

International Conference on Fourth Industrial Revolution Technologies for Sustainable Development



Jointly Organized by

**Asian and Pacific Centre for Transfer of Technology (APCTT) of
the United Nations Economic and Social Commission for Asia and
the Pacific (ESCAP)**

and

**Department of Scientific and Industrial Research (DSIR),
Ministry of Science and Technology, Government of India**

30 November 2021
New Delhi, India
(Virtual)

PROGRAMME

Date: 30 November 2021

Time: 0900 – 1615 hours (India Time: GMT + 5:30)

OPENING SESSION		
09:00-09:50	<p>Welcome Address</p> <p>Opening Address</p> <p>Special Remarks</p> <p>Keynote Address</p> <p>Group Photo</p>	<p>Ms. Preeti Soni Head, Asian and Pacific Centre for Transfer of Technology, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)</p> <p>Dr. Shekhar C. Mande Secretary, Department of Scientific and Industrial Research (DSIR), and Director General, Council of Scientific and Industrial Research (CSIR), Ministry of Science and Technology, Government of India</p> <p>Ms. Armida Salsiah Alisjahbana Under-Secretary-General and Executive Secretary of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)</p> <p>Dr. Rajiv Kumar Vice Chairman, NITI Aayog (National Institution for Transforming India), Government of India</p>
<p>09:50-11:15 PLENARY SESSION I: 4IR Technologies to Achieve Sustainable Development Goals (SDGs) – Opportunities and Challenges <i>This plenary session will deliberate on the overarching role of 4IR technologies to address the challenges of sustainable development. It will also touch upon the issues of digital divide and intellectual property management in wider adoption of such technologies.</i> Chair: Mr. Sanjeev Sanyal, Principal Economic Advisor, Department of Economic Affairs, Ministry of Finance, Government of India</p>		
09:50-10:05	Role of 4IR Technologies in Achieving the Sustainable Development Goals (SDGs)	<p>Mr. Purushottam Kaushik Head, Centre for the Fourth Industrial Revolution (India), World Economic Forum</p>
10:05-10:20	Policies and Financial Tools for Resilient Economic Recovery to Achieve SDGs in the Fourth Industrial Revolution Era	<p>Mr. Sanjeev Sanyal Principal Economic Advisor, Department of Economic Affairs, Ministry of Finance, Government of India</p>
10:20-10:35	Intellectual Property Management in The Fourth Industrial Revolution Era	<p>Dr. Carlos María Correa Executive Director, South Centre, Geneva, Switzerland</p>
10:35-10:50	Bridging the Digital Divide to Support Adoption of 4IR Technologies	<p>Prof. Subhasis Chaudhuri Director, Indian Institute of Technology (IIT) Bombay, Mumbai, India</p>
10:50-11:15	Discussion	

11:15-11:30	COFFEE BREAK	
11:30-12:45 BREAKOUT SESSION I: 4IR Technologies to Combat COVID-19 and Strengthen Healthcare Systems <i>This breakout session will deliberate on the policies, strategies, innovations, and applications of 4IR technologies to fight the COVID-19 pandemic. The deliberations will focus on how healthcare is posed to transform into a smart and resilient sector with use of such technologies during and post COVID-19 pandemic.</i> Chair: Dr. Randeep Guleria, Director, All India Institute of Medical Sciences (AIIMS), New Delhi, India Rapporteur: Prof. P. Uma Maheswari Devi, Director, Internal Quality Assurance Cell (IQAC) and Professor, Department of Applied Microbiology & Biochemistry, Sri Padmavati Mahila Viswa Vidyalayam (Women's University), Tirupati, India		
11:30-11:45	Future of Healthcare under Fourth Industrial Revolution – Implications for Policy and Strategy Development	Dr. Randeep Guleria Director, All India Institute of Medical Sciences (AIIMS), New Delhi, India
11:45-12:00	Disruptive 4IR Applications in Medical/Healthcare Services to Combat COVID-19 in Asia-Pacific	Prof. Subhas Chandra Mukhopadhyay Director of International Engagement, School of Engineering, Macquarie University, Australia
12:00-12:15	Digital Transformation and Innovations in Healthcare – Opportunities and Challenges	Dr. Anurag Agarwal Director, Institute of Genomics and Integrative Biology, Council of Scientific & Industrial Research (CSIR-IGIB), New Delhi, India
12:15-12:30	The Fourth Industrial Revolution: Towards Structural Transformations of Asia-Pacific Healthcare Systems	Dr. Kalenzi Cornelius, Fellow, Korea Policy Centre for the Fourth Industrial Revolution (KPC4IR), Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea
12:30-12:45	Discussion	
11:30-12:45 BREAKOUT SESSION II: 4IR Technologies for Climate Change Mitigation and Clean Energy <i>This breakout session will deliberate on enabling policies and strategies to harness 4IR technologies to reduce Greenhouse gas (GHG) emissions and shift towards clean energy sources. The experts will share experiences, good practices, and case studies for climate change mitigation by harnessing 4IR technologies.</i> Chair: Mr. Jagjeet Singh Sareen, Assistant Director General, International Solar Alliance (ISA), India Rapporteur: Dr. Sukhomay Pal, Professor, Mechanical Engineering, IIT Guwahati, India		
11:30-11:45	Accelerating Clean Energy Innovations and Applications Through Investments in Emerging Technologies	Mr. Jagjeet Singh Sareen Assistant Director General, International Solar Alliance (ISA), India
11:45-12:00	Enabling Policies and Strategies to Promote 4IR Technologies for Climate Change Mitigation In Asia-Pacific	Dr. Venkatachalam Anbumozhi Director - Research Strategy and Innovation, Economic Research Institute for ASEAN and East Asia (ERIA), Indonesia
12:00-12:15	Harnessing 4IR Technologies for Sustainable and Smart Cities	Mr. Kok-Chin Tay Chairman of the Smart Cities Network, Director, Smart Cities Council ASEAN, Singapore

12:15-12:30	Adoption of 4IR Technologies for Development of Clean Energy and Low Carbon Growth	Prof. Pinakeswar Mahanta Director, National Institute of Technology (NIT), Arunachal Pradesh and Professor, Mechanical Engineering, IIT, Guwahati, India
12:30-12:45	Discussion	
11:30-12:45 BREAKOUT SESSION III: Harnessing 4IR Technology for Sustainable Production and Resilient Economic Recovery from the COVID-19 Pandemic <i>This breakout session will discuss the challenges, strategies, and good practices with examples from the Asia-Pacific region to facilitate sustainable production and resilient recovery from the COVID19 pandemic through accelerating the development and usage of 4IR technologies.</i> Chair: Prof. (Dr.) Sachin Chaturvedi, Director General (DG), Research and Information System for Developing Countries (RIS), New Delhi, India Rapporteur: Dr. Indranil Biswas, Senior Principal Scientist, Programme Management Division, CSIR-Central Glass and Ceramic Research Institute (CGCRI), Kolkata, India		
11:30-11:55	Policies and Financial Tools to Support 4IR Technologies	Prof. (Dr.) Sachin Chaturvedi Director General, Research and Information System for Developing Countries (RIS), New Delhi, India
11:55-12:20	4IR-Driven Manufacturing for Accelerating Resilient Recovery in Post COVID-19 Era	Dr. Martyn Davies Managing Director for Emerging Markets and Africa, Dean, Deloitte Alchemy School of Management, Deloitte, South Africa
12:20-12:45	Discussion	
12:45-13:45	LUNCH BREAK	
13:45-16:00 PLENARY SESSION II: Panel Discussion on Proposals for Regional Cooperation on 4IR Technologies to Promote Sustainable Development <i>This session will deliberate on the strategies for regional cooperation to promote development and utilization of 4IR technologies for sustainable development. The panelists, among the representatives from the member States of ESCAP, will share views and experiences on the policy, strategies and good practices that have proved successful towards strengthened regional cooperation for innovation, transfer and commercialization of 4IR technologies. The discussion will help develop policy recommendations for regional cooperation to harness 4IR technologies.</i> Chair: Mr. Rajan Sudesh Ratna, Economic Affairs Officer, Subregional Office for South and South-West Asia, ESCAP		
13:45-14:00	Summary of breakout sessions I, II, III	Chairs/Rapporteurs of breakout sessions I, II, III
14:00-15:30	Panel discussion	Representatives of Member States (5-7 minutes each) People's Republic of China: Ms. Xuemei Yang Director, Department of International Cooperation, Ministry of Science and Technology (MOST), China

		<p>India: Prof. Abhay Karandikar Director, Indian Institute of Technology (IIT), Kanpur, India</p> <p>India: Prof. Jayant M Modak Professor, Chemical Engineering and Former Deputy Director, Indian Institute of Science (IISc), Bangalore, India</p> <p>Islamic Republic of Iran Dr. Alireza Allahyari General Director, Iranian Research Organization for Science and Technology (IROST), Ministry of Science, Research & Technology, Islamic Republic of Iran</p> <p>Sri Lanka: Mr. Ajith Dhammika Jayasuriya Deputy Director General (R&D), National Engineering Research & Development Centre (NERDC), Government of Sri Lanka</p> <p>Thailand: Dr. Kamolrat Intaratat Director of Expertise Research Centre, Associate Professor, School of communication Arts, Sukhothai Thammathirat Open University, Thailand</p>
15:30-16:00	Open discussion	
CLOSING SESSION		
16:00-16:15	Remarks	Ms. Preeti Soni Head, APCTT, ESCAP
	Remarks	Mr. Surinder Pal Singh Joint Secretary and National Focal Point for APCTT, Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India
	Vote of Thanks	Dr. Ramanuj Banerjee Scientist F and National Focal Point for APCTT, Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India

Master of Ceremonies: Dr. Vanita Sood, Deputy Secretary & Chief Welfare Officer (CWO), Department of Personnel & Training, Government of India