

TWAS/BioVisionAlexandria.NXT 2012

21–22 April 2012

Alexandria, Egypt

TWAS/BioVisionAlexandria.NXT 2012 was held on 21–22 April 2012, within the framework of the Sixth International Biennial Conference, BioVisionAlexandria 2012, in Alexandria, Egypt. Eighty-three outstanding young scientists were selected, after a careful selection process, from 148 applicants.

TWAS/BVA.NXT 2012 was the third BioVisionAlexandria.NXT conference organized in Alexandria. The event was held under the theme: “Scientific Innovation in the Developing World: From Theory to Practice”. TWAS/BVA.NXT 2012 was intended to explore scientific innovation in the developing world, and highlight its importance for sustainable development. It also identified innovative solutions to overcome different problems in developing countries.



In the conference opening session, Dr. Romain Murenzi, the Executive Director of the Academy of Sciences for the Developing World (TWAS), presented the role played by TWAS in organizing, sponsoring and promoting programmes and activities precisely aimed at encouraging and rewarding the scientific innovation in the developing world; which is the main theme of this conference.

In the first session, the speakers discussed the status, obstacles and future of innovative scientific research in developing countries and its impact on the quality of human life, which helped give the participants a better understanding of how to transform marginal innovative activities into sustainable innovations that have wider impact on the society. In addition, they presented various cases; Dr. Maged El-Sherbiny, President of the Academy of Scientific Research and Technology, Egypt, discussed in his presentation the scientific research and technology strategy in Egypt; Dr. Susantha Goonatilake, President of the Royal Asiatic Society, Sri Lanka, talked about the technology acquisition



in Asia and beyond; and Dr. Daniel Pagliano, Director of the Institute of Applied Biosciences, Uruguay, presented the trends and challenges in Mercosur countries.

During the second session, the speakers discussed means of promoting creativity and innovation. As presented by Prof. Abdelhamid El-Zoheiry, Executive Director of the RDI Programme, innovation is imperative. He explained that innovation can't be learned, and that it is a process which requires hard work and skills, and that creativity is a fluency in generating many different new ideas. He also illustrated that researchers must understand this before they start their research. Dr. Amir Assadi, Professor at the University of Wisconsin, shared some lessons from the ancient history and presented the modes of innovation in the 21st century. He clarified that promoting innovation requires facilitating rapid access to data, information and knowledge stored anywhere, encouraging local production of data and information by empowering the local human resources, communicating and sharing all localized data and information rapidly, and integrating local information into a global solution. Innovation is important not only for individual advancement in work, but also as a survival strategy for institutions and nations, as discussed by Dr. Ramy Aziz, Assistant Professor, Department of Microbiology and Immunology, Faculty of Pharmacy, Cairo University.

The importance and ethics of innovation was a dominant topic in this conference. As innovation is one of the main drivers of competitive economy and a powerful tool for creating new jobs, a nation's innovation status has become a subject of thorough evaluation. Dr. Hassan Azzazy, Chairman, Department of Chemistry, American University in Cairo, Egypt, presented the factors considered in assessing the level of national innovation, as it is important to create an innovative environment in universities and research centers. In this regard, Prof. Abdallah Daar, Chief Scientist, Grand Challenges Canada, presented the innovation and research funding opportunities offered to scientists in low- and middle-income countries by the Grand Challenges Canada; a research-funding agency that was created as part of major innovation policy followed by the government of Canada.



All of the talks given by the eminent speakers led to a very important point, which is how innovation drives the economic growth. The proper management of technological innovation is what creates wealth for nations, companies and individuals. It provides the foundation for economic growth and promotes national and organizational competitiveness. Multinational corporations and all successful enterprises realize that business competitiveness is driven by innovation and is no longer a matter of luxury, but a matter of survival in an increasingly global, fiercely competitive marketplace. Prof. Tarek Khalil, President and Provost, Nile University, Egypt, demonstrated in his presentation the policies needed, at the national as well as the firm level, to foster innovation and economic growth.

Moreover, the speakers also provided the researchers with the strategies needed to facilitate the creation and marketing of new innovative products and services in promising areas. Dr. Sherif Kandil, Professor of Material Science, Institute of Graduate Studies and Research, Egypt, concluded the conference with what research needs to reach the market; a politician who understands the role of scientific research and believes in its benefits. It also needs a system that adopts and implements a national strategy for scientific research that is based on a mission-oriented research approach. Furthermore, it requires a cadre of professional marketing experts who are capable of alerting researchers to the value of their Knowledge and attract the market attention and create demand for their research products.

No country will be developed unless it has a developed scientific research program; which requires innovation. More effort is needed to support outstanding young researchers in different branches of science; to help them understand how to transform marginal innovative activities into sustainable innovations that could improve livelihoods and contribute to inclusive development.



Alongside the conference, the young researchers were offered the opportunity to meet Nobel Laureates, renowned speakers and other young scientists from all over the world. Moreover, the event featured “Coffee with” sessions and the best 10 applicants were selected to present their innovative ideas and analyze their impact on the development of societies. The young scientists were also invited to participate in BioVisionAlexandria 2012 Conference program.



The Academy of Sciences for the Developing World (TWAS), the Islamic Development Bank (IDB), and the International Development Research Centre (IDRC), offered financial support to cover travel expenses for the accepted participants from developing countries.

