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| **Keywords:** | ITU Journal; ICT Discoveries; scholarly; professional publication; digital; free of charge; radio wave propagation; future of media; video; immersive media; Editorial Board; Call for Papers; |
| **Abstract:** | This document provides information on the publication of the current special issue on radio wave propagation of the ITU Journal: ICT Discoveries, and announces the open call of the upcoming special issue on “The future of video and immersive media”. |

# 1 Introduction

The [ITU Journal: *ICT Discoveries*](https://www.itu.int/en/journal/Pages/default.aspx) publishes original research on ICT technical developments and their policy and regulatory, economic, social and legal dimensions. It builds bridges between disciplines, connects theory with application, and stimulates international dialogue. This interdisciplinary approach reflects ITU’s comprehensive field of interest and explores the convergence of ICT with other disciplines.

ITU Member States adopted a new Resolution of the ITU Plenipotentiary Conference, which convened in Dubai, United Arab Emirates, from 29 October to 16 November 2018, to support the further development of this scholarly, professional, peer-reviewed, digital publication, free of charge for both readers and authors. Members further resolved to establish collaborative efforts with the research community and to raise awareness of the ITU Journal worldwide (Resolution 207 (Dubai, 2018)).

Working towards becoming a global and truly international publication, ITU signed a co-publishing agreement with Tsinghua University Press Ltd., of the renowned Tsinghua University, for a new, joint publication under the framework of the ITU Journal: *ICT Discoveries.*

# 2 Current special issue under publication on radio wave propagation

In line with the forthcoming World Radiocommunication Conference in 2019, the next issue of the ITU Journal will focus on radio transmission technologies, in particular, radio wave propagation, and is soon to be published in collaboration with the ITU Radiocommunication Bureau.

This next special issue of the ITU Journal titled “[Propagation modelling for advanced future radio systems – Challenges for a congested spectrum](https://www.itu.int/en/journal/2019/001/Pages/default.aspx)”, will provide original research on the impact of radio wave propagation phenomena, including effects due to climatic factors, on radiocommunication system performance, availability and reliability. It will also focus on the efficient use of radiofrequency spectrum and the planning of radio systems and networks.

As it stands, radio-frequency spectrum is a shared, finite, global resource which is in high demand, with the available spectrum currently congested and access to it coming at a high cost. Providing radio services against such constraints requires that these radio services operate with optimum efficiency and are provided using the minimum amount of radio-spectrum, while avoiding harmful interference to and from other systems.

Innovation to increase spectral efficiency is fundamental to the sustainable growth of radio-communications and ensuring this is central to the mandate of the ITU.

The [Call for Papers](https://www.itu.int/en/journal/2019/001/Documents/ITUjournal-2019-V2I1-cfp.pdf) for this special issue was extensively promoted, reaching out to experts and researchers, using several different channels, including EDAS: Editor's Assistant contacts; mailing lists; news/blogs and social media; advertisements on specialized websites (such as WikiCFP; PapersInvited (ProQuest); DBWorld; LIRNEasia and DataJustice; ACM Community; and IEEE Big Data Technical Committee; presentations at relevant ITU events (e.g. the AI for Good Summit).

With 21 original academic papers submitted, and at acceptance rate of under 30%, **6 papers** from reputable academic institutions and diverse geographical backgrounds have been selected for **publication**, as recommended by a pool of 55 international experts who carried out the single-blind peer-review.

The selected papers will soon be published on the [ITU website](https://www.itu.int/en/journal/2019/001/Pages/default.aspx) where they will be available for **download** free of charge. By the end of 2019, they will be bundled into a **yearly volume** which will, in time, be submitted for inclusion across the various and highly considered indexes/aggregators (Scopus, Web of Science, Google Scholar, etc.), and disseminated widely to relevant circles and the whole ITU membership. They will be also included in the [ITU iLibrary](https://www.itu-ilibrary.org/) for wider exposure.

The **Editorial Board** includes:

* [Editor-in-Chief](https://www.itu.int/en/journal/002/Pages/bios.aspx#Song): [Jian Song](https://www.itu.int/en/journal/002/Pages/bios.aspx#Song), Tsinghua University
* [Associate Editors-in-Chief](https://www.itu.int/en/journal/002/Pages/bios.aspx#Associates):
1. [Rajkumar Buyya](https://www.itu.int/en/journal/002/Pages/bios.aspx#Buyya), University of Melbourne
2. [Jun Kyun Choi](https://www.itu.int/en/journal/002/Pages/bios.aspx#Choi), Korea Advanced Institute of Science and Technology (KAIST)
3. [Xiaolan](https://www.itu.int/en/journal/002/Pages/bios.aspx#Fu) Fu, Oxford University
4. [Mostafa Hashem Sherif](https://www.itu.int/en/journal/002/Pages/bios.aspx#Sherif), Consultant
* [Outreach Chairman](https://www.itu.int/en/journal/002/Pages/bios.aspx#Ibaraki): Stephen Ibaraki, Social Entrepreneur and Futurist - Chair REDDS Capital
* [Guest Editors](https://www.itu.int/en/journal/002/Pages/bios.aspx#Guests):
1. Christopher R. Anderson, United States Naval Academy
2. Leke Lin, China Research Institute of Radio Wave Propagation
3. Carlo Riva, Politecnico di Milano
4. Sana Salous, Durham University
5. Zhen-Wei Zhao, China Research Institute of Radio Wave Propagation

* [ITU Editorial Team](https://www.itu.int/en/journal/Pages/ITU-Editorial-Team.aspx), composed of: Executive Editor-in-Chief; Managing Editor; Editorial Assistant; Administrative Assistant; Copy Editor; Promotional Support; Communications Officer; Outreach Team.

# 3 Future issue

In July 2019, the Call for Papers for the latest special issue was launched, inviting papers on the subject of “[The future of video and immersive media](https://www.itu.int/en/journal/2020/001/Pages/default.aspx)”.

With digital technology drastically reshaping the media landscape, our methods of entertainment, communication and connecting with people around the world are also being transformed and revolutionized. Multimedia compression and streaming delivery, increased storage capabilities and quality now allow for large scale innovations and more highly immersive media experiences.

Such advancements will, however, be matched with pertinent questions in order to ensure that technology remains to improve society and not to threaten it. This special issue will therefore have to consider what new emerging technologies can we expect? How will we continue to store and anlayze the vast quantity of video to be generated? How we will we begin to use augmented reality in our everyday lives? Will increasing dependence on new media affect our ability to discern reality from fiction – and how do we counteract the threat of manipulated content? What is the role of data governance and privacy in a world almost mirrored by the digital sphere?

ITU remains dedicated and involved in the development of media and video technology as well as in the setting of standards in this area. This special issue is added to the list of activities within the Union that relate to video innovation, including the video compression algorithms standards, together with IEC and ISO. The work on this standard was awarded with two Primetime Emmy Awards.

This special issue of the ITU Journal invites original research into the state of the art in multimedia as well as the new possibilities and associated challenges appearing on the horizon, with the deadline for submissions set for 11 November 2019. The final volume is set to be published online in the spring of 2020.

The [Guest Editors](https://www.itu.int/en/journal/2020/001/Pages/GE.aspx#Sullivan) for this special issue are:

1. Gary Sullivan, Microsoft
2. Yan Ye, Alibaba
3. Jens-Rainer Ohm, RWTH Aachen University
4. Lu Yu, Zhejiang University
5. Thomas Weigand, Fraunhofer HHI

For further information, please visit the ITU Journal [webpage](https://www.itu.int/en/journal/Pages/default.aspx) or contact the ITU Editorial Team at journal@itu.int.

An associated **workshop** will be held on Tuesday 8 October 2019, at ITU headquarters in Geneva, in parallel with the meetings of the [ITU-T Study Group 16 on Multimedia](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx), bringing together researchers and experts to take a deeper look at the future of media, highlighting current research and shedding light on the pressing questions faced in this area.

# 4 Open Submissions

With two special issues already published, the first on [The impact of Artificial Intelligence on future communication networks and services](https://www.itu.int/en/journal/001/Pages/default.aspx) and the most recent titled [Data for Good](https://www.itu.int/en/journal/002/Pages/default.aspx), as well as two upcoming issues on [Radio wave propagation](https://www.itu.int/en/journal/2019/001/Pages/default.aspx) and [The future of video and immersive media](https://www.itu.int/en/journal/2020/001/Pages/default.aspx), the ITU Journal is currently open to submissions on any topic within its scope and at any time during the year.

Across the various disciplines, specific topics within the scope of the Journal can be found on our [website](https://www.itu.int/en/journal/Pages/about.aspx), as a non-exhaustive list.

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