



**中华人民共和国科学技术部**

Ministry of Science and Technology of the People's Republic of China



**INTERNATIONAL CONFERENCE ON EMERGING TECHNOLOGIES  
TO COMBAT THE COVID-19 PANDEMIC**

**1 December 2020**

**Guangzhou, China**

**(Hybrid event)**

**(Venue: Aloft Guangzhou University Park Hotel, Guangzhou, China)**

**Organizer:**

- Department of International Cooperation of the Ministry of Science and Technology of the People's Republic of China
- Asian and Pacific Centre for Transfer of Technology (APCTT) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

**Supporter:**

- Department of Science and Technology of Guangdong Province
- Guangzhou Municipal Science and Technology Bureau

**Host:**

- Asia-Pacific Regional Innovation Knowledge Network for 4<sup>th</sup> Industrial Revolution Technologies (APRIKNET-4IR) and Secretariat Office at Guangzhou University

## **BACKGROUND**

The worldwide outbreak of COVID-19 pandemic and the consequent lockdowns and restrictions in countries have imposed major challenges to the public health and the economic activities globally. In this pandemic situation, science, technology and innovation (STI) has come to the rescue of countries on both fronts- to directly respond to the health challenges, as well as to provide adapting solutions during lockdowns and restrictions of business activities.

Towards containing the spread of the pandemic, new and emerging technologies and innovations are playing a significant role through various applications, such as for population screening, infection tracking, vaccine development, effective quarantine, prioritizing the use and allocation of resources, and designing targeted responses. Technologies and innovations are also supporting continuation of economic and social activities during the pandemic, ensuring employees' safety and restoration of business activities, delivering services and education in distance, among others. There are already many emerging technologies and advanced innovations, such as artificial intelligence, Internet of Things (IoT), big data, advanced robotics, wearable technologies, 5G based smart applications, etc., which can play a major role in managing the impact of the pandemic and in mitigating the risks.

These emerging technologies are playing a vital role on the two fronts. Firstly, in enhancing the preparedness towards such crisis situations through preventing the spread, educating, warning and empowering the governments and society to be aware of the situation. Secondly, in supporting economic recovery in terms of providing novel and more efficient ways of conducting business, education, production, research and development.

Strengthening international technology cooperation is recognized as an important means to deal with the challenges of COVID-19. Sharing of experiences and best practices of national strategies, collaborative research and development, innovation, and cross-border technology transfer are considered important to address the challenges of pandemic effectively.

Given the scale and impacts of COVID-19 pandemic, this international conference will provide a platform to share the challenges, strategies and best practices from across the Asia-Pacific region to facilitate effective prevention, adaptation and recovery from the pandemic.

## **OBJECTIVES**

- Increase knowledge and awareness of the role of science, technology and innovation (STI) and application of emerging technologies towards combating the COVID-19 pandemic

- Share national, regional and global best practices on the use of emerging technologies to address the challenges of COVID-19
- Discuss opportunities for international cooperation

## **EXPECTED OUTPUTS AND RESULTS**

- Presentations on strategies, experiences and best practices in using emerging technologies for COVID-19 pandemic management
- Increased understanding of stakeholders on collaborative research and innovation, and international and regional technology cooperation
- Recommendations for measures to promote cross-border technology transfer and to promote the application of emerging technologies for COVID-19 pandemic prevention and control

## **PARTICIPANTS**

Envisaged total number of participants is 90, comprising:

- About 30 participants from abroad, including approximately 20 high-level delegates attending from APCTT Governing Council (GC) member countries; 3-5 international resource persons; and 5 APCTT-ESCAP staff members
- About 60 Chinese participants, comprising senior representatives from ministry and academia, and representatives from the field of science, technology and innovation (STI)

The representatives of APCTT Governing Council member States, international speakers and APCTT staff shall participate in the international conference through a virtual platform.

## TENTATIVE PROGRAMME

**Date: 1 December 2020**

**Venue: Aloft Guangzhou University Park Hotel, Guangzhou, China**

**Time: 9:00 am – 5.30 pm (China Time)**

8:30-9:00	Registration	
<b>OPENING SESSION</b>		
9:00-9:10	Inaugural Address	<b>Mr. Huang Wei</b> Vice Minister, Ministry of Science and Technology of the People's Republic of China
9:10-9:20	Welcome Address	<b>Ms. Michiko Enomoto</b> Head of Asian and Pacific Centre for Transfer of Technology (APCTT), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
9:20-9:30	Opening Address	<b>Ms. Armida Salsiah Alisjahbana</b> Under-Secretary-General and Executive Secretary of the United Nations Economic and Social Commission for Asia and the Pacific
9:30-9:35	Address	<b>Mr. Zhihong Lao</b> Deputy Director General, Department of Science and Technology of Guangdong Province
9:35-9:40	Address	<b>Mr Jiang Li</b> Consultant (Level 1), Guangzhou Municipal Science and Technology Bureau
9:40-9:50	Group Photo	
<p><b>SESSION I: Strategies and role of Science, Technology and Innovation to combat the COVID-19 pandemic</b></p> <p><b>Moderator: Ms. Michiko Enomoto</b>, Head of Asian and Pacific Centre for Transfer of Technology (APCTT), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)</p>		
9:50-10:05	Approaches and policies for COVID 19 mitigation	<b>Dr. Rakesh Mishra</b> Director, CSIR-Centre for Cellular and Molecular Biology (CSIR-CCMB), India

10:05-10:20	Role of the new and emerging technologies to address COVID-19 – Imperatives for Asia Pacific	<b>Ms. Michiko Enomoto</b> Head of Asian and Pacific Centre for Transfer of Technology (APCTT), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
10:20-10:35	BGI's Efforts on Fighting Against COVID-19 Pandemic	<b>Dr Jeremy Cao</b> Vice President, International Dx Division, BGI Genomics Co., Ltd., China
10:35-10:50	STI strategies to combat COVID 19	<b>Associate Prof. Dr. Pasit Lorterapong</b> Science and Technology Counselor, Ministry of Higher Education, Science, Research and Innovation, Thailand
10:50-11:10	Discussion	
11:10-11:30	Coffee Break	
<b>SESSION II: Application of Emerging Technologies (such as 4IR technologies) to combat the COVID-19 Pandemic</b> <b>Moderator: Ms. Xuemei Yang</b> , Director, Division for International Organizations and Multilateral Cooperation, Department of International Cooperation, Ministry of Science and Technology, China		
11:30-11:45	Leveraging 4 <sup>th</sup> Industrial Revolution (4IR) technologies in the fight against COVID -19	<b>Prof. Xue-Feng Yuan</b> Guangzhou University, China
11:45-12:00	Role of fourth industrial revolution (4IR) technologies to drive inclusive economic growth during the pandemic	<b>Dr. So Young Kim</b> Director of the Korea Policy Center for the Fourth Industrial Revolution and Professor of the Graduate School of Science and Technology Policy, Korea Advanced Institute of Science and Technology (KAIST)
12:00-12:15	Supporting MSMEs' Digitalization Amid COVID-19	<b>Mr. Andre Wirjo</b> Analyst APEC Policy Support Unit Asia-Pacific Economic Cooperation (APEC) Singapore
12:15-12:30	Discussion	
12:30-13:45	Lunch Break	

<b>SESSION III: Facilitating technology collaboration to combat the COVID-19 Pandemic</b>		
<b>Moderator: Prof. Xue-Feng Yuan, Guangzhou University, China</b>		
13:45-14:00	Enabling policy ecosystem and strategies to promote use of emerging technologies for addressing COVID-19 challenges	<b>Dr. Jitendra J. Jadhav</b> Director, CSIR-National Aerospace Laboratories (CSIR-NAL), India
14:00-14:15	Responsibility from ability, Technology changes anti-epidemic	<b>Mr. Derek Chen</b> General Manager, China National Electric Apparatus Research Institute Co. Ltd, Kinte Machinery and Equipment Company, China
14:15-14:30	Role of international collaboration to address the challenges of COVID-19 and build an inclusive recovery	<b>Mr. Derek O'Halloran</b> Head, Future of Digital Economy and New Value Creation World Economic Forum Geneva, Switzerland
14:30-14:45	Leveraging open technology platforms to enhance access to information and promote research, education and healthcare to prepare for post COVID-19 recovery	<b>Ms. Clare Dillon</b> Technology Evangelist Clare Dillon Consulting Ireland
14:45-15:05	Discussion	
15:05-15:30	Coffee Break	
<b>SESSION IV: Panel discussion- Use of emerging technologies to assist in facilitating sustainable recovery of economy and building resilient society.</b>		
<b>Topics:</b>		
<b>Moderator: Ms. Michiko Enomoto, Head of Asian and Pacific Centre for Transfer of Technology (APCTT), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)</b>		
15:30-17:00	<p><b><u>Panelists</u></b></p> <p><b>Mr. Md. Towhid Hasanat Khan</b>, Additional Secretary, Ministry of Science and Technology, Bangladesh</p> <p><b>Dr. Puspita Lisdiyanti</b>, Director of Research Center for Biotechnology, Indonesian Institute of Sciences (LIPI), Indonesia</p> <p><b>Dr. Mohsen Vaez</b>, Molecular Genetics, Department of Biotech, Iranian Research Organization for Science and Technology (IROST), Islamic Republic of Iran</p>	

	<p><b>Mr. Tulsi Narayan Maharjan</b>, Senior Divisional Engineer (Mechanical), Ministry of Education, Science and Technology, Nepal</p> <p><b>Ms. Saba Khan</b>, Director, Innovation &amp; Commercialization, National University of Sciences and Technology, Ministry of Science and Technology, Government of Pakistan, Pakistan</p> <p><b>Mr. J A A D Jayasooriya</b>, Deputy Director General (Research and Development), National Engineering Research and Development Centre (NERD Centre), Sri Lanka</p> <p><b>Mr. Ziyodbek Yunusov</b>, Deputy Director of Scientific and Practical Center for the Implementation of Innovative Projects, Ministry of Innovative Development, Republic of Uzbekistan</p>	
17:00-17:15	The Opening Ceremony of the new website of Asia-Pacific Regional Innovation Knowledge Network – 4IR (APRIKNET-4IR)	Officials from The Ministry of Science and Technology and Prof. Xue-Feng Yuan, Guangzhou University, China
<b>CLOSING SESSION</b>		
17:15-17:30	Remarks	<p><b>Ms. Michiko Enomoto</b> Head of Asian and Pacific Centre for Transfer of Technology (APCTT), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)</p> <p><b>Mr. Linhao Chen</b> Deputy Director General, Department of International Cooperation, Ministry of Science and Technology of China</p>
18:00-19:00	Dinner	