

Comstech News



December 2021
Jumadi-ul-Awwal 1443 Hijri



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OIC MINISTERIAL STANDING COMMITTEE ON SCIENTIFIC AND TECHNOLOGICAL COOPERATION

From Coordinator General's Desk



Prof. Dr. M. Iqbal Choudhary
H.E., S.I., T.I.

With over 1.9 billion population of OIC region represents a quarter of the humanity. It is largely a youthful population with 60% below the age of 25 years. This youth bulge offers a tremendous opportunity, as well as pose a major threat, depending on how we decide to channel their vigor and creativity. Unleashing their creative potential for socio-economic development of OIC region should be our number one priority. Emerging technologies offer tremendous opportunity to leap frog, and catch up with rest of the world. However, this requires investment in higher education, and training and skill development of our young population. Intellectually driven, knowledge based development model suits well for OIC countries. Training of young men and women in emerging technologies, such as artificial intelligence, block chain, cyber security, programming, IoT, e-commerce, etc. will not only enhance their capacity to generate wealth for rapid social development, but also improve our image as a progressive forward

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COMSTech launches PhD and Postdoc Fellowships Programme for Refugee Scientists

TWAS-COMSTech Science in Exile PhD and Postdoc fellowship programme for displaced and refugee scientists has been launched. UNESCO and TWAS have partnered with COMSTech in the UNESCO-TWAS-COMSTech Science in Exile Fellowship Programme for displaced and refugee scholars and scientists. The programme aims to provide an opportunity — to displaced and refugee scholars and scientists who have not yet found a

safe and long-term host country — to pursue doctoral and post-doctoral studies in Pakistan, at institutions which are members of the COMSTech Consortium of Excellence (CCoE), starting in 2022. Nationals of Yemen, Syria and Afghanistan are eligible to avail this opportunity. The study fields for PhD fellowships are agricultural sciences, structural, cell and molecular biology, biological

systems and organisms, medical and health sciences, neurosciences, chemical sciences, engineering sciences, computing and IT, astronomy, space and earth sciences, mathematical sciences, and physics. Women are encouraged to avail this opportunity. The closing date for application is 28 January 2022. Send an email for further information to displacedscientists@twas.org and events@comstech.org ♦

COMSTech, IsDB and LRBT Perform Eye Surgeries and Training of Ophthalmologists in Niger

An advanced team of Pakistani doctors visited Niamey, capital of Niger a west African least developed Muslim country during November 21-28, 2021 to inspect the facilities available at Eye Hospital Niamey for repair & maintenance of faulty equipment, and to conduct Eye surgeries and training of local doctors. During the visit Dr. Khalid Masood Ashraf, the team leader, performed 25 cataract surgeries. The visiting team of experts repaired most of the

faulty equipment and set it up in order to conduct more than 400 cataract surgeries during forthcoming visit of Pakistani doctors. The objective is to deliver high quality cataract services to improve vision quality and reduce blindness related poverty. The visit had been arranged by COMSTech in collaboration with Islamic Development Bank (IsDB) under its Alliance to Fight

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PROF. M. IQBAL CHOUDHARY CALLS ON CHINESE ENVOY

Professor Dr. Muhammad Iqbal Choudhary, Coordinator General, COMSTech met with H. E. Nong Rong the Ambassador of Peoples Republic of China today. Both the dignitaries discussed the avenues of bilateral cooperation in the fields of science and technology between the two nations as well as in the OIC region.

The Ambassador showed keen interest in the development and promotion of Chinese traditional medicine in Pakistan. Prof. Choudhary appreciated the idea and agreed on joint venture for the promotion and development of Chinese traditional medicine in collaboration with the Pakistani institutions.

H. E. Nong Rong congratulated Prof. Choudhary for winning Mustafa Prize, conferred upon him

by Mustafa Foundation, Iran earlier this year. The Ambassador presented Prof. Choudhary the Guangxi Golden Silkball Friendship Award which was announced last year for him. On the recommendation of

Guangxi Normal University, the People's Government of Guangxi Zhuang, province of China decided to honor Prof. Dr. M. Iqbal Choudhary with the 2020 Guangxi Golden Silkball Friendship Award for his outstanding contribution to

the economic and social development of Guangxi.

Prof. Dr. Muhammad Iqbal Choudhary is world renowned medicinal chemist. He has published 1,175 research papers in the fields of organic and bioorganic chemistry in international journals, 76 books and 40 chapters in books published by major US and European press. He has secured 40 US patents so far. Dr. Iqbal is D.Sc., Ph.D., and C. Chem. He has been awarded by different governments of Pakistan with Hilal-e-Imtiaz, Sitara-e-Imtiaz, and Tamgha-e-Imtiaz.

Prof. Dr. M. Iqbal Choudhary is currently serving as Coordinator General, COMSTech and Director, ICCBS, University of Karachi. ♦



COMSTech Signs MoU with IOFS

OIC Ministerial Standing Committee on Scientific and Technological Cooperation (COMSTech) and Islamic Organization for Food Security (IOFS) signed Memorandum of Understanding (MoU). The MoU

was signed at COMSTech Secretariat by Coordinator General COMSTech and Director General, IOFS. Astana based IOFS fosters the

socio-economic development of its member countries with ultimate goal of promoting food security, sustainable agriculture and rural development, whereas Islamabad based COMSTech builds indigenous capabilities of OIC

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COMSTech & ICGB Start Scientific Cooperation Programme Worth Rupees 46 Million

COMSTech signed a memorandum of understanding with ICGB to establish a general framework for cooperation in science, education and technology.

COMSTech-ICGB programme, launched in January 2022, is offering research grants, fellowships and visiting professorship scheme to organize workshops in emerging technologies for capacity building of OIC states in various aspects of biotechnology and genetic engineering. International Centre for Genetic Engineering and Biotechnology (ICGB) is based in Trieste, (Italy), Durban (South Africa), and New Delhi (India).

COMSTech is an OIC Ministerial Standing Committee on Scientific and Technological Cooperation based in Islamabad, Pakistan. ♦

COMSTech Celebrates World Science Day

COMSTech celebrated “World Science Day” on Wednesday. Prof. Dr. Atta-ur-Rahman FRS, Chairman, Prime Minister Task Force for Science and Technology graced the occasion as chief guest.

Prof. Dr. Atta-ur-Rahman said that it is alarming that we are unable to see the light at the end of tunnel in case of implementing guidelines addressing climate change. He said at the moment we are not succeeding. The past actions of nations show the clear intent that how much they are serious towards climate change mitigation.

Prof. Rahman talked about number of technologies available to use to address climate change effects. He suggested that to use new technologies, OIC states need to invest in S&T, innovation and

entrepreneurship. He stressed the need of awareness of issues at hand and the technologies available to deal with them.

Mr. Ali Tauqeer Sheikh informed that the temperature increase by 1.5 Celsius is considered bad but by 2 degrees it would be disastrous. He said we are way behind Paris agreement. Mr. Sheikh said that it is good to share that the global discourse on climate change is now driven by science. Mr. Sheikh also mentioned that OIC states will be affected by climate change events as well. He suggested to prepare in advance and plan to mitigate climate change challenges.

Dr. Muhammad Ali Shah, Vice-Chancellor, QAU said that we in collaboration with COMSTech working on developing consortium

of universities to share knowledge and expertise and climate change could be a part of it. Dr. Shah suggested that IT and sustainable development must be included in curriculum of all fields of studies so that we can equip young generation with high impact modern knowledge to compete in the world. Director General IOFS, Mr. Yerlan Baidaulat, shared the vision, mission and activities of IOFS. He said climate change have deep impact on all spheres of life and we have to collectively prepare for it.

Coordinator General COMSTech, Prof. Dr. M. Iqbal Choudhary welcomed the participants and highlighted the importance of science and science communication to the masses for active engagement with new technologies and innovations available. He stressed the need to science and technology linkages with the society for development. Prof. Chaudhary said that S&T has played key role in global transformation and help the humanity to act beyond the limitations. ♦



COMSTech Holds MoST Institutions Meeting to Strengthen Cooperation with OIC States

Coordination meeting between COMSTech and the S&T organizations and institutions affiliated with the Ministry of Science and Technology (MoST), Pakistan held at COMSTech on Tuesday.

The meeting was chaired by the Additional Secretary, MoST, Dr. Syed Ata-ur-Rehman. In his welcome remarks Dr. Rehman said that there is a need of improved coordination between science and technology institutions and COMSTech. He said that the government is committed to achieve the goal of success in the development of science and technology. Dr. Rehman said that having COMSTech is a great privilege as well as a challenge. He emphasized the need of mutual cooperation and coordination among S&T institutions. Dr. Rehman said to have doable projects in the minutes of the meeting for circulation among the S & T institution for implementation.

Prof. Dr. M. Iqbal Choudhary, Coordinator General, COMSTech welcomed the heads of 12 leading S&T institutions participated in the meeting. He shed light on the establishment of COMSTech, its mandate and status in Muslim World. Prof. Choudhary

emphasized the need of linking Pakistani S&T organizations and institutions with the institutions of same mandate in other OIC member states to achieve socio-economic development through mutual cooperation and coordination and to accomplish successful science diplomacy. Prof. Choudhary offered S&T institutions full support in creating linkages with institutions in OIC member states for joint projects and programmes. He said the job of COMSTech is to serve OIC states to develop their own S&T capacity building, help building inter-institutional linkages for developing result oriented projects.

The meeting was attended by the heads of 12 leading S&T institutions affiliated with MoST: PCRWR, PCSIR, NUTECH, CUI, PCST, STEDEC, NIE, NIO, PNAC, PHA, PSF and PCRET. The heads of institutions presented their prospective projects, discussed future plan and gave recommendations.

Next meeting would be hosted by COMSTech in which all institutions would present doable projects for seeking funding from international funding agencies and partner organizations from OIC states. ♦

Lecture on The Role of Amino Acids in Bioenergetics of Trypanosoma Cruzi

COMSTech organized a lecture on “The Role of Amino Acids in the Bioenergetics of Trypanosoma Cruzi” delivered by Prof. Dr. Ariel M. Silber, Department of Parasitology, University of São Paulo, online on Wednesday.

Prof. Silber talked about Trypanosoma cruzi, and its life cycle and metabolism. He unfolded the very basic fundamentals of mitochondria and its properties as battery. He discussed the contribution of three amino acids: Proline, Histidine, and Alanine. Prof. Silber concluded his talk on answering the question of how we can obtain some numbers of mitochondrial bioenergetics.

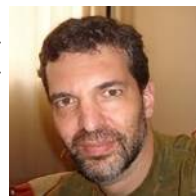
Coordinator General COMSTech, Prof. Dr. M. Iqbal Choudhary introduced the speaker to the audience. He said OIC member states are spread over four continents from north America to Africa, Middle East and Central and South Asia. Prof. Choudhary said that many of these countries are least developed, these are tropical countries and are facing host of problems like illiteracy, lack of medical supplies, healthcare research and huge disease burden. He said, this is the reason that we started this program in collaboration with NTD Network to develop capacity of scientists in this

region through the lectures of top scientists of the world.

COMSTech, in collaboration with A Global Network for Neglected Tropical Diseases (NTD Network), has launched a virtual lecture series for researchers across the Muslim world. This programme draws upon expertise from both networks, and offers opportunities to gain or enhance researcher's knowledge, skills and connections, to help grow shared global capacity to tackle these rapidly growing NTDs.

The NTD Network, funded by UKRI's Global Challenges Research Fund (GCRF), is a consortium of academic researchers from South America, Asia, and the UK, seeking new therapeutic solutions to Leishmaniasis and Chagas disease. Both COMSTech and the NTD Network aim to promote global scientific cooperation and build research capacity to find new and better therapeutic solutions for NTDs.

This webinar was attended by the academics, scientists and the general public from all OIC member states. ♦



Webinar on Use of Nanomaterials in Medicine

COMSTech has started a lecture series program on “Emerging Technologies”. This program is an effort to help upcoming scientists in identifying key areas of scientific research which are contributing immensely in the well-being of the humankind.

The first lecture of this series was given by Dr. Abdolreza Simchi of Sharif University of Technology, Iran, online on the application of nanomaterials in medicine. Dr. Simchi said that there are many applications of nanomaterials along with the application in the field of medicine.

Dr. Simchi talked about the basics of nanomaterials and their use. He said that today nanomaterials are used for drug delivery, therapy, bio-imaging, regenerative medicine, bio-sensing and bioinformatics. He

mentioned experiments conducted by his team. Dr. Simchi concluded his talk by saying that there is a plenty of room for development of nanomaterials for biomedical applications.

Dr. Abdolreza Simchi is a distinguished Professor of Engineering Science and Materials Engineering and a fellow of the Alexander von Humboldt Foundation Bonn, Germany. He is among the top 1% highly-cited materials scientists on Web of Science, and ranked among the top 150 scientists worldwide in “Emerging and Strategic Technologies Materials” identified by Sandford University in 2021. ♦



COMSTech Webinar on Turbulent Flows in Classical and Quantum Fluids

COMSTech organized a webinar on “A Perspective of Turbulent Flows in Classical and Quantum Fluids” delivered by Prof. Dr. Joseph Niemela, Research Scientist Emeritus and Consultant, at The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy on Tuesday online.



Prof. Niemela said that science is a universal language. Basic sciences are very important. There is an international year announced for basic sciences for sustainable development. He said we really need basic sciences these are really global for all nations and people.

Prof. Dr. Joseph Niemela outlined some of the challenges associated with the study of turbulent flows, an enduring unsolved problem in classical physics. He said, turbulence exists from microscopic to astrophysical scales, and also in quantum fluids albeit subject to severe restrictions imposed by the quantization of circulation, as first postulated by Onsager and Feynman. The talk was intended to be accessible to a non-specialized audience as well.

Coordinator General COMSTech said in his introductory remarks that we are in search of ways to how promote basic sciences in OIC states. He said one impediment is to develop real science is that students have very weak foundation to do so. Prof. Choudhary mentioned that International Centre for Theoretical Physics is a one example which have played a very important role in the development of physics in the world. He said we want to make science and technology part of the culture.

The webinar was attended by students, researchers, young scientists, and academicians from the OIC member states online as well as in-person at COMSTech secretariat.

Prof. Niemela is a Research Scientist Emeritus and Consultant at the Abdus Salam International Centre for Theoretical Physics, a UNESCO Category 1 Institute, where he headed its Office of External Activities, Training and Research in Italian Laboratories (TRIL) program, and Applied Physics group.

He is presently Chair-elect of the Forum on International Physics of the American Physical Society (APS), Secretary of Commission 13 (Physics for Development), of the International Union of Pure and Applied Physics (IUPAP), and Chair of the Physics for Development Group of the European Physical Society (EPS). He is a Fellow of the American Physical Society (APS) and is a Foreign Fellow of the Pakistan Academy of Sciences (PAS). He is a recipient of the Dwight Nicholson Medal from the APS, the Galileo Galilei medal of the Italian Physical Society, and the SPIE Educator of the Year award. ♦



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From Coordinator General's Desk

looking Ummah, in contrast to the current stereotype and Islamophobic image of Muslims emerged in the west. In this pursuit of equipping our young generation with the technologies of future, our focus should also be on woman scholars and girl students as they are among the most brilliant and bright of our generations.

COMSTech OIC's ministerial standing committee on scientific and technological cooperation has initiated many programs on emerging and digital technologies. Information about these programs is available on our website – www.comstech.org. We expect that our readers will benefit from these opportunities and provide their feedback. ♦

Webinar on “Escherichia coli”

COMSTech organized webinar on “Escherichia coli as a Model Organism” conducted by Prof. Dr. Ute Römling, Dept. of Microbiology, Tumor and Cell Biology, Karolinska Institutet, Stockholm, Sweden.

Dr. Römling said that I feel very honored to give this COMSTech lecture. She said that Escherichia coli has been studied for long time and still we know very little about this bacterial specie.

Dr. Römling informed that antimicrobial resistance among bacteria is increasing with globally disseminated clones. She said hospital-acquired infections in the clinics in susceptible patients are also on the rise.

She said that older population require more medical care. Her complete video lecture is available on Youtube channel “comstech-oic”. ♦



Webinar on “Building Academic Career”

COMSTech organized a webinar on “How to build a successful academic career” which was delivered online by Prof. Dr. Mohamed Ali Farag, Professor and Program Director, American University in Cairo, Egypt.

Prof. Farag said that there is a difference between what we think and what is the reality. He termed the academic career as 'Academic Metabolism', as it involves many factors like metabolism.

Prof. Farag delved deep into the

academic activities and talked on, how to research, write a scientific paper and present it. He suggested that the job of an academician is to break the bottlenecks and free the students by solving the problems faced by them. His full lecture is available on Youtube channel “comstech-oic”. ♦



Webinar on “Technological Trends Beyond 5G”

COMSTech organized a webinar on technological trends beyond 5G networks which was delivered by Prof. Dr. Mohamed Salim Alouini.

Prof. Alouini is a very high caliber scholar, he has contributed immensely in the development of science and technology in the region and has great insight and vision about how things will move, said Prof. Dr. M. Iqbal Choudhary, Coordinator General, COMSTech in his introductory remarks.

Prof. Alouini talked about digital inclusiveness, digital divide

mitigation and resilience and robustness in rural areas, and connecting remaining 4 billion people around the world with internet. He talked about the key 6G challenges and opportunities. He informed that 6G is coming in 2030, but of course to deploy 6G we have to prepare for it. His full lecture is available on Youtube channel “comstech-oic”. ♦



Webinar on “Immunology of Kala-Azar”

Visceral Leishmaniasis (VL) is a neglected tropical disease accounting for second highest mortality worldwide, with an estimated 50,000 to 90,000 new cases annually. India alone accounts for 50% of the global VL cases. Considering the growing drug-related toxicities, parasite resistance, HIV-coinfection, the development of an effective vaccine for Leishmaniasis remains a global priority, said Dr. Nahid Ali addressing COMSTech webinar online.

She said, a clear understanding of host immunology and role of T cells

in long-lasting memory generation is extremely essential to control hard-to-treat infections like VL.

Although human VL is characterized by high Leishmania-specific antibodies, inadequate, depressed CMI response and lack of protective cytokines are hallmarks of disease progression, she informed. Her complete lecture is available on Youtube channel “comstech-oic”. ♦



Lecture on “Emerging Technologies for S&T”

COMSTech organized lecture on “Emerging Technologies for Science and Technology” Lecture No. 02 “Functional Nanomaterials—Tuning the Size and Surface Chemistry for Applications in Catalysis, Biomedical and Environmental Sciences” which was delivered by Prof. Dr. Irshad Hussain, Professor, Lahore University of Management Sciences (LUMS) and Fellow of Royal Society of Chemistry (FRSC), on November 18, 2021.

Coordinator General COMSTech,

Prof. Dr. M. Iqbal Choudhary appreciated the work of Prof. Dr. Irshad Hussain in the field of nanotechnology.

Dr. Irshad talked about synthesis of metal nano-particles, nano-crystals and the application of nanomaterials in biomedical sciences, renewable energy, catalysis and environment. His complete video lecture is available on Youtube channel “comstech-oic”. ♦



Lecture on “Stem Cell Therapy”

Prof. Dr. Rasul Choudhary is someone who has contributed immensely in the development of scientific capacity of people all around the world and a scientist of very high caliber. He is known for his excellence in science and his motivation, perseverance and global view of science. He has a very strong connection with the developing world to build their capacity. He has not only produced good science but also helped others to produce good science, said Prof. Dr. M. Iqbal Choudhary,

Coordinator General COMSTech in his introductory remarks.

Prof. Rasul said that our focus has been on the cell therapy particularly using stem cell. He said stem cells have provided us a great opportunity in this area. Prof. Rasul talked about stem cell sources and their therapeutic use. His complete video lecture is available on Youtube channel “comstech-oic”. ♦



Certificate Course on “Quality Banana Plant for Commercial Purpose”

COMSTech, in collaboration with International Center for Chemical and Biological Sciences (ICCBS) and Pakistan Biotechnology Information Center (Karachi Chapter) organized online certificate course on “Micropropagation of Quality Banana Plant for Commercial Purpose”.

Prof. Dr. M. Iqbal Choudhary, Coordinator General, COMSTech said in his welcome address that this capacity building event is focused on Banana, which is considered as cash crop. Banana is a staple crop in

many countries in west Africa and central Africa as well as south America. Banana is prone to diseases, he mentioned. He said, tissue culture technique is very easy to perform by even farmers with little training.

Prof. Choudhary also informed that COMSTech has a major agriculture programme and working jointly with Islamic Organization of Food Security on different aspects of food security and agriculture.

The course comprised upon a lecture and an online training session covering, overview of plant

tissue culture and its applications, equipment and media used, explant selection, sterilization, initiation, multiplication, shooting and rooting. The course was attended by more than 350 scientists and research scholars.

Dr. Paul Chege of Afri-Center, International Service for the Acquisition of Agri-biotech Applications delivered the lecture. His lecture is available on youtube channel “comstech-oic”. ♦



Webinar on “Structure Based Drug Discovery”

This webinar is a part of COMSTech lecture series on emerging technologies which are changing the world. The idea of this lecture series is a brain child of Prof. Atta-ur-Rahman, said Prof. Dr. M. Iqbal Choudhary, Coordinator General COMSTech in his introductory remarks. In this lecture series, we have very carefully selected expert speakers in the fields of emerging technologies, he mentioned. Prof. Betzel, in his talk encompassed the techniques of

preparing protein, crystalizing it and collecting data and ending up with structure. He talked about X-ray laser and synchrotron light source. He also briefed about the past developments and present research work being done on drug discovery. His lecture is available on youtube channel “comstech-oic”. ♦



Webinar on “Hemicalide: Structure and Synthesis”

COMSTech organized a webinar on “Hemicalide, a complex marine natural product with strong biological activity: structure and synthesis”, on November 29, 2021, which was delivered by Prof. Dr. Georges Massiot, Emeritus Research Director, Université de Reims Champagne-Ardenne, France.

Prof. Massiot discussed a very natural product (Hemicalide) and its usefulness for drugs and gave information on structural isolation of this complex molecule. He also talked about the beginning of

synthesis work that has been done on that so far.

Prof. Massiot informed that seas are little explored, life started in the oceans and what we have on earth is just a sample of the diversity of organism. Chemodiversity is larger in oceans than in earth. His full lecture is available on COMSTech youtube channel “comstech-oic”. ♦



Webinar on “Clinical Trials – Ethical Aspects”

COMSTech organized a webinar on “Randomized Clinical Trials – Ethical Aspects”, conducted online by Prof. Dr. Khalid Saeed Khan, Distinguished Investigator, University of Granada, Spain.

This webinar is a continuation of activity in which we are going to conduct many webinars on clinical trials, said Prof. Dr. M. Iqbal Choudhary, Coordinator General COMSTech in his welcome address. He said never before such importance of clinical trials felt as we have seen during COVID19.

Dr. Khalid talked about ethics, research planning, research conduct and the process of publication. He talked about ethics, research planning, research conduct and the process of publication. He focused his lecture on ethical issues, transparency and integrity in the journey of the clinical trials. His lecture is available on “comstech-oic” youtube channel. ♦



Webinar on “Bioactivities of Turkish Medicinal Plants”

COMSTech organized an online webinar on “Bioactivities of Secondary Metabolites from Turkish Medicinal Plants”, delivered by Prof. Dr. Bilge SENER, Department of Pharmacognosy, Gazi University, Ankara-Turkey and Adjunct Professor, H.E.J. Research Institute of Chemistry, ICCBS, University of Karachi, Pakistan on November 23, 2021, online.

Prof. Sener talked about healthcare products, ongoing approaches for natural products, and bio-reactive compounds.

She said plants fulfill host of individual needs from food, clothing, shelter, and pharmaceuticals throughout the planet. Prof. Sener said plants are utilized by the homeopathy, allopathy, Unani, ayurvedic along with Chinese medicine to treat the different diseases in the world. Complete video lecture is available on “comstech-oic” youtube channel. ♦



Webinar on “EUHFORIA 2.0”

COMSTech under its “Basic Sciences Programme” organized webinar on “EUHFORIA 2.0: European Heliospheric Forecasting Information Asset” which was delivered by Prof. Dr. Stefaan Poedts, Professor and Chair, Department of Mathematics, KU-Leuven University, Belgium.

Coordinator General, COMSTech, Prof. Dr. M. Iqbal Choudhary said that the foundation of science is based on the understanding of conceptual framework, unless we

strengthen it, we cannot expect high quality science from young researchers. Prof. Poedts talked about space weather, solar wind, solar storms, solar flares, solar energetic particles and their effects on earth, consequences and socio-economic impact. Full lecture is available on “comstech-oic” youtube channel. ♦



COMSTech Funds Over 39 Million Science Projects

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COMSTech-IFS has so far financed 376 research projects in various disciplines of science and technology in 32 OIC member states by providing US\$ 4.123 million funds.

The 376 research projects from Afghanistan, Algeria, Bangladesh, Benin, Burkina Faso, Cameroon, Cote d'Ivoire, Djibouti, Egypt, Gabon, Gambia, Indonesia, Iran, Jordan, Lebanon, Malaysia, Mali, Mauritania, Morocco, Mozambique, Niger, Nigeria, Pakistan, Palestine, Senegal, Sierra Leone, Somali, Sudan, Suriname, Togo, Tunisia and Uganda have been financed under this program.

COMSTech and IFS agreed in February 1998 to enter into a collaborative program to strengthen the capacity in developing countries which are members of OIC to conduct relevant and high-quality research in sciences related to the management, use and conservation of biological resources. The program is funded in equal parts by COMSTech and IFS. ♦

COMSTech-IOFS MoU

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member states in the fields of science and technology through cooperation and mutual assistance.

In pursuit of common objectives both organizations intend to establish a general framework to facilitate and implement the collaboration and cooperation in areas of common interest. IOFS-COMSTech partnership will focus on scaling-up ongoing initiatives and exploring new opportunities to collaborate on global, regional and country-level priorities.

The areas of cooperation include: joint projects, identifying S&T needs of OIC states, capacity-building activities in agriculture and food security, exchange of information, and joint research. ♦

Eye Surgeries in Niger

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Avoidable Blindness (AFAB) Programme. LRBT Pakistan is a partner of COMSTech in this campaign.

It has been planned to conduct more than 400 cataract eye surgeries and training workshops for learning cataract surgery with Phacoemulsification under this campaign. Apart from clinics, the Pakistani team will also launch public awareness campaign about eye health. ♦

News from OIC Member States

OIC CHIEF CALLS FOR INTENSIFIED EFFORTS TO TACKLE CHALLENGES FACING CHILDREN

Jeddah (UNA-OIC) – Secretary-General of the Organization of Islamic Cooperation (OIC) Hissein Ibrahim Taha called on OIC member states and relevant institutions, international organizations and non-governmental organizations to intensify their efforts in tackling the challenges facing children, particularly those of refugees and displaced persons living under occupation and armed conflict, in



the light of measures taken by states to address the COVID-19 pandemic.

The Secretary-General stressed that when the rights of children are secured, the future of societies is guaranteed.

This came as part of his message to commemorate World Children's Day, celebrated annually on 20 November since its establishment in 1954. ♦

Turkish scientist enters list of '100 Women in Polar Science'

(Hurriyet DN) - Ebru Caymaz, an academic from Onsekiz Mart University in the northwestern province of Çanakkale, has become the first-ever Turkish scientist to be selected in the "100 Women in Polar Science" project.

The initiative, funded by the Foundation of Curtis and Edith Munson and conducted by the Ocean Foundation and Scientific Committee on Antarctic Research, enables women scientists to conduct research at the poles.

Having worked in Norway, Greenland and Iceland since 2015, Caymaz will now go to Siberia with the help of the project to study the impacts of global warming.

"I will continue my research at the poles and hope to see more women in the list in the coming years," Caymaz told daily Milliyet.

Nicknamed the "princess of the glaciers," Caymaz often climbs glaciers, does ice diving and visits icebergs as part of her research. ♦



Iran Develops Rapid Test Kits for Omicron

Tehran, IRNA – The knowledge-based E-Health Barakat Company, based in Iran, has developed a rapid COVID-19 test kit that is capable of detecting the Omicron variant, the company's CEO said.

Dr. Sajjad Moravveji told IRNA correspondent that these test kits have been developed to detect the new variant of the coronavirus – Omicron – and it can also detect the future variants.

The test kits detect the virus within 15 minutes and digitally register the patient and the samplers ID to allow smart tracking of infected people, Dr. Moravveji said.

He added that the kits, with 92% accuracy and 98% sensitivity, have been developed domestically and are now being used in the country.

The knowledge-based E-Health Barakat Company produces about 200,000 test kits of this kind on a daily basis, according to Dr. Moravveji. ♦

DHA, EPA beneficial for bone health: Qatar University study

Doha: A Qatar University study has disclosed that supplementation of fish oil (FO) with a maximum content of docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) starting at middle age may be beneficial for maintaining better bone health as one ages.

The study, published in the 16th issue of the university's Research

Magazine, also stated that fish oils aren't all the same, adding "the EPA and DHA content are the essential elements as well as the quality of the fish oils.

The researchers discovered that the supplementation of 4% CFO is very efficient in maintaining BMD in aging mice, whereas 1% CFO is only mildly beneficial. ♦

BioNTech, InstaDeep Develop Early Warning System to Detect Potential High-risk SARS-CoV-2 Variants

(TAP) - BioNTech SE and Tunisian InstaDeep Ltd announced the development of a new computational method that analyses worldwide available sequencing data and predicts high-risk variants of SARS-CoV-2.

The Early Warning System (EWS) developed in collaboration by BioNTech and InstaDeep is based on artificial intelligence (AI) calculated immune escape and fitness metrics.

The new method combines structural modeling of the viral Spike protein and AI algorithms to quickly flag potential high-risk variants entered into SARS-CoV-2 sequence data repositories within less than a day based on metrics scoring their fitness as well as their immune escape properties, reads a BioNTech press release.

The companies validated these predictions using experimental data

generated in-house and publicly available data.

During the trial period, the system has identified >90% of the World Health Organization (WHO)-designated variants (Variants of Concern, VOC; Variants of Interest, VOI; Variants Under Monitoring, VUM) on average two months in advance. WHO-designated variants Alpha, Beta, Gamma, Theta, Eta and Omicron were detected by the EWS in the same week its sequence was first uploaded.

The Omicron variant was ranked as a high-risk variant the same day its sequence became available. The IHU variant observed in France has also been evaluated by the EWS, which highlighted immune escape properties that are relatively similar to Omicron but with significantly lower fitness, making it less of a concern given current data.

The results from the study underline

that the EWS is capable of evaluating new variants in minutes and risk monitoring variant lineages nearly in real-time. It is also fully scalable.

With the advanced computational method we can analyse sequence information of the spike protein and rank new variants according to their predicted immune escape and ACE2 binding score, said Ugur Sahin, M.D., CEO and Co-Founder of BioNTech.

The Co-Founder and CEO of InstaDeep, Karim Beguir said that more than 10,000 novel variant sequences are currently discovered every week and human experts simply cannot cope with complex data at this scale. We've addressed this challenge by deploying the powerful AI capabilities of InstaDeep's DeepChain platform combined with BioNTech's SARS-CoV-2 know-how and technology. ♦

Ambassador Hissein Ibrahim Taha Assumes Office as OIC Secretary-General



Jeddah (UNA-OIC) – Secretary-General elect of the Organization of Islamic Cooperation (OIC) Ambassador Hissein Ibrahim Taha assumed office Wednesday, 17 November 2021, at the OIC General Secretariat headquarters in Jeddah, Kingdom of Saudi Arabia.

Taha was elected in November 2020 during the 47th Session of the OIC Council of Foreign Ministers (CFM) held in Niamey, Republic of Niger, as a representative of the African Group, as per the geographical rotation of the office of the OIC Secretary-General. The said session elected him as the new OIC Secretary-General for five years, starting November 2021.

Taha is a Chadian diplomat who had held several positions in his country, including Minister of

Foreign Affairs, African Integration, and International Cooperation, Minister (Assistant Deputy Secretary-General of the Presidency of the Republic), Diplomatic Advisor to the Presidency of the Republic, Minister Plenipotentiary, and Ambassador Extraordinary to France, Spain, Portugal, Greece, and the Holy See. He also served as a Senior Advisor at the Embassy of the Republic of Chad in Saudi Arabia.

The new OIC chief, who speaks French, Arabic, and English, was awarded the National Order of Chad (Knight), which is the preeminent order of merit of the Republic of Chad, the French National Order of the Legion of Honor (Officer), the highest French order of merit, and the honorary ambassador merit. ♦

Saudi Arabia's KAUST Launches Science Festival at Thuwal Beach

JEDDAH: King Abdullah University of Science and Technology has launched its annual Science Festival for 2022, which will be held Jan. 20-21.

The festival, which will be held at Thuwal Beach in Jeddah, aims to inspire young talents in Saudi Arabia, the Middle East and North Africa region.

KAUST President Tony Chan said that the world is moving towards innovation as a basis for discovery and invention, and that there is an urgent need for young people to confront the most essential problems in global societies and participate in solving them.

He pointed out that KAUST has become prominent in science and technology in Saudi Arabia, quickly becoming an international platform to inspire and nurture young scientific minds to unleash the power of science and achieve the UN's sustainable development goals.

Chan stated that this year's festival will feature a schedule including a variety of science fairs, daily evening science shows, science, technology, engineering, arts, and mathematics challenges for children, and science projects presented by KAUST students. ♦

Digital Innovation: NITDA to Hold Hackathon Challenge

(NAN) - The National Information Technology Development Agency (NITDA) of Nigeria, says it will organise editions of its national Hackathon challenge in three states: Adamawa, Oyo and Cross River.

Mrs. Hadiza Umar, Head, the Corporate Affairs and External Relations of the agency said the gesture was to drive digital innovation and entrepreneurship in the country.

The News Agency of Nigeria (NAN) reports that NITDA Hackathon challenge is a national event to be held in collaboration with academic institutions.

The aim is to drive digital innovation and entrepreneurship targeted at challenging Nigerian youths to ideate and develop solutions from inception through commercialisation process. ♦

Algeria's 1st Bioequivalence Center to be Operational Soon

ALGIERS - The first bioequivalence center in Algeria will be operational in "less than two weeks," announced by CEO of the public pharmaceutical group Saïdal, Fatoum Akacem. ♦

First Algerian Mineral Sciences Lab Accredited to International Standards

ALGIERS- The Mineral Sciences Laboratory of the National Office of Geological and Mining Research (ORGM) has been officially accredited on Thursday, in a ceremony organized in Algiers, to the international standards by obtaining the standard ISO 17025:2017. ♦



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