founding Fellows of the IAS from Bangladesh: Prof. Mohammad Ibrahim (1911-1989). During the ceremony, Prof. Liaquat Ali, an outstanding Bangladeshi medical researcher, was honoured as the recipient of the 2013 IAS Ibrahim Memorial Award.

At the conclusion of the 19<sup>th</sup> IAS Conference, the IAS adopted the IAS 2013 Dhaka Declaration on Achieving Socioeconomic Development in the Islamic World through

Science, Technology and Innovation. The declaration called for the promotion of scientific and technological cooperation among developing and OIC countries and for the creation of links between knowledge generation and enterprise development. To further promote the development of local technology, OIC countries need to improve their incentive regimes including taxation and must try to promote technological innovation and generate markets for new products and services within their societies, the declaration suggested.

The proceedings volume (ISBN 978-9957-412-25-8) of this conference has subsequently been published online.

### ***6.3.15. Science and Technology in Muslim World: Achievements and Prospects, Astana, Kazakhstan, May 2012***

Under the patronage of His Excellency Nursultan Nazarbayev Hon. FIAS, the President of Kazakhstan, the IAS convened a special symposium in ‘Palace of Peace and Accord’ Astana (Kazakhstan) during May 2012, and under the title: *Science and Technology in the Muslim World: Achievements and Prospects*.

This activity was organized by the IAS and the R.B. Suleimenov Institute of Oriental Studies of the Ministry of Education and Science of the Republic of Kazakhstan. The Islamic Development Bank (IDB) and the COMSTECH were the sponsors of the event.

### ***6.3.16. The Islamic World and the West: Rebuilding Bridges through Science and Technology, Doha, Qatar, October 2011***

Under the patronage of H E the Prime Minister and Foreign Minister of the State of Qatar, the Islamic World Academy of Sciences (IAS) convened its 18<sup>th</sup> international science conference in Doha, the capital of the State of Qatar, during 22-24 October 2011.

The theme of the conference was *The Islamic World and the West: Rebuilding Bridges through Science and Technology*. The conference was followed by the 9<sup>th</sup> Doha Interfaith Conference, 24- 26 October 2011 under the title: *Social Media and Inter-Religious Dialogue: A New Relationship*, which was organized by the Doha International Centre for Interfaith Dialogue (DICID).

At the conclusion of the 18<sup>th</sup> IAS Conference, which also included a number of side-meetings and site visits, the IAS adopted the IAS 2011 Doha Declaration on *The Islamic World and the West: Rebuilding Bridges through Science and Technology*.

The declaration reiterated that Islam has been and can be the driving force behind an all-encompassing renaissance in STI for a better tomorrow for Muslims and humanity and that the current low level of achievement in the Islamic world is the cumulative

effect of multiple factors and not the result of a single dominant cause. The declaration also highlighted that governance in many OIC countries is in a state of turmoil with polities torn between upholding national security and adopting good governance practices with 2011 witnessing a tsunami of political events sweeping through the Arab region of the Islamic world.

The proceedings volume (ISBN 978-9957-412-24-1) of this conference has subsequently been published online.

### ***6.3.17. Knowledge Society for the Innovation Economy, Shah Alam, Malaysia, December 2010***

Under the patronage of H.R.H. the Sultan of Selangor, the IAS convened a special symposium in Shah Alam (near Kuala Lumpur), Malaysia; on 8-9 December 2010 on the topic of “Knowledge Society for the Innovation Economy.” This activity was organized by the IAS and the International Islamic Academy of Life Sciences and Biotechnology (IIALSB) together with the University of Industry of Selangor (UNISEL). The Islamic Development Bank (IDB) and the OPEC Fund for International Development (OFID) were the sponsors of the event.

The symposium examined the interaction between Education, Research and Innovation. This so-called Knowledge Triangle is the key driver of growth as well as a knowledge-based society, today.

### ***6.3.18. Towards the Knowledge Society in the Islamic World: Knowledge Production, Application and Dissemination, Shah Alam, Malaysia, December 2009***

Under the patronage of His Royal Highness the Sultan of the State of Selangor, Malaysia; the IAS convened its seventeenth science conference in Shah Alam, the capital of Selangor, 14 to 17 December 2009. The conference was under the title; *Towards the Knowledge Society in the Islamic World: Knowledge Production, Application and Dissemination.*

Over 150 participants representing over 25 countries participated in the conference including the representatives of no less than 15 academies 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 (NASIC) were also convened.

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 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; in order to help OIC countries build knowledge societies and achieve rapid socioeconomic development.

The proceedings volume (ISBN 978-9957-412-22-7) of this conference has subsequently been published online.

### ***6.3.19. Science and Technology and Innovation for Sustainable Development in the Islamic World: Policies and Politics Rapprochement, Kazan, Tatarstan (Russia), August 2008***

Under the patronage of the President of the Republic of Tatarstan, the IAS convened its 16<sup>th</sup> Conference in Kazan, the capital of the autonomous Republic of Tatarstan in the Russian Federation, during 25 - 28 August 2008. The conference addressed the theme of *Science, Technology and Innovation for Sustainable Development in the Islamic World: Politics and Policies Rapprochement*.

Alongside the conference, the IAS and the UNESCO organised a special symposium at Kazan State University on the ‘History of Islamic Science, Technology and Innovation.’

The IAS 2008 Kazan Declaration pronounced that it was imperative that interest of the OIC science community, and ultimately the public, is rejuvenated in what has become known as the accepted narrative of the ‘Rise and Decline of Islamic Science,’ and perhaps to question what has been described as the classical narrative including some theories related to the subject.

The proceedings volume (ISBN 978-9957-412-19-7) of this conference has subsequently been published online.

### ***6.3.20. Higher Education Excellence for Development in the Islamic World, Ankara, Turkey, November 2006***

Under the patronage of the Prime Minister of Turkey, the IAS convened its fifteenth international science conference in Ankara, Turkey, during November 2006. The conference addressed the theme of *Higher Education Excellence for Development in the Islamic World*, and was organised and sponsored by the IAS; Bilkent University; the IDB; COMSTECH; OPEC Fund for International Development; ICESCO; and the International Conference on Higher Education (ICHE).

The conference, which coincided with the 20<sup>th</sup> Anniversary of the IAS, sought to engage the widest range of institutions and individuals involved in higher education in Turkey, the region, the OIC; as well as some international agencies.

The IAS Ankara Declaration, adopted at the conclusion of the conference, highlighted that very few OIC universities were ranked among the world's top 500 universities. It emphasised that to attain and sustain quality in higher education, certain components are particularly relevant; notably careful selection of staff, continuous staff development and mobility, as well as student mobility within and between countries. A special mention was made in the declaration of the Bologna Process adopted by many European countries which represents a good model for harmonizing academic degree standards and quality assurance standards.

The proceedings volume (ISBN 978-9957-412-18-0) of this conference has subsequently been published online.

#### ***6.3.21. Science, Technology and Innovation for Socioeconomic Development of OIC-Member Countries: Towards Vision 1441, Kuala Lumpur, Malaysia, 2005***

Under the patronage of the Prime Minister of Malaysia, the IAS convened its fourteenth science conference in Kuala Lumpur, Malaysia, during March 2005. The conference addressed the theme of *Science, Technology and Innovation for Socio-economic Development of OIC-Member Countries: Towards Vision 1441*.

At the conclusion of the conference, the IAS adopted the Malaysia-IAS 2005 Kuala Lumpur Declaration on *Science, Technology and Innovation for Socio-economic Development of OIC-Member Countries: Towards Vision 1441*. The declaration reiterated its support for *Vision 1441*, and its constituent elements, and proposed a number of strategies to help OIC countries to achieve the various targets outlined therein.

The proceedings volume (ISBN 9957-412-11-6) of this conference has subsequently been published online.

#### ***6.3.22. Energy for Sustainable Development and Science for the Future of the Islamic World and Humanity, Kuching, Sarawak, Malaysia, 2003***

Under the patronage of the Chief Minister of Sarawak, the IAS convened its thirteenth international conference in Kuching, over the period 29 September – 2 October 2003. The conference addressed the themes of *Energy for Sustainable Development* and *Science for the Future of the Islamic World and Humanity*. It was an open scientific activity in which over 250 participants representing over 25 countries participated.

The proceedings volume (ISBN 9957-412-08-6) of this conference has subsequently been published online.

#### ***6.3.23. Materials Science and Technology and Culture of Science, Islamabad, Pakistan, 2002***

Under the patronage of the President of Pakistan, the IAS convened its twelfth international conference in Islamabad (Pakistan), during October 2002. The conference addressed the themes of *Materials Science and Technology* and *Culture of Science*.

At the conclusion of the conference, delegates adopted the IAS Islamabad Declaration on Materials Science and Technology and Culture of Science. The declaration proposed the implementation of an R&D policy that addresses the link between technological advancement and societal response. It highlighted the impacts of globalisation and developments in Information Technology (IT), Biotechnology (BT), and Nanotechnology (NT) on the knowledge production systems.

On the theme of *Culture of Science*, the declaration emphasized that understanding the processes by which information concerning science and technology diffuses from the laboratory to the outside world is central to understanding social-transformation. The proceedings book of this conference was published in 2004 (ISBN 9957-412-06-x) and has been published online.

#### ***6.3.24. Biotechnology and Genetic Engineering for Development in the Islamic World, Rabat, Morocco, 2001***

Under the patronage of Morocco's King Muhammad VI, the IAS convened its eleventh conference in Rabat (Morocco), in October 2001. The conference addressed the theme of *Biotechnology and Genetic Engineering*, and was hosted by the Academy of Morocco. A number of Moroccan and international organisations, including the COMSTECH and the OPEC Fund for International Development as well as the IDB and the ICESCO supported this international activity in which many local specialists participated. The proceedings book of this conference was published in 2004 (ISBN 9957-412-07-8) and has been published online.

#### ***6.3.25. Information Technology for Development in the Islamic World, Tunis, Tunisia, 2000***

During November 2000, and under the patronage of H.E. the President of Tunisia, the Academy convened its Tenth Conference in Tunis, Tunisia; under the title of *Information Technology for Development in the Islamic World*.

The conference concluded with the publication of the IAS Tunis Declaration on Information Technology for Development in the Islamic World.

The declaration was subsequently presented to over 1,500 specialists and over 100 agencies throughout the Islamic world. The proceedings volume has also been published (ISBN 9957-412-03-5) and is available online.

#### ***6.3.26. Science and Technology Education for Development in the Islamic World, Tehran, Iran, 1999***

In July 1999, and under the patronage of the President of Iran, and then chairman of the OIC Summit, the Academy convened its Ninth Conference in Tehran, under the title of *Science and Technology Education for Development in the Islamic World*.

The policy document resulting from the conference in the form of the conference proceedings book was later published (ISBN 9957-412-00-7).

**6.3.27. *Water in the Islamic World: An Imminent Crisis, Khartoum, Sudan, 1994***

The IAS convened its eighth international conference in Khartoum (Sudan) in December 1994. The conference, entitled, *Water in the Islamic World: An Imminent Crisis*, was held under the patronage of the President of Sudan.

The conference aimed to assess the water security situation in the Islamic world and to develop innovative proposals for future activities in water resources management.

The proceedings of this conference have subsequently been published and marketed internationally, gradually becoming an extensively-cited reference on water resources issues in the Middle East.

**6.3.28. *Health, Nutrition, and Development in the Islamic World, Dakar, Senegal, 1993***

The President of Senegal hosted the seventh IAS annual conference in Dakar, (Senegal), 22-26 November 1993.

The conference, which was entitled, *Health, Nutrition, and Development in the Islamic World*, reviewed the state of population health in the various OIC regions, highlighted the major epidemics and diseases confronting the Islamic and developing worlds, and appraised national strategies adopted by countries in combating these diseases.

The proceedings of this conference have subsequently been published.

**6.3.29. *Environment and Development in the Islamic World, Kuala Lumpur, Malaysia, 1992***

The IAS convened its sixth annual conference in Kuala Lumpur, (Malaysia), from 10-14 August 1992.

The conference which was entitled *Environment and Development in the Islamic World*, was held under the patronage of the Prime Minister of Malaysia; Dr. Mahathir Mohamad, and was designed to identify the global environmental issues of relevance to the Islamic world. It also addressed a number of concepts related to environment and development thereby identifying possible roles for NGOs that are active in this domain. The proceedings of this conference have subsequently been published.

**6.3.30. *Science and Technology Manpower Development in the Islamic World, Amman, Jordan, 1991***

Under the patronage of Jordan's Prince El-Hassan Ibn Talal, the IAS convened its fifth international conference on *Science and Technology Manpower Development in the Islamic World*, in Amman (Jordan), in December 1991.

The proceedings of this conference have subsequently been published.

**6.3.31. *Technology Transfer for Development in the Muslim World, Antalya, Turkey, 1990***

Under the patronage of the President of Turkey, the conference on *Technology Transfer for Development in the Muslim World*, was held in Antalya, (Turkey), during November 1990.



The conference was organised by the IAS, by the Turkish Scientific and Technical Research Council (TUBITAK), the Islamic Foundation for Science, Technology and Development (IFSTAD), the Islamic Development Bank (IDB) as well as the UNESCO.

The proceedings of this conference have subsequently been published.

### ***6.3.32. New Technologies and the Development of the Muslim World, Kuwait City, Kuwait, 1989***

Under the patronage of H H the Emir of Kuwait and the (then) Chairman of the Organisation of the Islamic Conference, the conference on *New Technologies and Development of the Muslim World*, was held in Kuwait during December 1989. The conference was jointly organised and sponsored by the IAS and the Kuwait Foundation for the Advancement of Sciences (KFAS).

The declaration called for the acceleration of efforts to rejuvenate regional co-operation with the ultimate goal of establishing a Muslim Common Market, and for the removal of barriers constraining the movement of capital, scientific manpower and technology-based products among Islamic countries.

The proceedings of this conference have subsequently been published.

### ***6.3.33. Co-operation and Co-ordination among Islamic Institutes, Amman, Jordan, 1989***

Under the patronage of Jordan's Prince El-Hassan Ibn Talal, the Academy and *Al Albait* Foundation, Jordan; jointly organised a seminar during June 1989, the theme of which was *Co-operation and Co-ordination among Institutes of Research and Studies and their Applications within the Framework of Islamic Thought*.

### ***6.3.34. Science and Technology Policies for Self-Reliance in the Muslim World, Islamabad, Pakistan, 1988***

This was the major activity of the Academy for 1988. It was convened in Islamabad during December of that year and was sponsored by the IAS, COMSTECH, IFSTAD, as well as the government of Pakistan. It came in conformity with the Academy's program to promote S&T concepts in the Muslim world.

The Academy issued a declaration at the end of the conference urging the *Ummah* to give the task of formulating S&T policies a high priority. The proceedings of this conference were published in a quality volume by the Academy and distributed internationally.

### ***6.3.35. Food Security in the Muslim World, Amman, Jordan, 1987***

Under the patronage of Jordan's Prince El-Hassan bin Talal, IAS Founding Patron, the Academy convened its first seminar in Amman during 1987 on *Food Security in the Muslim World*. The proceedings of the seminar and a three-language summary were later published and distributed by the IAS, and copies were presented to prominent world figures, as well as Ministers of Agriculture throughout the Islamic world.

### **6.3.36. Future Conferences**

The IAS maintains contact with a number of countries regarding the hosting of future IAS conferences.

## **6.4 The Medical Journal of the IAS**

The *Medical Journal of the Islamic World Academy of Sciences*, which first appeared in August 1988, is a quality publication that has established itself as a major scientific publication in the Islamic world and has been granted an ISSN number (ISSN 1016-3360). It is a forum for scientists and technologists in developing countries through which they can get their research work published.

The Journal in the medical field, which is published in Turkey and distributed internationally, was launched with the help of the Kuwait Foundation for the Advancement of Sciences (KFAS).

An electronic version of the Medical Journal was subsequently launched on the Internet where it has the URL address of [www.medicaljournal-ias.org](http://www.medicaljournal-ias.org)

## **6.5 Website (www.iasworld.org)**

In 2023, the IAS secretariat has updated its website with an easy to navigate interface for easy access for everyone to enjoy. The site contains IAS publications (including conference proceedings, books and Newsletter issues) The site also includes information about the Academy and its Fellows and a photo gallery among other imperative information.

## **6.6 Social Media**

The IAS is active on Social media through LinkedIn, Facebook and YouTube Channel. Those platforms are used to promote IAS news and activities and disseminate conference papers and proceedings. The IAS newsletter is also distributed through social media platforms.

## **6.7 Publications**

### **6.7.1 Proceedings**

In its efforts to disseminate scientific information, the IAS publishes the proceedings of the annual conference online and in hardcover. Recently, however, to cut the expenses only digital format will be published online. Such a process ensures that the papers that are presented at the conferences are made available to a wider range of stakeholders including scientists and decision-makers that are concerned with Third World issues.

The proceedings of the conferences of the academy were published in hardcover (from the first conference until the 16<sup>th</sup> conference). Since 2016, the IAS has started publishing the proceedings online via the IAS website.

In 2023, the Proceeding of the 22<sup>nd</sup> IAS Conference on *Landscape of Science, Technology and Innovation in the Islamic Countries*, and the 23<sup>rd</sup> IAS Conference entitled *Science, Technology and Innovation (STI) Under Ever Changing Global Events*, and the 24<sup>th</sup> IAS Conference entitled *Challenges to Promote Science & Technology for Socio-Economic Development in OIC Countries*, were published online on IAS website.

### **6.7.2 Books**

#### *(a) General*

In its efforts to address important topics relevant to scholars and thinkers in OIC countries, the Academy often undertakes the task of publishing books by eminent Muslim scientists and intellectuals.

One such undertaking has been the publication of a book entitled, *Islamic Thought and Muslim Modern Science*, by the late Dr. M A Kazi, IAS Founding President and Fellow. The book represents the author's view of the relationship between Islam and science in today's world. Dr. Kazi authored another book entitled *Qur'anic Concepts and Scientific Theories* which is also published by the Academy.

Back in 1983, the National Science Council of Pakistan and Hamdard Foundation published what was to become a very famous book. The name chosen by the then editor Hakim Said for the book was "Personalities Noble." The book contained brief profiles of 26 towering scholars of the golden age of Islam. Demand on the book was such that within a few years only a few rare copies were still in existence.

Realising the importance of the book, and appreciating its value as a reference, the IAS published a second revised edition of "*Personalities Noble*," in both English and Arabic, during 2000. To disseminate knowledge on the scientific achievements of Islamic countries especially during the Golden Age of Islam, the IAS published in 2013 a book that illustrates the contribution of Islamic civilization in scientific discoveries. The book is written in Arabic language.

The Academy has exhibited its various publications at the various book fairs that were organised in Jordan and in the Middle East, including the Cairo, Abu Dhabi, Sharjah, and the Beirut International Book Fair as well as the book fairs organized alongside the IAS conferences.

*(b) Islamic World Academy of Sciences Declarations Booklet*

The conferences organised by the IAS generally aim to engender acknowledgement by the political leadership of the OIC of the inextricable link between advancement in S&T and socioeconomic development and to provide OIC Heads of State with a scientific roadmap for their national development in the context of the discussed topics.

This publication is a compilation of the various statements (declarations) that were issued by the IAS at the end of each conference starting with the 1987 IAS Conference up to 2005.

*(c) Islamic World Academy of Sciences Outreach Seminar Booklet*

Some academies of sciences, such as the IAS, often organise outreach activities to which politicians, diplomats, academics and civil servants working at scientific institutions are invited. Such activities aim to expose the attendees to the latest scientific and development concepts as well as contemporary ideas on the attainment of socio-economic development. Such S&T fora often reiterate and show the value of science as a means of knowledge generation.

This publication contains the presentations that were made at an outreach seminar organised by the Islamic World Academy of Sciences at the Royal Scientific Society in Amman, Jordan, during December 2004.

*(d) Intellectual Property Rights: An Introduction for Scientists and Technologists*

An eminent Fellow of the Islamic World Academy of Sciences, and immediate past-President of the Egyptian Academy of Sciences the late Prof. M. B. E. Fayez FIAS, volunteered to prepare this specialised yet lucid document on the rather complex and topical issue; namely Intellectual Property Rights.

*(e) Reverse Engineering: The Permissible but not Well-Recognized*

Another booklet has been prepared by Prof. M. B. E. Fayez FIAS, relates to scientific research and to development of the relevant results to the level that enables their useful applications. Reverse engineering is seen as an effort by scientific researchers to learn the facts that lie behind the commercial success of a certain product. The booklet was published in 2010.

*(f) 'The Discoveries in the Islamic Countries' الاكتشافات العلمية في الحضارة الاسلامية*

In 2013, the IAS published the Arabic-language version of the book 'Les decouvertes en pays d'Islam.' The English-language version of the book was earlier published by the International Science, Technology and Innovation Centre for South-South

Cooperation under the Auspices of UNESCO (ISTIC) to disseminate knowledge on some of the scientific achievements in the Islamic civilisation, especially during the Golden Age of Islam.

*(g) The Essentials of Science, Technology and Innovation Policy*

In 2013, the IAS published the third print of a book by Tan Sri Dr. Omar Abdel Rahman FIAS under the title *The Essentials of Science, Technology and Innovation Policy*. The book is a major reference on the topic and a qualitative addition to the available references in the OIC on the subject. The book delineates aspects needed to establish roadmap and agenda for functional STI ecosystem.

### **6.7.3 Newsletter**

The Academy, through its Secretariat, regularly publishes the *Newsletter* of the Islamic World Academy of Sciences.

This widely distributed publication aims to publicize the various activities the Academy undertakes and to put across the Academy's short and long-term programs. It contains scientific articles on various topics contributed by IAS Fellows and many eminent scientists from around the world. It also contains general news about the Academy, its Fellows, and staff.

### **6.7.4 Overview of the Islamic World Academy of Sciences**

The Secretariat of the Academy publishes, every two years, an *Overview* of the Academy summarising the program of the Academy, its activities and detailing the various Academy procedures. This publication also provides information about the background to the founding of the Academy and lists its achievements, particularly in the area of international co-operation.

## **6.8 Capacity Building**

### **6.8.1 General**

In its endeavours to contribute to building the S&T capacity of OIC-member countries, the IAS regularly organises or co-sponsors qualitative training programs in the various countries.

The Academy adopts a dynamic policy to activities of this nature and tries to assist other organisations that undertake such programs through the provision of experts or financial assistance whenever possible.

### **6.8.2 Laser Physics and Applications**

The IAS and COMSTECH, in association with the University of Tunis El Manar, and the African Laser Atomic and Molecular Physics Network (LAM), organized the Sixth International Workshop on Laser Physics and its Applications, in Tunis, Tunisia, during December 2002. The purpose of the activity was to introduce the new

applications of lasers and discuss the progress of laser physics, lasers in medicine, environment and telecommunications. Scientists, physicists, researchers, engineers, and optical industrialists from more than 40 countries participated in this activity. The workshop was co-sponsored by: the Abdus Salam International Centre for Theoretical Physics (ICTP), Italy; the Swedish International Development Cooperation Agency (Sida), Sweden; and the Ministry of High Education of Tunisia.

The IAS, along with COMSTECH, also helped in the convening of the *School of Molecular Physics*, which was held in Tunis (Tunisia) during December 2005, with Prof. Zohra Benlakhdar FIAS, UNESCO L'Oreal Laureate, as chief organiser.

### ***6.8.3 Training program entitled Characterizing and Assessing Research Quality for Scaling the Impact for Innovation and Development***

In 2021 the IAS and AARINENA organized a virtual training program on *Characterizing and Assessing Research Quality for Scaling the Impact for Innovation and Development*. The audience of the training were researchers, professors, graduate students, project and program officers, and policy makers in OIC countries.

## **7 INTERNATIONAL RELATIONS**

### **7.1. General**

A primary function of the Academy is to act as a Pan-Islamic affiliating body to the relevant international organisations. Through this, Muslim scholars can have a channel of communication, through the Academy, with different international academies and organizations.

At the level of the OIC, examples of the co-operation that exists between the Academy and other institutions are outlined below:

### **7.2. Co-operation with the OIC General Secretariat**

Upon a proposal from Jordan and with the support of Prof. Ekmeleddin Ihsanoglu, was then the Secretary General OIC, the Islamic Council of Foreign Ministers (ICFM) approved, at its June 2006 meeting which was held in Baku (Azerbaijan), the affiliation of the IAS to the OIC system. This newly acquired status for the IAS would provide it further direct access to OIC Summit and the Heads of State of the OIC and other OIC-affiliated organizations.

In 2013, Prof. Ekmeleddin Ihsanoglu, Former Secretary General OIC attended the 19<sup>th</sup> IAS conference which was held in Dhaka, May 2013.

The IAS presented reports that summarised its various activities in the domain of science and technology at the level of the OIC, and its vision for the future. The IAS has moreover submitted proposals on a number of science and technology activities.

### **7.3. Co-operation with The Higher Council for Sciences and Technology (HCST), Jordan.**

The Islamic World Academy of Sciences (IAS) and the Higher Council for Science and Technology (HCST) signed a Memorandum of Understanding in which the HCST is committed to co-finance the IAS conferences as a partner.

### **7.4. Co-operation with COMSTECH**

The Islamic World Academy of Sciences and COMSTECH have had solid relations, since COMSTECH helped to create the Academy in 1986, in compliance with the OIC Summit recommendations.

Over the years, COMSTECH has, along with the host country (Jordan), supported the Academy financially, and sponsored a number of S&T capacity building activities that were organised by the IAS. The IAS and COMSTECH regularly exchange information on programs and act, each within its catchment area, to promote S&T activities and encourage OIC countries to increase their S&T expenditure.

COMSTECH also provided a small annual grant to the IAS Medical Journal, for a few years. It also sponsored the publication of several books by the IAS, and had contributed to the budget allocated by the IAS for the Ibrahim Memorial Award, which was awarded biannually to outstanding medical researchers from the Islamic world. COMSTECH also co-sponsored some IAS Conferences.

### **7.5. Co-operation with the UNESCO**

The IAS, during March 2009, participated in the launch of the UNESCO International Science, Technology and Innovation Centre for South-South Cooperation (ISTIC) in Kuala Lumpur and has implemented a number of programs with this newly founded centre since.

Furthermore, the IAS - through Prof. Adnan Badran FIAS and Former DG-IAS - was commissioned to author the 'Arab States Chapter' of the UNESCO Science Report 2010.

The IAS revised the Arabic edition of the UNESCO Science Report: Towards 2030 which was subsequently launched in February 2019.

### **7.6. Co-operation with TWAS**

The Academy signed a co-operation agreement with The World Academy of Sciences (TWAS) some years ago. That was a first step towards enhancing co-operation between these two international academies, which have been in close liaison recently on their scientific activities. The IAS often joins TWAS at its scientific meetings and both academies exchange information, as well as TWNSO meetings, especially as the IAS has been a member of the Third World Network of Scientific Organisation (TWNSO) for a number of years.

### **7.7. Co-operation with the InterAcademy Partnership (IAP)**

In order to interact fully with 100 or so national and international academies of sciences the world over, the IAS joined the Inter-Academy Partnership, which is a global network of science academies. The IAS was elected to join the IAP at latter's General Assembly Meeting which was held in Alexandria, Egypt, during December 2006.

### **7.8. Co-operation with the Inter Academy Medical Panel (IAMP)**

The Inter Academy Medical Panel on Global Health Issues (IAMP) is an association created by the world's academies of medicine and academies of sciences or engineering having members from the health sciences for the purpose of working together through bilateral, regional and worldwide. The IAS was elected to join the IAMP at latter's General Assembly Meeting which was held in Kuala Lumpur, Malaysia, during March 2010.

### **7.9. Co-operation with the International Union of Academies (IUA)**

During November 2007, the IAS was elected to the membership of the International Union of Academies (IUA) (Union Académique Internationale). This is the oldest and largest federation of academies and learned societies in the world. Based in Brussels, it was established in 1919.

During January 2014, the IAS co-organised an international conference in Erlangen (Germany) under the title *The Impact of Arabic Sources on Divination and the Practical Sciences in Europe and Asia* in association with the International Union of Academies (IUA).

The IAS, together with the IUA, and the Royal Institute for Interfaith Studies (RIIFS), organized an international conference on 'Islamic Sciences in the Western World (Middle Ages-Renaissance) Exchanges, Transmission, Influence,' April 2017, at the University of Petra in Amman.

### **7.10. Co-operation with Academies of Sciences**

The IAS has signed Memorandum of Understanding with each of the World Academy of Sciences (TWAS), Pakistan Academy of Sciences (PAS), The National Academy of Sciences of the Republic of Kazakhstan, the Korean Academy of Science and Technology (KAST), and the Turkish Academy of Sciences (TÜBA). These agreements lay the foundation for long-term co-operative relationships between IAS and these academies.

Contacts with the US National Academy of Sciences have been ongoing for over fifteen years, resulting in the participation of top US NAS representatives in some IAS



activities. Moreover, the US NAS has regularly nominated its Foreign Secretary to participate in IAS conferences.

The IAS has been actively supporting the Palestine Academy of Science and Technology (PALAST) through facilitating the participation of PALAST officials in the various scientific activities in the Middle East, as well as providing help and advice to this sister academy regularly.

The Bangladesh Academy of Sciences played an important part in organising the 19<sup>th</sup> IAS conference which was held in Dhaka, Bangladesh, and a number of the BAS Fellows took part in the conference.

The Turkish Academy of Sciences (TÜBA) helped in organizing the 21<sup>st</sup> IAS conference which was held in Konya, in 2017, and the IAS signed a Memoranda of Understanding with TÜBA during the conference.

In 2022, the IAS convened its 23<sup>rd</sup> Conference in cooperation with the Hassan II Academy for Science and Technology (Morocco) in Rabat, Morocco.

In July 2024, the IAS will convene its 25<sup>th</sup> Conference jointly with the Pakistan Academy of Sciences (PAS).

#### **7.11. Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA)**

In order to achieve fruitful and constructive cooperation between the (AARINENA) and the (IAS) in the common areas (research, training and any agreed topics) a cooperation agreement has been signed by DG-IAS and the Secretary General-AARINENA.

The two parties agreed to exchange experiences and provide technical and economic consultancy services and technical support in matters of mutual concern and encourage joint cooperative activities. As a result of this agreement IAS conducted a series of webinars in conjunction with AARINENA to discuss issues related to Agricultural production and food Security and safety under the COVID-19 pandemic.

#### **7.12 The International Science Council (ISC)**

In May 2021 the IAS became “Affiliated Member” in the International Science Council; being a member in the ISC will help the IAS to create and maintain partnership or membership with other academies, institutions/organizations at ISC. This partnership allows the IAS to exchange publications and information and run joint activities or programs.

## **8 ACADEMY FELLOWSHIP**

### **8.1 General**

IAS Fellows come from 30 nationalities, and represent numerous educational, scientific as well as research and development institutions. The number of Fellows as of July, 2024 is 96.

Membership of the IAS is made up of Founding and elected Fellows. They are eminent scientists with sizeable contributions to the development of science and technology and related topics, in their countries and internationally. The Secretariat of the Academy organises an election every year through which existing Fellows nominate and then elect new members to the Academy Fellowship.

### **8.2 Honorary Fellowship**

The Honorary Fellowship is awarded by the Academy to eminent personalities outstanding in their fields, who have promoted science and technology in the Islamic world, and internationally. As of July 2024, the IAS has 24 Honorary Fellows, the honorary fellowship is also awarded to the laureates of the Mustafa Prize.

### **8.3 Corporate Members**

In 2013, the IAS General Assembly adopted the IAS Council's proposal to incorporate the 'Corporate Membership' category of Fellowship into the relevant IAS By-Laws. In 2014, the IAS invited a number of companies to become corporate members; the Jordan Islamic Bank and the Jordan Phosphate Mines Company were the first to join the IAS as Golden Corporate Members. University of Petra (Jordan) joined in 2016.

## **Appendix A**

### **PATRONS OF THE ISLAMIC WORLD ACADEMY OF SCIENCES**

**His Excellency the President of the Islamic Republic of Pakistan.  
His Royal Highness Prince El-Hassan bin Talal of the Hashemite Kingdom of  
Jordan, Founding Patron.**

## **Appendix B**

### **HONORARY FELLOWS OF THE ISLAMIC WORLD ACADEMY OF SCIENCES (in alphabetical order)**

1. Dr. Mohammad Abdolahad (Iran), The 2019 Mustafa Prize Laureate, Field of the Prize: Nano Electronic Science and Technology.
2. Mr. Fouad Alghanim, President, Alghanim Group, Kuwait.
3. Prof. Hossein Baharvand (Iran), The 2019 Mustafa Prize Laureate, Field of the Prize: Stem Cell Biology.
4. Prof. Omid C. Farokhzad (Iran), the 2023 Mustafa Prize Laureate, Field of the Prize: Life and Medical Science and Technology.
5. Prof. Sami Erol Gelenbe (Turkey), The 2017 Mustafa Prize Laureate, Field of the Prize: Information and Communication Science and Technology.
6. Prof. M. Zahid Hasan (Bangladesh), The 2021 Mustafa Prize Laureate, Field of the Prize: Quantum Physics.
7. Prof. Ahmed E. Hassan (Egypt), The 2023 Mustafa Prize Laureate, Field of the Prize: Information and Communication Science and Technology.
8. Prof. Ekmeleddin Ihsanoglu, Former OIC Secretary General, Turkey.
9. Prof. Umran S. Inan (Turkey), The 2019 Mustafa Prize Laureate, Field of the Prize: Ionospheric and Atmospheric Physics.
10. Prof. Ahmad Fauzi Ismail (Cambodia), The 2023 Mustafa Prize Laureate, Field of the Prize: Basic and Engineering Sciences.
11. Prof. Ali Khademhosseini (Iran), The 2019 Mustafa Prize Laureate, Field of the Prize: Life & Medical Science and Technology.
12. Prof. Samia J. Khoury (Lebanon), The 2023 Mustafa Prize Laureate, Field of the Prize: Life and Medical Science and Technology.
13. Tun Pehin Sri Haji Dr. Abdul Taib Mahmud, the Governor of Sarawak (Yang di-Pertua Negeri), Malaysia.
14. Dr. Adnan M. Mjalli, Chairman, MIG, USA.

15. His Excellency Dato' Seri Dr. Mahathir Mohamad, Former Prime Minister of Malaysia.
16. His Excellency Nursultan Nazarbayev, Former President of the Republic of Kazakhstan.
17. Prof. Ugur Sahin (Turkey), The 2019 Mustafa Prize Laureate, Field of the Prize: Life & Medical Science and Technology.
18. Prof. Mohamed El-Sayegh (Lebanon), The 2021 Mustafa Prize Laureate, Field of the Prize: Medicine.
19. His Excellency Mr. Mintimer Shaimiev, Former President of the Republic of Tatarstan/ Russian Federation.
20. Prof. M. Amin Shokrollahi (Iran), The 2017 Mustafa Prize Laureate, field of the Prize: Information Theory.
21. Prof. Yahya Tayalati (Morocco), The 2021 Mustafa Prize Laureate, Field of the Prize: Theoretical and Particle Physics.
22. His Excellency Sheikh Hamad Bin Jassim Bin Jabr Al Thani, Former Prime Minister of Qatar, Qatar.
23. Prof. Murat Uysal (Turkey), The 2023 Mustafa Prize Laureate, Field of the Prize: Information and Communication Science and Technology.
24. Prof. Cumrun Vafa (Iran), The 2021 Mustafa Prize Laureate, Field of the Prize: Theoretical Physics.

## Appendix C

### List of Fellows of the Islamic World Academy of Sciences (July 2024)

1. Prof. Mohammad <b>Abdollahi</b>	Iran	Toxicology/Pharmacology
2. Prof. Zakri <b>Abdul Hamid</b>	Malaysia	Genetics
3. Prof. Omar <b>Abdul Rahman</b>	Malaysia	Veterinary Medicine
4. Prof. Farhan Jalees <b>Ahmad</b>	India	Pharmaceutics
5. Prof. Bobomurat <b>Ahmedov</b>	Uzbekistan	Physics
6. Prof. Askar <b>Akayev</b>	Kyrgyzstan	Computer Engineering
7. Prof. Liaquat <b>Ali</b>	Bangladesh	Medicine
8. Prof. M. Shamsher <b>Ali</b>	Bangladesh	Physics
9. Prof. Qurashi Mohammed <b>Ali</b>	Sudan	Medicine/Anatomy
10. Prof. Huda Saleh Mehdi <b>Ammash</b>	Iraq	Biology
11. Prof. Shazia <b>Anjum</b>	Pakistan	Chemistry
12. Prof. Muhammad <b>Asghar</b>	France	Physics
13. Prof. Muhammad <b>Ashraf</b>	Pakistan	Botany-Salt Tolerance
14. Prof. Allaberen <b>Ashyralyev</b>	Turkmenistan	Mathematics

15.Prof. Saleh A <b>Al-Athel</b>	Saudi Arabia	Mechanical Engineering
16.Prof. Ahmad Abdullah <b>Azad</b>	Bangladesh/ Australia	Biochemistry
17.Prof. Agadjan <b>Babaev</b>	Turkmenistan	Geography
18.Prof. Adnan <b>Badran</b>	Jordan	Biology
19.Prof. Shah Nor Bin <b>Basri</b>	Malaysia	Mechanical Engineering
20.Prof. Elias <b>Baydoun</b>	Jordan	Biochemistry
21.Prof. Farouk <b>El-Baz</b>	USA	Geology
22.Prof. Kazem <b>Behbehani</b>	Kuwait	Immunology
23.Prof. Azret Yusupovich <b>Bekkiev</b>	Balkar/Russia	Physics
24.Prof. Rafik <b>Boukhris</b>	Tunisia	Medicine
25.Prof. David (M. Daud) <b>Bradley</b>	UK	Physics
26.Prof. Noor Mohammad <b>Butt</b>	Pakistan	Physics
27.Prof. Mohamed Thameur <b>Chaibi</b>	Tunisia	Agriculture/ Climate Technologies
28.Prof. Muhammad Iqbal <b>Choudhary</b>	Pakistan	Organic Chemistry
29.Prof. Abdallah <b>Daar</b>	Oman/ Canada	Medicine
30.Prof. Ali Al- <b>Daffa'</b>	Saudi Arabia	Mathematics
31.Prof. Mamadou <b>Daffe</b>	Mali/France	Biochemistry
32.Prof. Ramazan <b>Demir</b>	Turkey	Biology
33.Prof. Dilfuza <b>Egamberdieva</b>	Uzbekistan	Biology
34.Prof. Mehmet <b>Ergin</b>	Turkey	Chemical Engineering
35.Prof. Sehamuddin <b>Galadari</b>	UAE	Biochemistry
36.Prof. Nesreen <b>Ghaddar</b>	Lebanon	Metallurgical Engineering
37.Prof. Mehdi <b>Golshani</b>	Iran	Physics
38.Prof. Kadyr G <b>Gulamov</b>	Uzbekistan	Physics
39.Prof. Ameenah <b>Gurib-Fakim</b>	Mauritius	Chemistry
40.Prof. Hashim M <b>El-Hadi</b>	Sudan	Veterinary Medicine
41.Prof. Kemal <b>Hanjalic</b>	Bosnia- Herzegovina	Mechanical Engineering
42.Prof. Mohamed H A <b>Hassan</b>	Sudan	Mathematics
43.Prof. Tasawar <b>Hayat</b>	Pakistan	Mathematics
44.Prof. Bambang <b>Hidayat</b>	Indonesia	Astronomy
45.Prof. Rabia <b>Hussain</b>	Pakistan	Microbiology
46.Prof. Aini <b>Ideris</b>	Malaysia	Veterinary Medicine
47.Prof. Asma <b>Ismail</b>	Malaysia	Biotechnology
48.Prof. Mohammad Qasim <b>Jan</b>	Pakistan	Geology
49.Prof. Afaf <b>Kamal-Edin</b>	Sudan	Chemistry
50.Prof. Hamza <b>El-Kettani</b>	Morocco	Physics and Chemistry
51.Prof. Idriss <b>Khalil</b>	Morocco	Mathematics
52.Prof. Hameed Ahmed <b>Khan</b>	Pakistan	Physics
53.Prof. Mostefa <b>Khiati</b>	Algeria	Medicine
54.Prof. Hala Jarallah <b>El Khozondar</b>	Gaza/ Palestine	Physics
55.Prof. Abdelhafid <b>Lahlaidi</b>	Morocco	Medicine
56.Prof. Zohra Ben <b>Lakhdar</b>	Tunisia	Physics
57.Prof. Malek <b>Maaza</b>	Algeria	Neutronics

58.Prof. Ahmed <b>Marrakchi</b>	Tunisia	Electronic Engineering
59.Prof. Akhmet <b>Mazgarov</b>	Tatarstan/ Russia	Petrochemistry
60.Prof. Amdoulla <b>Mehrabov</b>	Azerbaijan	Materials Science
61.Prof. Shaheer <b>Al-Momani</b>	Jordan	Mathematics
62.Prof. Ali A. Moosavi- <b>Movahedi</b>	Iran	Chemistry
63.Prof. Sami <b>Al- Mudhaffar</b>	Iraq	Biochemistry
64.Prof. Zaghoul <b>El-Naggar</b>	Egypt	Geology
65.Prof. Ibrahim Saleh <b>Al- Naimi</b>	Qatar	Chemistry
66.Prof. Anwar <b>Nasim</b>	Pakistan /Canada	Genetics
67.Prof. Munir <b>Nayfeh</b>	Jordan/ USA	Physics
68.Prof. Robert <b>Nigmatulin</b>	Tatarstan/ Russia	Physics/ Mathematics
69.Prof. Shekoufeh <b>Nikfar</b>	Iran	Pharmacoeconomics & Pharmaceutical
70.Prof. Gulsen <b>Oner</b>	Turkey	Medicine
71.Prof. Ilkay Erdogan <b>Orhan</b>	Turkey	Pharmacognosy
72.Prof. Ramdane <b>Ouahes</b>	Algeria	Chemistry
73.Prof. Munir <b>Ozturk</b>	Turkey	Biology
74.Prof. Iqbal <b>Parker</b>	South Africa	Biochemistry
75.Prof. Syed Muhammad <b>Qaim</b>	Germany	Nuclear Chemistry
76.Prof. Atta-ur- <b>Rahman</b>	Pakistan	Chemistry
77.Prof. Hussein Samir <b>Salama</b>	Egypt	Entomology
78.Prof. Jawad A. <b>Salehi</b>	Iran	Electronic Engineering
79.Prof. Boudjema <b>Samraoui</b>	Algeria	Biology
80.Prof. Lorenzo <b>Savioli</b>	Italy	Medicine
81.Prof. Mohammed Musa <b>Shabat</b>	Gaza/ Palestine	Biology
82.Prof. Muhammad Raza <b>Shah</b>	Pakistan	Nanotechnology
83.Prof. Ali <b>Al-Shamlan</b>	Kuwait	Geology
84.Prof. Ahmad <b>Shamsul-Islam</b>	Bangladesh	Botany
85.Prof. Muthana <b>Shanshal</b>	Iraq	Chemistry
86.Prof. Zabta Khan <b>Shinwari</b>	Pakistan	Biology
87.Prof. Ahmedou M <b>Sow</b>	Senegal	Medicine
88.Prof. Mahmoud <b>Tebyani</b>	Iran	Electronic Engineering
89.Prof. Ahmet Hikmet <b>Ucisik</b>	Turkey	Materials Science
90.Prof. Gulnar <b>Vagapova</b>	Tatarstan/ Russia	Medicine
91.Prof. Omar M. <b>Yaghi</b>	Jordan/USA	Chemistry
92.Prof. Jackie <b>Ying</b>	Singapore/ USA	Chemical Engineering
93. Prof. Bekhzad <b>Yuldashev</b>	Uzbekistan	Physics/ Mathematics
94. Prof. Khatijah Mohd <b>Yusoff</b>	Malaysia	Microbiology
95. Prof. Salim <b>Yusuf</b>	Canada	Medicine
96. Prof. Mikhael <b>Zalikhonov</b>	Balkar/Russia	Glaciology/Biology

**Deceased Fellows of the  
Islamic World Academy of Sciences**

1. Prof. Mohammad Ibrahim	Bangladesh	(1911-1988).
2. Prof. Djibril Fall	Senegal	(1930-1992).
3. Prof. Salimuzzaman Siddiqui	Pakistan	(1897-1994).
4. Prof. Abdus Salam Mia	Bangladesh/USA	(1925-1995).
5. Prof. Suleiman Gabir Hamad	Sudan	(1937-1996).
6. Prof. Mohammad R Siddiqi	Pakistan	(1908-1998).
7. Prof. Abdullah M Sharafuddin	Bangladesh	(1930-1998).
8. Prof. Achmad Baiquni	Indonesia	(1923-1998).
9. Prof. Mumtaz Ali Kazi	Pakistan	(1928-1999).
10. Prof. Faramaz Maksudov	Azerbaijan	(1930-2000).
11. Prof. Mahjoub Obeid Taha	Sudan	(1937-2000).
12. Prof. Ali Kettani	Morocco	(1941-2001).
13. Prof. Mohamed Kamel Mahmoud	Egypt	(1926-2003).
14. Prof. Samaun Samadikun	Indonesia	(1931-2006).
15. Prof. Iftikhar Ahmad Malik	Pakistan	(1936-2008).
16. Prof. J (Younis) Ario Katili	Indonesia	(1929-2008).
17. Prof. Ibrahima Mar Diop	Senegal	(1921-2008).
18. Prof. Syed Zahir Haider	Bangladesh	(1927-2008).
19. Prof. Muhammad Ilyas Burney	Pakistan	(1922-2008).
20. Prof. Badri Muhammad	Malaysia	(1943-2009).
21. Prof. Pulat Khabibullaev	Uzbekistan	(1936-2010).
22. Prof. Mohammed A Waqar	Pakistan	(1941-2010).
23. Prof. Souleymane Niang	Senegal	(1929-2010).
24. Prof. Ahmad Nawawi Ayoub	Malaysia	(1937-2010).
25. Prof. Kamal H. Batanouny	Egypt	(1936-2011).
26. Prof. Mohamed B E Fayez	Egypt	(1927-2011).
27. Prof. Mazhar M Qurashi	Pakistan	(1925-2011).
28. Prof. Mahmoud Hafez	Egypt	(1912-2011).
29. Prof. Jamal Nazrul-Islam	Bangladesh	(1939-2013).
30. Prof. Riazuddin	Pakistan	(1930-2013).
31. Prof. Naeem Ahmad Khan	Pakistan	(1928-2013).
32. Prof. Mehmet Nimet Ozdas	Turkey	(1921-2014).
33. Prof. Ugur Dilmen	Turkey	(1955-2015).
34. Prof. Ibrahim Gamil Badran	Egypt	(1924-2015).
35. Prof. Fakhruddin Daghestani	Jordan	(1936-2016).
36. Prof. Ibrahima Wone	Senegal	(1926-2016).
37. Prof. Syed Qasim Mehdi	Pakistan	(1941-2016).
38. Prof. Korkut Ozal	Turkey	(1929-2016).
39. Prof. Mohammad Salimullah	Bangladesh	(1949-2016).
40. Prof. Attia A Ashour	Egypt	(1924-2017).

41. Prof. Mustafa Doruk	Turkey	(1932-2017).
42. Prof. Ishfaq Ahmad	Pakistan	(1930-2018).
43. Prof. Naci Bor	Turkey	(1928-2018).
44. Prof. Salambek Khadjiev	Chechnya	(1941-2018).
45. Prof. Makhmud Salakhitdinov	Uzbekistan	(1933-2018).
46. Prof. Adnan Hamoui	Syria	(1932-2018).
47. Prof. M. Ajmal Khan	Pakistan	(1953-2019).
48. Prof. Naim Afgan	Bosnia-Herzegovina	(1929-2019).
49. Prof. Mohammad Hamdan	Jordan	(1934-2020).
50. Prof. Subhi Qasem	Jordan	(1934-2020).
51. Prof. Ali Ali Hebeish	Egypt	(1936-2020).
52. Prof. Oussaynou Fall Dia	Senegal	(1935-2020).
53. Prof. Khalid Yusoff	Malaysia	(1955-2021).
54. Prof. Najih Khalil El-Rawi	Iraq	(1935-2021).
55. Prof. Wiranto Arismunandar	Indonesia	(1933-2021).
56. Prof. Abdul Qadeer Khan	Pakistan	(1936-2021).
57. Prof. Şinasi Özsoylu	Turkey	(1927-2022).
58. Prof. M. Sajjad Alam	USA	(1947-2022).
59. Prof. Abdul Latif Ibrahim	Malaysia	(1938-2022).
60. Prof. Eldar Yunisoglu Salayev	Azerbaijan	(1933-2022).
61. Prof. Abdel Salam Majali	Jordan	(1925-2023).
62. Prof. Misbah-Ud-Din Shami	Pakistan	(1930-2023).
63. Prof. Mohammad Shamim Jairajpuri	India	(1942-2024).

## Appendix D

### CORPORATE MEMBERS OF THE ISLAMIC WORLD ACADEMY OF SCIENCES

The Jordan Islamic Bank, Jordan.

Jordan Phosphate Mines Company, Jordan.

University of Petra, Jordan.

## APPENDIX E

### LAUREATE(S) OF THE IAS IBRAHIM MEMORIAL AWARD

Prof. Ugur <b>Dilmen</b>	Turkey	1996.
Prof. Mohammad <b>Abdollahi</b>	Iran	2005.
Prof. Mohammed Manna <b>Al-Qattan</b>	Saudi Arabia	2007.
Dr. Faris <b>Gavrankapetanovic</b>	Bosnia	2009.
Dr. Saima <b>Riazuddin</b>	Pakistan	2011.
Prof. Liaquat <b>Ali</b>	Bangladesh	2013.
Prof. Jackie <b>Ying</b>	Singapore	2015.
Prof. Ameenah <b>Gurib-Fakim</b>	Mauritius	2019.



## **Appendix F**

### **COUNCIL OF THE ISLAMIC WORLD ACADEMY OF SCIENCES (2023-2027)**

President:	Prof. Adnan Badran	Jordan
Vice-President:	Prof. Khatijah Yusoff	Malaysia
Vice-President:	Prof. Abdelhafid Lahlaoui	Morocco
Vice-President:	Prof. Zabta Shinwari	Pakistan
Treasurer:	Prof. Elias Baydoun	Jordan
Secretary General:	Prof. Tasawar Hayat	Pakistan
Member:	Prof. Malek Maaza	Algeria
Member:	Prof. Farhan Jalees Ahmad	India
Member:	Prof. Mohammad Abdollahi	Iran
Member:	Prof. Aini Ideris	Malaysia
Member:	Prof. Dilfuza Egamberdieva	Uzbekistan

### **IAS EXECUTIVE STAFF**

Prof. Adnan Badran	Director General.
Mrs. Taghreed Saqer	Executive Secretary.
Mrs. Najwa F. Daghestani	Programs Manager.
Mr. Ahmad Nassar	Finance Officer.
Mr. Hamdi Bader Ahmad	Public Relations.

## APPENDIX G

### PUBLICATIONS OF THE ISLAMIC WORLD ACADEMY OF SCIENCES CONFERENCE PROCEEDINGS

1. *The Islamic Academy of Sciences*. Proceedings of the Founding Conference (1986). Published by the Islamic Academy of Sciences, **Editor: A. Kettani (Morocco)**.
2. *Food Security in the Muslim World*. Proceedings of the first international conference, Amman (Jordan) (1987). Published by the Islamic World Academy of Sciences, **Editor: S. Qasem (Jordan)**.
3. *Science and Technology Policy for Self-Reliance in the Muslim World*. Proceedings of the second international conference, Islamabad (Pakistan) (1988). Published by the Islamic World Academy of Sciences, **Editors: F. Daghestani (Jordan), H. El-Mulki (Jordan), and M. Al-Halaiqa (Jordan)**.
4. *New Technologies and Development of the Muslim World*. Proceedings of the third international conference, (Kuwait) (1989). Published by the Islamic World Academy of Sciences, **Editors: F. Daghestani (Jordan), and S. Qasem (Jordan)**.
5. *Technology Transfer for Development in the Muslim World*. Proceedings of the fourth international conference, Antalya (Turkey) (1990). Published by the Islamic World Academy of Sciences, **Editors: F. Daghestani (Jordan), A. Altamemi (Jordan), and M. Ergin (Turkey)**.
6. *Science and Technology Manpower Development in the Islamic World*. Proceedings of the fifth international conference, Amman (Jordan) (1991). Published by the Islamic World Academy of Sciences, **Editors: F. Daghestani (Jordan), A. Altamemi (Jordan), and H. El-Mulki (Jordan)**.
7. *Environment and Development in the Islamic World*. Proceedings of the sixth international conference, Kuala Lumpur (Malaysia) (1992). Published by the Islamic World Academy of Sciences, **Editors: S. Al-Athel (Saudi Arabia), and F. Daghestani (Jordan)**.
8. *Health, Nutrition and Development in the Islamic World*. Proceedings of the seventh international conference, Dakar (Senegal) (1993). Published by the Islamic World Academy of Sciences, **Editors: N. Bor (Turkey), A. Kettani (Morocco), and M. Zou'bi (Jordan)**.
9. *Water in the Islamic World: An Imminent Crisis*. Proceedings of the eighth international conference, Khartoum (Sudan) (1994). Published by the Islamic World Academy of Sciences, **Editors: M. Ergin (Turkey), H. Dogan Altinbilek (Turkey), and M. Zou'bi (Jordan)**.
10. *Science and Technology Education for Development in the Islamic World*. Proceedings of the ninth international conference, Tehran (Iran) (1999). Published by the Islamic World Academy of Sciences, **Editors: M. Ergin (Turkey), M. Doruk (Turkey), and M. Zou'bi (Jordan) (ISBN 9957-412-7)**.
11. *Information Technology for Development in the Islamic World*. Proceedings of the tenth international conference, Tunis (Tunisia) (2000). Published by the Islamic

- World Academy of Sciences, **Editors: M. Ergin (Turkey), M. Doruk (Turkey), and M. Zou'bi (Jordan) (ISBN 9957-412-03-5). Online.**
12. *Biotechnology and Genetic Engineering for Development in the Islamic World*. Proceedings of the eleventh international conference, Rabat (Morocco) (2001). Published by the Islamic World Academy of Sciences, **Editors: A. S. Majali (Jordan), M. Ergin (Turkey), and M. Zou'bi (Jordan) (ISBN 9957-412-07-8). Online.**
  13. *Materials Science and Technology and Culture of Science*. Proceedings of the twelfth international conference, Islamabad (Pakistan), (2002). Published by the Islamic World Academy of Sciences, **Editors: M. Ergin (Turkey), and M. Zou'bi (Jordan) (ISBN 9957-412-06-x). Online.**
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## APPENDIX H

### IAS SUPPORTERS

**The Hashemite Kingdom of Jordan**  
**The Islamic Republic of Pakistan**  
**The State of Kuwait**  
**The Republic of Turkey**  
**Malaysia**  
**The Republic of Senegal**  
**The Republic of Sudan**  
**The Islamic Republic of Iran**  
**The State of Qatar**  
**The Republic of Tunisia**  
**The Kingdom of Morocco**  
**The State of Sarawak/Malaysia**  
**The Republic of Indonesia**  
**The Republic of Tatarstan/ Russian Federation**  
**The State of Selangor/Malaysia**  
**The Sultanate of Oman**  
**The Republic of Kazakhstan**  
**The People's Republic of Bangladesh**

Higher Council of Science and Technology (HCST), Jordan.

The OIC Standing Committee on Scientific and Technological Co-operation (COMSTECH), Pakistan.

The Islamic Development Bank (IDB), Saudi Arabia.

The OPEC Fund for International Development, Vienna, Austria.

Arab Fund for Economic and Social Development (AFESD), Kuwait.

Arab Potash Company, Jordan.

United Nations Educational Scientific and Cultural Organisation (UNESCO), France.

The Islamic World Educational, Scientific and Cultural Organization (ICESCO), Morocco.

The World Bank, USA.

The United Nations Environment Program (UNEP), Kenya.

Kuwait Foundation for the Advancement of Sciences (KFAS).

Turkish Scientific and Technical Research Council (TUBITAK).

The Royal Scientific Society (RSS), Jordan.

Pakistan Ministry of Science and Technology.

Ministry of Science, Technology and the Environment, Malaysia.

University Cheikh Anta Diop, Dakar, Senegal.

Ministry of Higher Education and Scientific Research, Sudan.

National Centre for Research, Sudan.

Ministry of Culture and Higher Education, Iran.  
 Iranian Research Organisation for Science and Technology (IROST).  
 The Academy of Sciences, Tehran, Iran.  
 The Academy of Medical Sciences, Tehran, Iran.  
 Saudi Arabian Oil Company, Saudi Arabia (ARAMCO).  
 Ihlas Holding, Turkey.  
 Arab Bank, Jordan.  
 Jordan Kuwait Bank, Jordan.  
 Rafia Industrial Company, Jordan.  
 Secretariat of State for Scientific Research and Technology, Tunisia.  
 Academy of the Kingdom of Morocco.  
 University of Petra, Jordan.  
 Pakistan Academy of Sciences.  
 Majlis Islam Sarawak, Malaysia.  
 Tabung Baitulmal Sarawak, Malaysia.  
 Sasakawa Peace Foundation, Japan.  
 Perdana Leadership Foundation, Putrajaya, Malaysia.  
 Royal Jordanian Airlines, Jordan.  
 Arab Jordan Investment Bank, Jordan.  
 National Centre for Human Resources Development, Jordan.  
 Al Bukhary Foundation, Malaysia.  
 Bilkent University, Turkey.  
 US National Academy of Sciences, USA.  
 International Islamic Charity Organisation, Kuwait.  
 Islamic Organisation of Medical Sciences, Kuwait.  
 Arab Gulf Program for Development (AGFUND), Saudi Arabia.  
 Fouad Alghanim & Sons Group of Companies, Kuwait.  
 Saudi Basic Industries Corporation (SABIC), Riyadh, Saudi Arabia.  
 Tatarstan Academy of Sciences, Tatarstan, Russian Federation.  
 World Islamic Call Society, Tripoli, Libya.  
 Jordan Phosphate Mines Company, Amman, Jordan.  
 International Islamic Academy of Science and Biotechnology (IAB), Malaysia.  
 University of Industry of Selangor (UNISEL), Malaysia.  
 Ministry of Foreign Affairs of Qatar: The Permanent Committee for Organizing Conference, Qatar.  
 Doha International Centre for Interfaith Dialogue (DICID), Qatar.  
 R.B. Suleimenov Institute of Oriental Studies, Kazakhstan.  
 Prime Ministry of Bangladesh, Bangladesh.  
 Foreign Ministry of Bangladesh; Bangladesh.  
 University Grants Commission of Bangladesh, Bangladesh.  
 Bangladesh Academy of Sciences, Bangladesh.  
 Sheikh Mohammed bin Hamad Al Thani, Qatar.  
 Eng. Awni Shaker Al Aseer, Saudi Arabia.

Eng. Amjad Abu Aisheh, Jordan.

Jordan Islamic Bank, Jordan.

Dr. Mahmood Abu Shairah, Jordan.

Necmettin Erbakan Üniversitesi, Turkey.

Turkish Academy of Sciences (TÜBA), Turkey.

Hikma Pharmaceuticals, Jordan.

Dr. Ahmed Saif Balhasa, UAE.

Dr. Adnan Mjalli, USA.

Mr Ahmed Abu Ghazaleh (Arab Wings), Jordan.

Cairo Amman Bank, Jordan.

The Inter-Islamic Network on Water Resources Development and Management (INWRDAM), Jordan.

The Hassan II Academy of Science and Technology, (Morocco).

International Center for Chemical and Biological Sciences (ICCBS), Karachi, Pakistan

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