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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: 国际电联2024年大视野活动 – 面向可持续世界的创新和数字化转型, 印度新德里
(2024年10月21-23日)

尊敬的先生/女士,

1 大视野系列会议是国际电信联盟(国际电联)增进学术界和工业研发之间对话而发起的举措,为此我高兴地向您通报,将举办这一前瞻性系列学术大会的第十五次会议,目的在于确定信息通信技术(ICT)的新发展,尤其是那些需要国际标准来帮助实现互连互通世界可持续发展的领域。“面向可持续发展世界的创新和数字化转型活动”将于2024年10月21-23日在印度新德里与2024年世界电信标准化全会(WTSA-24)同期举行。

2 2024年大视野活动征集原创学术论文,探讨技术创新和数字化转型对政策、监管、法律和道德框架、经济和社会的影响。重点将放在国际ICT标准如何为实现联合国可持续发展目标做出贡献。论文征集函全文见附件1。提交截止日期为2024年4月29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有意参与此工作的国际电联成员国任何个人均可参加。其中亦包括作为国际、区域性和国家组织成员的个人。活动不收取任何费用。

4 我们鼓励所有国际电联成员在各自国家的研究界,包括大学、学术机构、行业研发和创业公司中推广这项活动。本次活动还将举办一场以青年与标准化为主题的特别会议。

5 当大会临近时,将在活动网页(<http://itu.int/go/K-2024>)上提供有关注册和后勤服务的详细信息。请注意,此次活动参与者的预注册仅以在线方式进行。

顺致敬意!

(已签)

秘书长
多琳·伯格丹-马丁

附件: 1件

ANNEX

15TH ITU ACADEMIC CONFERENCE

ITUKALEIDOSCOPE NEW DELHI 2024

*Innovation and digital transformation
for a sustainable world*

21-23 October 2024
New Delhi, India

CALL FOR PAPERS

Hosted by



Organized by



ITUKALEIDOSCOPE

NEW DELHI2024

Kaleidoscope 2024: Innovation and digital transformation for a sustainable world is the fifteenth 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 Kaleidoscope is to foster collaboration and discussion on emerging trends in technologies for a digital and sustainable transformation that can benefit humanity.

CALL FOR PAPERS

Preamble

The United Nations (UN) 2030 Agenda for sustainable development, which includes the 17 Sustainable Development Goals ([SDGs](#)), recognizes that “*the spread of information and communication technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies, as does scientific and technological innovation across areas as diverse as medicine and energy*”.

The UN Secretary-General’s vision on the future of global cooperation puts forward an upgraded UN that can offer more relevant, system-wide, multilateral and multi-stakeholder solutions to better respond to humanity’s most pressing challenges, focusing significantly on innovation and digital transformation.

Sustainable digital transformation and universal connectivity are ITU’s main goals, as indicated in the Union’s Strategic Plan, which put forward a clear vision for “*an information society, empowered by the interconnected world, where telecommunication/information and communication technologies (ICTs) enable and accelerate social, economic and environmentally sustainable growth and development for everyone*”.

Theme

The theme of the fifteenth edition of the ITU Kaleidoscope academic conference captures the ongoing global efforts to harness the power of technology for positive and sustainable change.

The landscape of innovation and digital transformation is evolving at an unprecedented pace, influencing every aspect of our lives, and profoundly impacting global development. As we strive to achieve the SDGs and address pressing societal and environmental concerns, the role of ICTs becomes pivotal.

The conference invites contributions that delve into cutting-edge research, transformative technologies, and innovative practices that underpin the digital revolution with a focus on sustainability and standardization. From the fundamental restructuring of network infrastructures to the applications shaping sustainable development, and the enabling technologies driving these advancements, we seek to explore the multidimensional facets of innovation and digital transformation.

Objective

The fifteenth Kaleidoscope conference calls for original, academic papers exploring technological innovation and digital transformation's implications for policy, regulation, legal and ethical frameworks, the economy, and society. **Emphasis is placed on how international ICT standards contribute to achieving the UN SDGs.**

Audience

Kaleidoscope 2024 targets specialists in the fields of ICT and socio-economic development, including researchers, academics, students, engineers, policymakers, regulators, and innovators.

Date and venue

21-23 October 2024, in conjunction with the World Telecommunication Standardization Assembly 2024 (WTSA-24), 15-24 October - www.itu.int/wtsa/2024/

Submission of papers

Submission of full, original papers should be within eight pages, including a summary and references, using the template available on the event website. All papers will go through a double-blind peer-review process. Submission must be made electronically; see <http://itu.int/go/K-2024> for more details on online submission (EDAS). Paper proposals will be evaluated according to content, originality, clarity, relevance to the conference's theme and, in particular, significance to future standards.

Deadlines

Submission of full paper proposals: **29 April 2024**

Notification of paper acceptance: **12 July 2024**

Submission of camera-ready accepted papers: **2 August 2024**

Publication and presentation

Accepted and presented papers will be published in the Conference Proceedings.

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

Artificial intelligence, cloud computing, digital transformation, extended reality, green communications, human-oriented technologies, Internet of Things, machine learning, metaverse, mobile and wireless communications, regulation and standardization, security and privacy in cyberspace, technological innovation, UN agenda for sustainable development

Suggested (non-exclusive) list of topics

Track 1

Technology, next-generation network architectures

Future mobile and wireless communication networks and network infrastructures (5G and beyond)
Energy-efficient cloud computing and sustainability
Cyber-physical systems for environmental monitoring and management
System architectures for extended Reality (XR), metaverse, and Immersive Live Experience (ILE)
Security, privacy, and trust in decentralized and distributed systems
Edge computing and fog computing for real-time applications
Machine learning and AI-driven optimization in sustainable solutions: Quality of Service (QoS), Quality of Experience (QoE) and performance
Network resilience in disaster relief and recovery systems
Quantum communication for secure and resilient networks
Optical and wireless communication convergence system
Long-distance and ultra-high-speed transmission network systems (terabit, exabit)
Efficient communication and design in IoT and sensor networks
Circular economy approaches in ICT waste management

Track 2

Applications and services for sustainable development

AI-driven personalized e-services for health and well-being
IoT applications for water quality monitoring and sanitation
Sustainable energy services
Smart transportation and urban mobility applications
Data analytics for monitoring and assessing development goals
Robotics and drones for eco-friendly applications
Technology for aging in place and ambient assistive living
Sustainable smart cities and communities
Provision of adequate security and privacy services

Track 3

Enabling technologies

Data processing, management and analytics
Interoperability in decentralized and distributed systems
Next-generation human-computer interaction
Location-based services and spatial registration technologies
Semantic computing and communications
Service chaining, orchestration and federation
Technology convergence: computing network convergence, IT/OT (operational technology) convergence, etc.
Modelling and simulation for digital twins and digital humans
Emerging AI techniques and algorithms including Generative AI
Edge intelligence with on device AI
Blockchain/distributed ledger technologies with incentive and consensus mechanisms
Technologies for quality and sustainable online education
Alternate technology options for rural connectivity
Integration of existing mechanisms to provide for security and privacy

Track 4

Social, economic, environmental and policy aspects for sustainable development

Standards and regulations for sustainable development and sustainable ICT solutions
ICT strategies for sustainable development
Regulatory mechanisms under the convergence paradigm
Environmental implications of cloud computing services
Accessibility and usability in technology solutions
Engineering education for sustainable development
Modelling of the role of technology in society
Intellectual property rights in the digital era
Conformance and interoperability for global technology adoption
Regulation to enforce adequate security and privacy mechanisms
Generating a sustainable echo-system for the Startups

Steering Committee

Christoph Dosch, Former Chairman of ITU-R Study Group 6; ARD, Germany

Debkumar Chakrabarti, Ministry of Communications, India

Eva Ibarrola, University of the Basque Country, Spain

Kai Jakobs, RWTH Aachen University, Germany

Gyu Myoung Lee, Liverpool John Moores University, United Kingdom

Tiziana Margaria, University of Limerick, Ireland

Mitsuji Matsumoto, Waseda University Emeritus Professor, Japan

Roberto Minerva, Télécom SudParis, France

Vishnu Ram OV, Independent Consultant, India

Mostafa Hashem Sherif, Consultant, United States

Atul Sinha, Ministry of Communications, India

Technical Programme Committee

Mostafa Hashem Sherif, Consultant, United States

The Technical Programme Committee is composed of international subject-matter experts. Details will be available shortly at <http://itu.int/en/ITU-T/academia/kaleidoscope/2024/Pages/progcom.aspx>.

Additional information

For additional information, please visit the conference website: <http://itu.int/go/K-2024>. Inquiries should be addressed to Alessia Magliarditi at kaleidoscope@itu.int.
