

From Coordinator General's Desk



Prof. Dr. M. Iqbal Choudhary

The COVID-19 pandemic is undoubtedly the greatest challenge the world has faced since the World War II. The disease is affecting all of us without any discrimination. We are certainly going through the toughest time of the human history. The

deployment of science and technology is the most important strategy against the disease. Medical professionals are taking care of the patients suffering from COVID-19 at the risk of their own safety and health, Government officials are working on tracking the virus and maintain social distancing and lockdown. Researchers around the world are engaged in the development of diagnostic, treatments, and vaccines.

There are multiple issues which are making the situation worse in the developing region of the world, such as limited or no access to clean water to wash hands, maintaining social distancing in over populated or overcrowded areas, and lack of capacity to conduct large scale testing, and tracking. How the economic consequences of pandemic will be tackled? These and many other alarming issues are the major challenges in front of us and will remain there even after the end of the pandemic, if the global authorities will not sit together, and take collective efforts.

It has been established scientifically that malnourished refugees, living in overcrowded and unhygienic conditions are especially vulnerable to infections.

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Prof. Dr. M. Iqbal Choudhary Assumes Charge as Coordinator General, COMSTECH

The President of Pakistan, Chairman COMSTECH has appointed Prof. Dr. M. Iqbal Choudhary (H.I., S.I., T. I.) the Coordinator General of COMSTECH. COMSTECH is the only OIC institution chaired by Pakistan.

Prof. Dr. M. Iqbal Choudhary is a Distinguished National Meritorious Professor and Director at International Center for Chemical and Biological Sciences (H. E. J. Research Institute of Chemistry and Dr. Panjwani Center for Molecular Medicine and Drug Research). He is among the most prominent scientists of Pakistan, recognized for his original contributions in the fields of natural products and bioorganic chemistry. He has written and edited 76 books, most of which have been published in USA and Europe. He is also the author of over 1,175 research papers and chapters in top international science journals of the West, as well as 40 US patents. This is by far the largest number of quality publications from any scientist in Pakistan. He has been among the most cited scientists of Pakistan in last five years with citations exceeding 27,407 (h-Index: 68). He has served as a visiting faculty in many prestigious universities of the world, including Cornell University (New York), Purdue University (Indiana), Pennsylvania

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Coordinator General, COMSTECH Meets Minister of Science and Technology

The newly appointed Coordinator General Prof. Dr. M. Iqbal Choudhary (H.I., S.I., T. I.) soon after taking the charge of the organization, met with the Minister of Science and Technology, Mr. Fawad Chaudhary in his office. He briefed the minister on COMSTECH existing program, such as collaborative programs with IFS, TWAS, Lindau Nobel Laureates Meetings, financial assistance for Inter-Islamic Networks, assistance for conferences, workshops, and seminars, COMSTECH awards, preparation of OIC science profile and COMSTECH research publication program.

To highlight the future plans, he mentioned COMSTECH capacity building initiative in infectious diseases ("preparing for the next pandemics"), artificial intelligence initiative for health and agriculture, science diplomacy and university-industry initiative. He emphasized the revival of the Science Technology and Innovation Organization (STIO) approved by OIC, and obtained contributions from Saudi Arabia, Turkey, Iran, and Malaysia. Prof.

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Prime Minister Visits MoST Exhibition on COVID-19 Related Products at COMSTECH

No Huge Delay in Vaccine Development for COVID-19

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Prime Minister Visits MoST Exhibition on COVID-19 Related Products at COMSTECH



The Prime Minister of Pakistan visited exhibition on COVID-19 organized by Ministry of Science and Technology at COMSTECH. The Coordinator General.

COMSTECH Prof. Dr. M. Iqbal Choudhary (H. I., S. I., T. I.) visited the exhibition and attended the briefing given at the occasion.

The exhibition was organized by the Ministry of Science and Technology with the objective to showcase Pakistan's success in manufacturing various essential items, such as protective gears, ventilators, respirators, sanitizers and disinfectants and masks of various types. The coordinator General COMSTECH Prof. Dr. M. Iqbal Choudhary regarded this exhibition an excellent example of converting a calamity into an opportunity for technological development of show-casing Pakistan's technological breakthrough in other OIC countries.

The minister of S&T, Chaudhry Fawad Hussain briefed Prime Minister about various initiatives which MoST has taken to meet the national demands for products



required against COVID-19 infection. Minister of defence production Ms. Zubaida Jalal also spoke at the occasion. The Prime Minister speaking to audience, appreciated the efforts of scientists and technologists of Pakistan and emphasized the need of science and technology and higher education as primary attributes of national self-reliance.

The exhibit took place in the COMSTECH building at the constitution avenue.■

COMSTECH Food Security Project Attracts Funding from COMCEC

COMSTECH capacity building project on the use of New Breeding Technologies for Food and Nutritional Security has been selected for this year's project funding under COMCEC project funding scheme. The Economic and Commercial Cooperation Standing Committee of the Islamic Cooperation Organization (COMCEC) is one of the four Standing Committees of the OIC, which was established in 1981 and based in Ankara, Turkey.

The project envisages institutional and human resource capacity building of Pakistan, Turkey, Malaysia, Iraq, Jordan, Saudi Arabia and Egypt, 7 OIC member states, by conducting training courses on the introduction of New

Breeding Technologies in Agriculture to achieve nutritional food security. Scientists from National Institute of Biotechnology and Genetic Engineering (NIBGE), Pakistan are among leading trainers in this project. The project was conceived and designed in close collaboration with NIBGE, Pakistan, and Niğde Ömer Halisdemir University (NOHU), Turkey. It directly helps to ensure food security and nutrition in the 7 OIC member countries while indirectly works to increase resilience of the food system in the member countries. Prof. Dr. M. Iqbal Choudhary, Coordinator General COMSTECH congratulated Ms. Khazima, Programme Manager for leading the efforts in this inter-OIC capacity building project in this critically important field. ■

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From Coordinator General's Desk

We Muslims understand the importance of serving refugees in the Islamic world. Respect and care of refugees is deep rooted in Islam's commitment to generosity, hospitality, and non-discriminatory protection, as taught in Islamic traditions. Pakistan has hosted Afghan refugees for over 40-years with sincerity and belief in basic human dignity. Many OIC member states including Bangladesh, Syria, Jordan, Lebanon, and Turkey have been generously taking care of millions of refugees. With this background in mind, we recognize that there is an urgent need to configure the far-reaching impact of conflict, poverty and displacement associated threats of starvation and disease arising from the rapid spread of COVID-19 in refugees in OIC member states. I hope that we shall collectively strive in protecting the most vulnerable, as well as upholding the rights of refugees in our countries.

I am pleased to inform you that the COMSTECH, has initiated many programs and projects for the promotion of science and technology, and capacity building in OIC region. We are initiating various fellowship programs for the capacity building of young scholars from the OIC-Africa region. Through another program, COMSTECH is planning to build critical mass in the fields of Virology and Vaccine Technology through training of scholars of 7 OIC Member Countries (Pakistan, Indonesia, Turkey, Iran, Malaysia, Lebanon, and Egypt). COMSTECH is also regularly organizing Virtual International seminars, delivered by top academicians from the world especially OIC region. Many of existing and new initiatives of the COMSTECH are presented in this newsletter, and on website www.comstech.org

I am confident, through your support and patronage, the COMSTECH will contribute towards the promotion of science and technology in the OIC region in a major way, Insha Allah

No Huge Delay in Vaccine Development for COVID-19

There is no huge delay in the vaccine development for COVID-19, said by leading American expert Prof. Dr. Saad B. Omer while delivering his online seminar arranged by COMSTECH today for OIC countries. He described the vaccine development process in detail by discussing all technical aspects involved in process. He informed that the fast-track vaccine development is currently underway. Human trials have been started and there is no huge delay in vaccine development for COVID-19. He provided a detailed account of various vaccines which are in the process of development against COVID-19, and explained how vaccines work against the viral pathogens.

At the outset of his lecture, Prof. Dr. Saad B. Omer said that it is not to stigmatized any disease any country or nation and there is a need of empowering the scientists to lead in making critical decisions, avoid fake news and false assurances. Despite lockdown, social distancing is not possible or practical at home, many of the infections are of familial origin - originate between the family.

To cope with the pandemic he suggested to test, trace contact, quarantine asymptomatic carriers, reduce household transmission and practice social distancing. He informed that the outbreak in South Asia is slower than the

Europe, and the doubling time of cases is 7 days.

By answering a question seeking his opinion on complete lockdown or smart lockdown, he stressed that nations should be pre-emptive, don't wait for cases to rise. Countries that reacted quickly, proactively succeeded in slowing



down the spread, whereas those countries which were not proactive saw exponential rise in cases. He suggested go early, test, trace contacts and ease lockdown slowly, smartly and sector wise.

Is it wise to ease lockdown while there is no therapy, no vaccine? He replied that it depends on the rate of cases, if cases are rising rapidly then nations have appropriate strategy to cope with the situation. He suggested to ease lockdown carefully by implementing all suggested safety measures.

Participants from various cities of Pakistan, and other OIC countries such as Nigeria, Azerbaijan, Bangladesh and Egypt joined the session.

To watch complete lecture please browse: http://www.comstech.org/seminar-covid-19.aspx ■

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Prof. Dr. M. Iqbal Choudhary Assumes Charge as Coordinator General. COMSTECH

State University (Pennsylvania), Scripps Institution of Oceanography (San Diego, California), The University Rhode Island (Rhode Island) and various top Universities of UK, China, Saudi Arabia, Malaysia, Kazakhstan, and Iran.

Prof. Choudhary has won several national and international awards, such as Hilal-e-Imtiaz, Sitara-e-Imtiaz and Tamgha-e-Imtiaz by the President of Pakistan, Pakistan. Academy of Sciences Gold Medal, National Book Foundation Prize on best book and the Third World Academy of Sciences Young Scientist Prize. He received the prestigious title of "Distinguished National Professor" from the Higher Education Commission in 2004 and Meritorious Professor by the

University of Karachi 2013. He is a member and fellow of many prestigious societies including Fellow of The Academy of Sciences for the Developing World, Islamic Academy of Sciences, Chemical Society of Pakistan, Royal Society of Chemistry (London) and LEAD-International. He is also the recipient of the 1st Khawarizmi International Award and Prize from the President of Islamic Republic of Iran, Economic Cooperation Organization (ECO) Award in Education by the President of Azerbaijan, COMSTECH Award in Chemistry by the Prime Minister of Pakistan and more recently Chinese Academy of Sciences Distinguished Foreign Scientist Award.

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Coordinator General, COMSTECH Meets Minister of Science and Technology

Choudhary mentioned that the programs and activities planned for 2020-21 are from a working paper, prepared on the instruction of the President of Pakistan who is the Chairman COMSTECH as well.

The Minister assured him the fullest support of his Ministry in fulfilling the mission of COMSTECH for science and technology cooperation in OIC member states. He has shown confidence that through COMSTECH, Pakistan will also be able to build its capacity in future fields of science and technology through bilateral and multilateral cooperation with leading institutions in OIC countries.

COMSTECH is the Ministerial Standing Committee on Scientific and Technological Cooperation of the OIC (Organization of Islamic Cooperation) which was established by the Third Islamic Summit of OIC held at Makkah, Saudi Arabia in January 1981. COMSTECH is composed of all the member states of the organization represented by their ministers of science and technology or nominated representatives. The President of Pakistan is the chairman, Prime Minister of Pakistan is the co-chairman and the Coordinator General is the Chief Executive of COMSTECH which is the only OIC organization chaired by Pakistan.



COMSTECH Intra-OIC Cooperation for Conservation of Plant Genetic Resources and its Use in the Varietal Development

COMSTECH has doubled its efforts recently in order to increase the resilience of food systems in the OIC states. It was initiated in May 2018 when COMSTECH in collaboration with Pakistan Agricultural Research Council (PARC) and ECO Science Foundation conducted a workshop of the stakeholders from the OIC member states to comprehend the status of Genebank operations management systems. Experts from 15 OIC states participated in the workshop and recommended on various aspects related to strengthening of plant genetic resources. These included germplasm collection, promoting evaluation and utilization of plant genetic resources for varietal development and the integration of their seed system, as well as promoting technical cooperation between member states for Genebank establishment/management. To carry the effort forward, a Working Group of experts from 15 participating countries was formed.

Based on the recommendations of the Working Group, COMSTECH in collaboration with Food and Agriculture Organization of the United Nations (FAO), and the Pakistan Agriculture Research Council (PARC) has developed a multinational project on "Promotion of Plant Genetic Resources Use in the Varietal Development and its Integration in the Seed System". The project is aimed to benefit five OIC countries, viz. Azerbaijan, Jordan, Kazakhstan, Oman and Pakistan, through mutual collaboration and strengthening of the institutional capacities of these countries. Two consultative meetings, the first one in Pakistan and the second one in Azerbaijan, have been held in 2019 for inputs from the participating countries and expert opinion for development of the proposal. After thorough deliberations and inputs from the representatives (nominated by their governments) of participating countries, the project is being finalized for eventual presentation to potential donors later this year.

Development of National Gene Banks in the OIC Member States

COMSTECH has joined hands with the Islamic Organization for Food Security (IOFS), Kazakhstan on its initiative for "Developing National Gene Banks in the OIC Member States". A teleconference meeting of the stakeholders from the IOFS, Dubai Food Security Organization, COMSTECH, and FAO headquarters, Italy was held in February 2020 for brainstorming a plan of action towards the said agenda. As the first step towards this initiative, it has been decided to hold a consultative workshop of the potential stakeholders in 2020. Participation is expected from the representatives of

Gene Banks in OIC member states, experts from the relevant OIC institutions and some reputed international organizations working in the area of food security. The workshop will deliberate on the role of Gene Banks, country experiences, and issues and challenges on establishment of Gene Banks. The workshop would be expected to produce a status report on the development of Plant Genetic Resources in OIC Member States and also an elaborate plan of action for intra-OIC cooperation in the area of Plant Genetic Resources for Food and Agriculture.

International Workshop on Sustainable Cities

COMSTECH with the support of OIC General Secretariat organized the "International Workshop on Sustainable Cities: Issues & Challenges of Rapid Urbanization" at COMSTECH, 28-29, Jan. 2020 on the theme of sustainable urban development, as one of the activities commemorating the 50 years of OIC.

The workshop was organized to strengthen cooperation among OIC states in science and technology and to enhance their capabilities in emerging areas.

The 2-day workshop gathered over 80 scientists, experts, policy makers and young research scholars from several OIC Member States.

Keynote lecture was delivered by Dr. Ishrat Hussain, eminent economist and Advisor to Prime Minister on Institutional Reforms & Austerity. Dr. Tariq Banuri, one of the pioneers of sustainable development, and the then Coordinator General COMSTECH, gave a comprehensive overview of the challenges faced in sustainable urbanization.

Experts gave insights into new technological advancements, challenges faced in urban centers and solutions for tackling these problems. They also explained how research, development and well-defined governance and management models that emphasize municipal level engagement are required to overcome these issues.

COMSTECH Capacity Building Initiative for 2020-21

To build the capacity of OIC states in the cutting-edge emerging areas of S&T, COMSTECH has planned fifteen thematic workshops, training courses and conferences for 2020-2021 which will be organized at different venues in OIC states with the cooperation of relevant research institutions on the topics of Artificial Intelligence in Health Care, Fundamental Techniques in Viral Diseases Diagnostics, Nanomedicines - Designing, Development, and Characterization Techniques, Training Course for Drug Regulators, Crystallography

Workshop with the Support of IUCr, Plant Genetic Resources/ Genebanks, Building Capacity for Maternal, Newborn and Child Health Care, Nanotechnology, Biotechnology, Biodiversity as Source of Novel Drugs against Neglected Tropical Diseases, Application of Genomics in Health and Agriculture, Renewable Energy, Climate Change and Technician Training for Science Labs. Event coordinators at COMSTECH are engaged in communication with different institutions and experts for collaboration and organization of these events.

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