

Annals of Telecommunications



**Call for papers
Special Issue on**

Exposure to Electromagnetic Field (EMF) and Radio Frequency (RF)

The Exposure to Electromagnetic Field (EMF), and Radio Frequency (RF) in particular, has been fuelling for over a decade many debates, often passionate, involving science and society. At the same time, mobile phones and more generally wireless communication systems have become massively used and have globally disrupted the way we communicate and work. Today, the number of mobile phone users over the world exceeds 5 billion. In many countries, the 18-25 year-olds are massively using wireless communications. For example in France, more than 99% of this age group owns mobile devices. In wireless communication networks, data transmission exceeds by far that of voice, and smartphones are today often used to connect to the Internet. The Internet of Things and the explosion of the use of wireless connected objects are set to reinforce this trend.

Huge research efforts have been conducted to study possible health impacts of electromagnetic radiofrequency waves and assess the RF exposure. Studies are carrying on as wireless technologies and their uses are constantly evolving. This attention to radiofrequency exposures is essential because of the large number of users, among which a growing number of young people. The densification of networks, which is intensifying with the deployment of "4G" and which will continue with the "5G", may not only contribute to improve the throughputs but can also contribute to greatly reduce the mobiles' power outputs. Therefore, new architectures such as small cells can reduce people's exposure. Future fifth-generation networks will be much more complex, agile and heterogeneous to cope with the growing demand for data flows and the proliferation of connected objects. This special issue aims to disseminate the latest works conducted in this domain of dosimetry and exposure assessment.

Topics of interest may include one or more of the following (but are not limited to) themes:

- Millimeters waves
- Active multi-beam antenna
- Novel architectures: Small cells, movable base stations, low-exposure network planning...
- Variability and uncertainty management
- Compliance methods and equipment
- Real-life exposure assessment
- Field measurements and personal dosimetry

Guest Editors

- **Joe Wiart, Telecom ParisTech, France**
- **Soichi Watanabe, NICT, Japan**
- **Wout Joseph, UGent, Belgium**
- **Tongning Wu, CAICT China**

Papers must be written in English and describe original research not published or currently under review by other journals or conferences. The length of the article file should not exceed 35,000 characters including spaces (i.e., around 5,500 words). The manuscripts that are outside the expected length are likely to be rejected. All relevant papers submitted will go through an external review process.

The authors should specify if a paper has already been published partially in a conference, in which case the submitted paper must be extended (30% of added value, modification and new results can be a reasonable target) compared to the conference paper; the title must be different from the one of the conference.

Submissions should be sent according to the instructions available at:
<http://annalsoftelecommunications.wp.mines-telecom.fr/how-to-publish/>

The authors can directly submit their papers at: <https://www.editorialmanager.com/ante/> and must select the menu "Choose Article Type" and then the item "CfP: Exposure to Electromagnetic Field (EMF) & Radio Frequency (RF)".

Proposed schedule

- **Manuscript submission** January 15th, 2018 **Extended February 15, 2018**
- **Notification** April 30th, 2018
- **Online with DOI** As soon as accepted
- **Printed issue** Fall 2018



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