



General Secretariat (SG)

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TSB/AM

To: ITU Member States
ITU Sector Members, Associates,
Academia and relevant international,
regional and national organizations

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Subject: **ITU Kaleidoscope 2020 – Industry-driven digital transformation
Ha Noi, Viet Nam, 7-9 September 2020**

Dear Sir/Madam,

1 As part of the Kaleidoscope events, an ITU initiative to increase cooperation with academia and research institutions, I am pleased to inform you about the twelfth in a series of forward-looking academic conferences that aim at identifying emerging developments in information and communication technologies (ICTs) and, in particular, areas in need of international standards to aid the healthy development of the Information Society. *Kaleidoscope 2020 – Industry-driven digital transformation* will take place in conjunction with [ITU Digital World 2020](#), Ha Noi, Viet Nam, from 7-9 September 2020.

2 *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. The full text of the call for papers may be found in **Annex 1**. It invites submissions by **6 April 2020**.

3 Participation is open to ITU Member States, Sector Members, Associates and Academic Institutions and to any individual from a country which is a member of ITU who wishes to contribute to the work. This includes individuals who are also members of international, regional and national organizations. The event is free of charge but no fellowships will be granted.

4 We encourage all ITU members to promote this event within the academic community of their countries.

5 Detailed information concerning registration and logistics will be available on the event's webpage, <http://itu.int/go/K-2020>, closer to the date of the conference. **Please note that pre-registration of participants for this event will be carried out exclusively online.**

6 We would remind you that citizens of some countries are required to obtain a visa in order to enter and spend time in Viet Nam. Where this is the case, the visa must be requested and obtained from the office (embassy or consulate) representing Viet Nam in your country or, if there is no such office in your country, from the one that is closest to the country of departure. Participants who need support from the host country to obtain an entry visa are requested to check the Kaleidoscope webpage at <http://itu.int/go/K-2020>. Information will be published as soon as available.

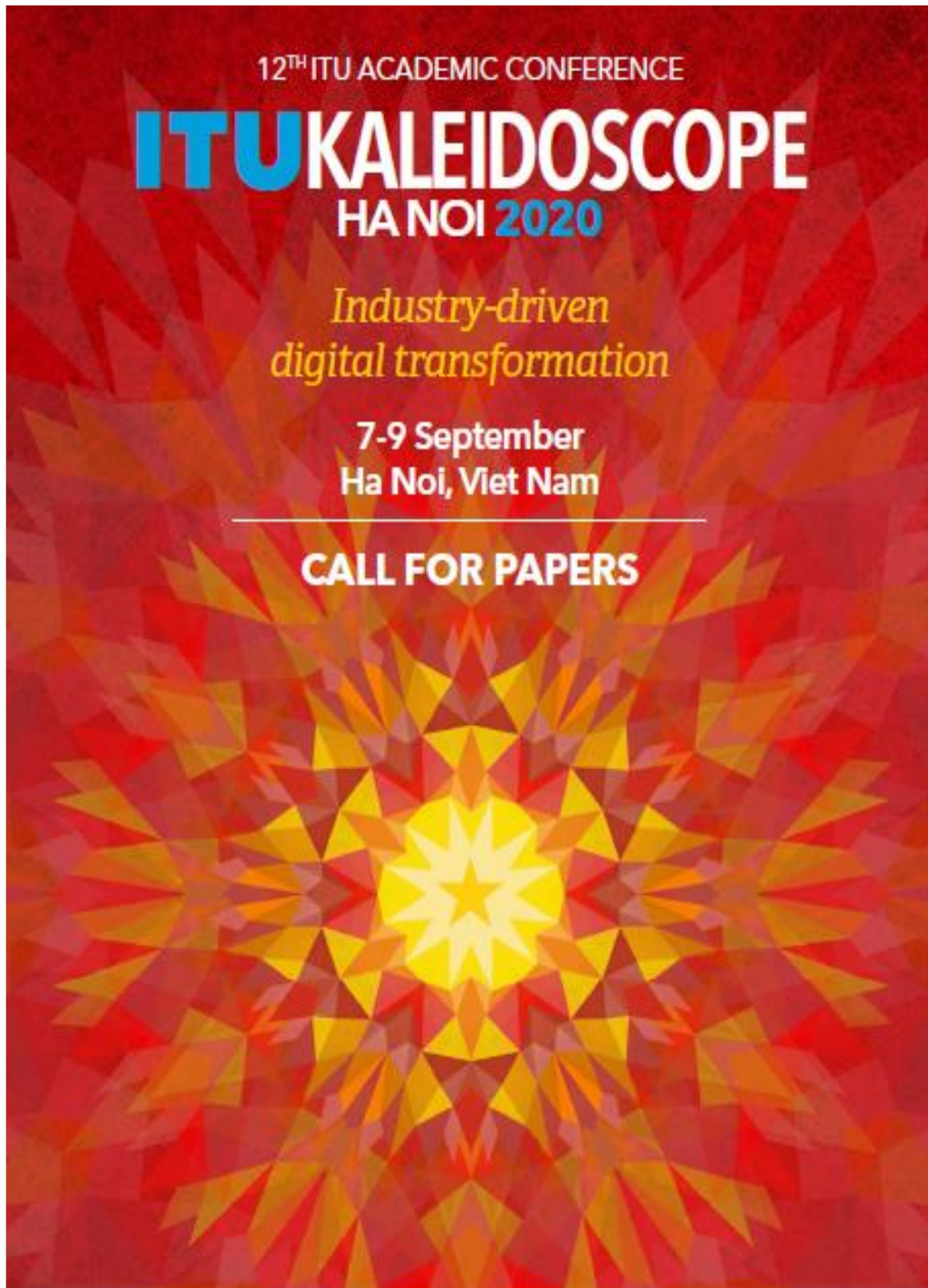
Yours sincerely,

(signed)

Houlin Zhao
Secretary-General

Annex: 1

ANNEX



Co-located with



Organized by



12th 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

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

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

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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.