



MESTECC-APCTT

2018 Conference on the Fourth Industrial Revolution

“New and Emerging Technologies in Achieving Sustainable Development Goals”

23-24 October 2018, Hotel Bangi-Putrajaya, Putrajaya, Malaysia.

Background:

Science, technology and innovation (STI) has been identified as a means of implementation of the post-2015 development agenda and for achieving the sustainable development goals (SDGs). It is very clear that the achievement of the SDGs requires major innovations and technological advances which, in turn, require research and development. STI is no longer the prerogative of high income countries alone as some developing countries particularly those in Asia-Pacific region have achieved significant economic growth through the creation and deployment of STI capacity. STI is essential to be integrated into public policies, action plans and national development agenda to achieve SDGs.

Emerging technologies or often referred to as disruptive technologies in the sphere of Fourth Industrial Revolution (4IR) have the potential to improve quality of life and societal well-being, drive economic growth as well as increase productivity and efficiency. However, there are bound to be challenges such as governments and organizations might be unable to adapt and regulate new technologies to capture their benefits. Several countries are already adopting and implementing various 4IR-related initiatives such as Smart and Future Cities; Intelligent Integrated Transportation and Mobility Systems; Healthcare Management and Society Support System; and Digital Government, Support Services and Content Delivery System.

To reap the full benefits of emerging technologies such as Internet of Things (IoT), Artificial Intelligence or Block chain, it is important to understand the social, cultural, political, regulatory, environmental and economic factors influencing access to these technologies. Hence, more participatory and inclusive discussion through engagement and networking with STI actors for potential cooperation at the national, regional or global level is needed to unlock the benefits, particularly in new emerging technologies.

A conducive ecosystem through supportive infrastructure, policies, legislations and regulations, standards, right talent and industry commitment including the readiness of the community at large to embrace technologies would facilitate the diffusion of 4IR technologies in various sectors or sphere of life. The demand for more personalized or customized products and services by society such as e-hailing and cryptocurrency is

creating new business models that provide opportunities for entrepreneurship, challenging the conventional business models.

As such, this conference is envisaged to facilitate awareness and foster collaboration among stakeholders, including those from public and private sector, academia, Non-Governmental Organizations (NGOs) and international participants involved in 4IR ecosystem. Deliberations during the conference will focus on key aspects of 4IR technologies such as IoT, Artificial Intelligence, Augmented Reality, Big Data, Additive Manufacturing, Cloud Computing and Cyber Security.

Objectives:

- (1) To create awareness on new and emerging technologies that can accelerate Fourth Industrial Revolution (4IR);
- (2) To facilitate knowledge sharing on various new and emerging technologies and applications; and
- (3) To demonstrate 4IR related technologies that have strong social impact and could help in achieving sustainable development goals
- (4) To facilitate regional cooperation and sharing of best practices among Asian and Pacific countries on the innovative use of new and emerging technologies for social purposes and in achieving SDGs.
- (5) To enable access to information on new and innovative ICT applications and explore possibilities for their cross-border transfer

Expected Outcomes:

- (1) Improved understanding of the current scenario related to 4IR technologies encompassing the key enablers such as digital infrastructure, policies, legislations and regulations, standards and talent;
- (2) Increased awareness and knowledge of key issues, major challenges, lessons learnt and leading practices in the access as well as application of 4IR technologies in addressing sustainable development challenges; and
- (3) Formation of networks and collaborations to enable further discussions and knowledge sharing within the region going forward.

Participants:

Participation is expected by international speakers, government officials, leaders of industries and industry association, NGOs, representatives of Government-Linked Companies (GLCs) and Government Owned Companies (GOCs), researchers and practitioners.

Site Visit:

A site visits to MESTECC's agencies for foreign participants and speakers will be organized to showcase the domestic facilities available on Innovative ICT Applications and IT Enabled Services.

11:00-11:20	The Role of Blockchain Technology in the Future of Electricity	Dr. Wei-nee Chen, Acting Chief Executive Officer, Sustainable Energy Development Authority (SEDA), Malaysia
11:20-11:40	Q & A	
11:40-12:00	Cyber Resilience in Fourth Industrial Revolution	Mr. Mohd Zabri Adil Talib, Head of Digital Forensics Department, Cybersecurity, Malaysia
12:00-12:20	An IoT Eco-system for Sustainable Development Goals (SDGs)	Dato' Sri Ganes, Malaysia IoT Association (MyIoT)
12:20-12:40	Q & A	
12:40-13.40	Lunch	
<p>SESSION II: Enablers in Facilitating Technology Diffusion</p> <p><i>Fourth Industrial Revolution is characterized by a range of new technologies that are fusing the physical, digital and biological worlds through cyber-physical system (CPS), thus impacting all disciplines, economies and industries. Mega trends such as rapid urbanization, demographic shifts and technological breakthroughs serve as game changers with far-reaching impacts on individuals, society, industries and nations. This session examines the enabling environment needed to facilitate technology diffusion for sustainable development.</i></p> <p>Moderator: Mr. Rosli Kp Mohamed Yoosuf, Senior Director, Strategic Business Development, Corporate Strategy Office, MIMOS Berhad</p>		
13:40 -14:00	Promoting Regional Cooperation on R&D in Innovative ICT Applications in Asia	Mr. Takahiro Kono, Director, NICT Asia Center, Bangkok, Thailand
14:00 -14:20	Human Capital & The Future of Jobs	Mr. Sivakumeren A Narayanan, Deputy Chief Executive Officer, Talent Corporation Malaysia Berhad
14:20-14:50	Intelligent Manufacturing in the Digital Age – Perspectives from China	Prof. Xue-Feng Yuan, Director, Institute for Systems Rheology, Guangzhou University, China & Founding Director, National Supercomputer Centre, Guangzhou, China
14:50 -15:10	Q & A	
15:10-15:20	Short break	
15:20 -15:40	National CoE on Smart Manufacturing	Prof. Ir. Dr. Ahmad Fadzil Mohamad Hani, President and Group Chief Executive, SIRIM Berhad, Malaysia
15:40 -16.00	Role of E-commerce Platform in Driving Digital	Mr. Nurezali Osman, Head of National e-Commerce Strategic Roadmap, e-

	Economy	Commerce Division, Malaysia Digital Economy Corporation (MDEC), Malaysia
16:00 -16.15	Q & A	
16:15 -17:00	Coffee & Networking Session	
24 October 2018 (Wednesday)		
SESSION III: Role of Emerging Technologies in Achieving SDGs and Policy Recommendations		
09:00-09:20	Presentation on “Innovation for ASEAN Peat Swamp Forest Management” - Dr. Hafizal Mohamad, MIMOS, Malaysia	
09:20-09:40	Presentation on IoT, Big Data Analytics and Machine Learning Applications for Industrial Productivity - Mr. Manpreet Singh, Director, Infinite Sum Modeling, Gurugram, India	
09:40-10:00	Regional Cooperation on New and Emerging Technologies for Achieving SDGs – Dr. Satyabrata Sahu, Coordinator, APCTT-ESCAP	
10:00-10:15	Q & A	
10.15-10.30	Coffee Break	
10:30-11:40	Panel Discussion on the Role of Emerging Technologies in Achieving SDGs and Policy Recommendations	<p>Moderated by: Academician Professor Emerita Datuk Dr Mazlan Othman FASc, ASM Council member and Senior Fellow, Malaysia</p> <p>Prof. Madya. Dr. Ramzah Dambul, Deputy Secretary General of Energy, Science, Technology, Environment and Climate Change, MESTECC</p> <p>Mr. Khor Yew Shin, Senior Strategist, Telecommunications and Digital Technology, Huawei Technologies (Malaysia) Sdn. Bhd</p> <p>Prof. Xue-Feng Yuan, Director, Institute for Systems Rheology, Guangzhou University, China & Founding Director, National Supercomputer Centre, Guangzhou, China</p> <p>Mr. Manpreet Singh, Director, Infinite Sum Modeling, Gurugram, India</p> <p>Mr. Nobuyuki Asai, Deputy Director, NICT Asia Center, Bangkok, Thailand</p>

11:40-12:00	Key Recommendations and Way Forward	Dr. Krishnan S. Raghavan, Coordinator, APCTT-ESCAP
12:00-12:10	Closing Remarks	MESTECC, Malaysia
12:10-13:00	Lunch	
13:00-17:30	Visit to MESTECC's Agencies for foreign participants and speakers	1. MIMOS 2. SIRIM (Bukit Jalil)