

21ST ISLAMIC WORLD ACADEMY OF SCIENCES CONFERENCE
on
Science, Technology and Innovation for Global Peace and Prosperity

CONFERENCE REPORT

Konya, Turkey
8-11 October 2017

The Islamic World Academy of Sciences (IAS) convened its 21st 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.’

Held at the Dedeman Hotel in Konya, the IAS Conference was an open activity in which over 120 local and international participants representing over 30 countries participated. Among the participants were Fellows of the IAS, local scientists from the various universities, young university students, expatriate Turkish scientists as well as representatives of Asian, African and Western academies of sciences. Prior to the conference, the 21st meeting of the General Assembly of the IAS as well as the 40th meeting of the IAS Council were convened.

The 21st IAS Conference was organised and sponsored by:

- Islamic World Academy of Sciences (IAS), Amman, Jordan;
- Turkish Academy of Sciences (TÜBA), Ankara, Turkey; and
- Necmettin Erbakan University, Konya, Turkey.

It was co-sponsored by:

- Arab Fund for Social and Economic Development (AFSED), Kuwait, Kuwait;
- Economic Cooperation Organization Science Foundation (ECOSF), Islamabad, Pakistan;
- Islamic Development Bank (IDB), Jeddah, Saudi Arabia;
- OIC Standing Ministerial Committee on Scientific and Technological Co-operation (COMSTECH), Islamabad, Pakistan; and
- Arab Potash Company, Amman, Jordan.

The conference addressed a number of key issues in the domain of science, technology and innovation (STI) for peace and prosperity.

The objectives of the 21st IAS Conference thus were:

- (a) As the conference was organised in Konya (Turkey), an objective thereof was to revisit the life and times of the world-famous scholar Jalāl ad-Dīn Rūmī and attempt to unravel his spiritual legacy that had lasted for the past seven centuries;
- (b) To discuss the evolving role of universities, in research and development in particular;

- (c) To further understand how the OIC STI community views sustainable development, as expressed by the SDGs, and to identify sectoral teething problems that can generally impede sustainable development;
- (d) A crosscutting objective of the 21st IAS Conference was to explore the role that could be/is played by science, technology and innovation (STI) community in achieving the SDGs. This, to envision how sustainable development agendas can be assimilated into national political agendas and national policies;
- (e) To discuss the key areas of public health and higher education in some selected OIC countries to draw possible lessons relevant to other developing countries, while showcasing some of the international successes in such domains; and
- (f) To discuss the prospect of adopting and disseminating an innovation dashboard template as well as a biomonitoring template for OIC countries.

The conference commenced on Sunday 8 October 2017 at 16:00.





The inaugural session of the conference included an address by Prof. Muzaffer Şeker, Rector, Necmettin Erbakan University, Turkey; an address by Prof. Ahmet Cevat Acar, President of the Turkish Academy of Sciences (TÜBA), Turkey; an address of H E Prof. Abdel Salam Majali FIAS, President of the IAS, Jordan; a keynote message of H R H Prince El-Hassan bin Talal, Founding Patron of the IAS, Jordan, which was read by Prof. Adnan Badran FIAS; the message of H E the President of the Islamic Republic of Pakistan and Patron of the Islamic World Academy of Sciences (IAS), Pakistan, which was read by Dr Syed Khurshid Hasanain, Senior Expert, COMSTECH, and the message of H E Recep Tayyip Erdoğan, President of the Republic of Turkey, which was read by Prof. Bilal Kuşpınar, Director, International Rumi Centre for the Study of Civilisations, Konya, Turkey.

During the inaugural session, newly elected IAS Fellows were inducted. Also, Prof. Jackie Ying from Singapore was honoured as the recipient of the 2015 IAS Ibrahim Memorial Award.

The inaugural session concluded with the TÜBİTAK presentation, which was delivered by Prof. Ahmet Arif Ergin, President of the Scientific and Technological Research Council of Turkey (TÜBİTAK).

The first session of the conference included a number of presentations including one by Prof. Bilal Kuşpınar, Director, International Rumi Centre for the Study of Civilisations, Konya, Turkey, entitled *The Lasting Influence of Mawlana Jalal ad-Din Rumi on Islamic Thought and Culture*.

The second session of the conference included keynote presentations by Prof. Jackie Ying, Founding Executive Director of the Institute of Bioengineering and Nanotechnology, Singapore, on *Nanostructured Materials for Energy and Biomedical Applications* and by Prof. Adnan Badran FIAS, Chancellor, University of Petra, Amman, Jordan, entitled *Ups and Downs in R&D, Technology and Innovation in the Middle East as Compared to the World*.

That was followed by a presentation by Prof. Salim Al-Hassani, University of Manchester and President of the Foundation for Science Technology and Civilization, UK, which was entitled *1001 Inventions Touring Exhibition: Inspirational Lessons from Muslim Civilization*.

During the same session, a paper entitled *The Future of Medical Education* was presented by Prof. Khalid Yusoff FIAS, Vice Chancellor and President, UCSI University, Kuala Lumpur, Malaysia.

The Workshop on 'Innovation: The Quantitative and Qualitative Elements' comprised a number of presentations including one by Ambassador Musa Kulaklikaya

and Dr Atilla Karaman, of the Statistical, Economic and Social, Research and Training Centre for Islamic Countries (SESRIC), Turkey; which was entitled *Research and Scientific Development in OIC Countries*. The presentation covered the overall research and development (R&D) landscape of OIC countries. The subsequent paper was by Dr Jacques van der Meer, representing the Centre for Mediterranean Integration (CMI), Marseille, France, entitled *Innovation Scoreboard for the MENA-Region; A Dashboard for the Road toward an Arab, Knowledge Based Economy*, and was essentially tone-setting in terms of the objective of the workshop. That was followed with the country case-study entitled *Malaysia's Innovation Agenda: Progress and Lessons Learned* by Prof. K. Thiruchelvam, Perdana School of Science, Technology and Innovation Policy, Universiti Teknologi Malaysia, Malaysia; and a presentation by Prof. Munir Nayfeh FIAS, Department of Physics, University of Illinois on *Nanovation: Innovation in Nanotechnology, Where is it taking us?* Prof. Sehamuddin Galadari FIAS, Professor of Biochemistry and Molecular Cell Biology, UAE University, on the other hand, presented his inaugural lecture as a Fellow of the IAS, entitled *In Death there is Life*. Dr Huseyin Şeker, Department of Computer and Information Sciences, University of Northumbria at Newcastle, UK, then presented a talk entitled *Evidence-Based Technology and Design to Drive Innovation in the Age of Big Data*.

The succeeding session was devoted to 'Sustainable Development' and consisted of a number of presentations by: Prof. Münir Öztürk FIAS, Turkey; Dr Dalal Najib, USA; Prof. Datin Dr Faridah Ibrahim, Malaysia; Prof. Muammer Koç, Turkey; as well as Prof. Muthana Shanshal FIAS, University of Baghdad, who addressed the topic of *Radioactive Pollution of the Soil in Falluja City in Iraq: Pre-2014*.

The topic of the fifth session was 'Health' with three papers presented therein including a keynote by Dr Adnan Mjalli, Honorary FIAS, Founder and CEO of High Point Clinical Trials Center, USA, which was entitled *Translating Innovative Science into Medicines for the Treatment of Global Unmet Medical Need*.

Session six was entitled 'Laureates Nouveau' and included a number of presentations by a number of newly elected Fellows including: Prof. Shaher Momani FIAS, Professor of Mathematics, Dean of Academic Research, University of Jordan; Prof. Thameur Chaibi FIAS, Director of Research, National Research Institute for Rural Engineering, Water and Forestry, Tunisia; Prof. Zabta Khan Shinwari FIAS, Secretary General, Pakistan Academy of Sciences (PAS); Prof. Liaquat Ali FIAS, Vice-Chancellor, Bangladesh University of Health Sciences (BUHS); and Prof. Gulnar Vagapova FIAS, Head of Endocrinology Department, Kazan State Medical Academy, Tatarstan. At the end of the session, Prof. Syed M. Qaim FIAS, Advisor at the Institute für Nuklearchemie, Jülich, Germany, also presented a paper entitled *Use of Novel Accelerator-Produced Radionuclides in Medicine*. He was followed by Dr M. Nedim Aytekin, Department of Orthopedics and Traumatology, Yildirim Beyazit University, who presented an overview paper on the *Medical Journal of the IAS: Past, Present and Future*.

On Wednesday 11 October 2017, the IAS organized a special workshop on 'The Culture of Science in the Islamic World' that included seven presentations. It started off with Dr Athar Osama, Director, Founder, Muslim-Science.com, Pakistan, who introduced the workshop and talked about *Why the Culture of Science?* This was followed by Prof. Khatijah Yusoff FIAS, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia, who presented a paper on *Promoting and Understanding Science: The Institutional and Policy Elements and the Role of Women*

Scientists. Prof. Ahmet Nuri Yurdusev, Vice-President, Turkish Academy of Sciences (TÜBA), then presented a paper on *The Conception of World Order (Nizam-i Alem) in Islam and Universal Peace*; and Dr Muhammad Sabieh Anwar, Professor of Physics, LUMS Syed Babar Ali School of Science and Engineering, Pakistan, presented a paper on *The Laboratory in the Muslim World*. This was followed by Mr Khalil Raza, Scientific Officer at ECOSF, Pakistan, who presented a paper entitled *Promoting Global Peace and Harmony through Inquiry Based Science Education (IBSE) and the “Fusion of Civilizations” School Curriculum Development*, on behalf of Prof. Manzoor Hussain Soomro, President, ECO Science Foundation (ECOSF), Pakistan. Prof. Nidhal Guessoum, Professor of Physics and Astronomy, American University of Sharjah (AUS), UAE, presented a paper via video-conference on *Developing the Culture of Sciences in OIC Societies: The Need to Answer the Big Questions*.

The workshop was followed by the closing session of the conference which was chaired by Prof. Abdel Salam Majali FIAS, IAS President. Panelists were Prof. Muzaffer Şeker, Turkey, Prof. Bilal Kuşpınar Turkey, Prof. A. Nuri Yurdusev, Turkey, Prof. Münir Öztürk FIAS, Turkey, and Dr Moneef R. Zou’bi (DG/IAS).

At the conclusion of the 21st IAS Conference, the IAS adopted the IAS 2017 Konya Declaration on *Science, Technology and Innovation for Global Peace and Prosperity*.

The declaration called upon the OIC science community to attempt to bridge the divide between knowledge creation and knowledge commercialization, as there is more to developing a national innovation system than simply physical infrastructure. The IAS noted that the Islamic world is going through a transitional phase where national innovation policies no longer met the demands of young entrepreneurs in work and economy. Closing the innovation gap is an indispensable goal of universities in Organisation of Islamic Cooperation (OIC) and developing countries; and promoting innovation must become as important as teaching and research.

The declaration also stressed that, to further this enterprise, the IAS – in collaboration with SESRIC, the European Investment Bank through the Centre for Mediterranean Integration, plans to disseminate the innovation-barometer template to all OIC countries.

The declaration stated that the IAS, by exploring the role that could be/is played by STI in achieving the SDGs, advocated that sustainable development agendas should be assimilated into national political agendas.

The declaration also highlighted that the IAS recognises the crucial role of champions of STI; and the presence of sound, independent scientific advisory systems that can improve the quality of science-based decisions on policy-making. Needless to say, the launch of national science academies in OIC countries where such entities do not exist is an imperative in this regard.

The declaration expressed its support for the ‘Culture of Science’ initiative which will assemble theologians, historians, philosophers, scientists and science communicators to discuss both historical and current determinants of a ‘Culture of Science’ in the Islamic world.

As part of the follow-up action to the conference, the Academy will circulate the IAS 2017 Konya Declaration to concerned individuals and relevant agencies throughout OIC and developing countries, so that measures are taken to put into action the ideas proposed at the conference.

The IAS will also publish the complete proceedings of the conference in a quality volume and online.