



## 总秘书处 (SG)

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致:

- 国际电联各成员国
- 国际电联各部门成员、部门准成员、学术成员和相关国际组织、区域性组织和国家组织

事由: **2020年国际电联大视野会议 – 业界驱动的数字化转型**  
**2020年9月7-9日, 越南河内**

尊敬的先生/女士,

1 大视野会议活动是国际电联为增进与学术界和研究机构的合作而开展的举措。我高兴地向您通报, 将第十二次举办这一具有前瞻性的系列学术大会, 目的在于确定信息通信技术 (ICT) 的新兴发展状况, 尤其是那些需要国际标准来帮助实现信息社会医疗卫生发展的领域。“2020年国际电联大视野会议 – 业界驱动的数字化转型” 将于2020年9月7-9日结合 [国际电联2020数字世界展](#) 在越南河内举办。

2 2020年大视野会议征集原创学术论文, 以分享对于正在进行的项目和数字化转型相关研究的真知灼见。大视野会议的目标对象是ICT和社会经济发展领域的专家, 包括研究人员, 学者, 学生, 工程师, 政策制定人员, 监管人员, 创新人才和未来学家。论文征集函全文见 **附件1**。论文提交截止日期为**2020年4月6日**。

3 国际电联成员国、部门成员、部门准成员和学术机构以及愿参加此工作的来自国际电联成员国的任何个人均可参加。这里所指的“个人”亦包括作为国际、区域和国家组织成员的个人。会议不收取任何费用, 但亦不发放与会补贴。

4 我们鼓励所有国际电联成员在各自国家的学术界推广此重大活动。

5 当大会临近时, 将在活动网页上提供有关注册和会议后勤服务方面的详细信息: <http://itu.int/go/K-2020>。请注意, 此次活动参与者的预注册仅以在线方式进行。

6 我们谨在此提醒您，一些国家的公民需要获得签证才能入境越南并逗留。在此情况下，需要向驻贵国的越南代表机构（使馆或领事馆）申领签证。如贵国没有此类机构，则请向驻离出发国最近国家的此类机构申领。需要东道国帮助协办入境签证的与会者，请查询大视野会议活动网页 <http://itu.int/go/K-2020>。信息将尽快发布。

顺致敬意！

[原件已签]

秘书长  
赵厚麟

附件：1件

**ANNEX**



Co-located with



Ha Noi, 6-9 September

Organized by



## ***12<sup>th</sup> ITU Kaleidoscope academic conference***

### **INDUSTRY-DRIVEN DIGITAL TRANSFORMATION**

Ha Noi, Viet Nam, 7-9 September 2020

#### **Call for Papers**

***Kaleidoscope 2020 – Industry-driven digital transformation*** is the twelfth in a series of peer-reviewed academic conferences organized by ITU to bring together a wide range of views from universities, industry, and research institutions. The aim of the Kaleidoscope conferences is to identify emerging advancements in information and communication technologies (ICTs) and, in particular, areas in need of international standards to aid the healthy development of the Information Society.

#### **Theme**

The Fourth Industrial Revolution has data analytics at its core, and relies on innovations in fields such as robotics, cyber-physical systems, digital twins, virtual simulation, augmented reality, edge computing, artificial intelligence and blockchain – innovations all contributing to digital transformation of industrial processes.

In particular, the manufacturing sector has been an early adopter of new technologies capitalizing on connectivity and intelligence, but these technologies introduce endless possibilities – the automotive, energy, retail and healthcare industries are all moving in this direction.

#### **Objective**

*Kaleidoscope 2020* calls for original academic papers sharing insight into ongoing projects and research relevant to digital transformation. It targets specialists in the fields of ICT and socio-economic development, including researchers, academics, students, engineers, policymakers, regulators, innovators, and futurists.

#### **Date and venue**

7-9 September 2020, in conjunction with ITU Digital World 2020, Ha Noi, Viet Nam (6-9 September 2020 - <http://telecomworld.itu.int/>)

#### **Submission of papers**

Prospective authors are invited to submit full, original papers. The submission should be within eight pages, including a summary and references, using the template available on the conference's website. All papers will go through a double-blind peer-review process. Submission must be made electronically; see <http://itu.int/go/K-2020> for more details on online submission (EDAS). Paper proposals will be evaluated based on content, originality, clarity, relevance to the conference's theme and, in particular, **significance to future standards**.

#### **Deadlines**

Submission of full paper proposals: **6 April 2020**

Notification of paper acceptance: **12 June 2020**

Submission of camera-ready accepted papers: **26 June 2020**

#### **Publication and presentation**

Accepted and presented papers will be published in the Conference Proceedings. In addition, extended versions of selected papers will be considered for publication in the *International Journal of Technology Marketing*, the *International Journal of Standardization Research*, or the *Journal of ICT Standardization*.

## Awards

A prize fund totalling CHF 6 000.- will be shared among the authors of the three best papers, as judged by the Steering and Technical Programme Committees. In addition, young authors of up to 30 years of age presenting accepted papers will receive Young Author Recognition certificates.

## Keywords

Information and communication technologies (ICTs), standards, digital transformation, manufacturing and energy management, smart manufacturing, software defined networking, cyber-physical systems (CPS), cloud computing, fog computing, edge computing, mobile technologies, wireless networking (5G and beyond), machine-to-machine, 3D printing, advanced robotics, big data analytics, artificial intelligence (AI), machine learning, internet of things (IoT), industrial internet of things (IIoT), RFID technology, cognitive computing, trustworthiness, security, privacy.

## Suggested (non-exclusive) list of topics

<b>Track 1:</b> <b>Network and computing infrastructure, architecture</b>	<ul style="list-style-type: none"><li>• Design principles, architecture and protocols for IIoT and digital twins</li><li>• Protocols and mechanisms for seamless IoT communications in wireless sensor networks</li><li>• Mobile and wireless communications</li><li>• Architecture and protocols for decentralized networking and services</li><li>• Cloud, fog and edge architectures</li></ul>
<b>Track 2:</b> <b>Applications and services</b>	<ul style="list-style-type: none"><li>• Smart manufacturing</li><li>• infrastructure systems</li><li>• Verification and testing</li><li>• Virtual and augmented reality</li></ul>
<b>Track 3:</b> <b>Enabling technologies</b>	<ul style="list-style-type: none"><li>• AI and machine learning</li><li>• Intelligent real time data analytics</li><li>• Data management (analysis, quality, exchange, interoperability and integration prediction)</li></ul>
<b>Track 4:</b> <b>Security, privacy and trust</b>	<ul style="list-style-type: none"><li>• Security architectures, trust, identity management, protection mechanisms</li><li>• Threat models and attack strategies</li><li>• Security applications and management</li><li>• Lightweight cryptography</li></ul>
<b>Track 5:</b> <b>Social, economic, standards, legal and policy aspects</b>	<ul style="list-style-type: none"><li>• Regulation and standards for industrial Internet tools and services</li><li>• Multi-disciplinary standardisation</li><li>• New business models and multi-stakeholder aspects for digital transformation</li></ul>

## Steering Committee

Christoph Dosch, ITU-R Study Group 6 Vice-Chairman; IRT GmbH, Germany

Eva Ibarrola, University of the Basque Country, Spain

Kai Jakobs, RWTH Aachen University, Germany

Gyu Myoung Lee, Liverpool John Moores University, United Kingdom

Mitsuji Matsumoto, Waseda University Emeritus Professor, Japan

Roberto Minerva, Télécom SudParis, France

Mostafa Hashem Sherif, Consultant, United States

### **Technical Programme Committee**

Chairman: Mostafa Hashem Sherif, Consultant, United States

The Technical Programme Committee is composed of over 60 subject-matter experts. Details will be available shortly at: <http://itu.int/en/ITU-T/academia/kaleidoscope/2020/Pages/progcom.aspx>.

### **Additional information**

For additional information, please visit the conference website: <http://itu.int/go/K-2020>. Inquiries should be addressed to Alessia Magliarditi at [kaleidoscope@itu.int](mailto:kaleidoscope@itu.int).

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