

Call for Papers for Intelligent Wireless Emergency Communications Networks: Theory and Applications (IWECN 2019)

In conjunction with the **IEEE ICC 2019** (http://icc2019.ieee-icc.org)

Empowering Intelligent Communications

20-24 May 2019, Shanghai, China

Website: http://icc2019.ieee-icc.org/workshop/w21-intelligent-wireless-emer gency-communications-networks-theory-and-applications

Paper Submissions: Jan. 25, 2019 Feb. 2, 2019

Acceptance Notification: Feb. 16, 2019
Camera-ready Paper Due: Mar. 16, 2019
Workshop: May 20, 2019

EDAS link for submissions: https://edas.info/N25634

GENERAL DESCRIPTION

The Workshop on "Intelligent Wireless Emergency Communications: Theory, Application, and System" provides a forum for discussions of the theoretical foundations and original technical contributions of emergency wireless communications/networks as well as brings together industry and academia, engineers, and researchers.

The emerging fifth-generation (5G) wireless networks aim at ensuring that various contemporary wireless applications can be timely and satisfactorily served in any time, any place, and any way. Nowadays, the 5G mobile wireless communications and networks are rapidly developing. It is being expected that 5G wireless networks will be extensively deployed after 2020. However, even

with well-developed infrastructure based wireless networks, we still have a long way to achieve the goal that communicating in any time and any place. For example, after some unforeseen disaster such as earthquakes or floods, the traditional communication infrastructure may be unavailable or seriously disrupted and overloaded. Under such circumstances, rapidly deployable network solutions are needed to restore connectivity and provide assistance to users and first responders in the incident area.

Having noticed the importance of communications at post-disaster or extremely dangerous scenarios, many countries have started their plans/projects on emergency communications researches, which involve a number of specified wireless networks such as satellite-based space information networks, post-earthquake networks, and unmanned aerial vehicle (UAV) assisted networks. Based on these corresponding projects, a number of academic and industrial researchers are making great efforts on developing efficient architectures/schemes as well as implementing them in various emergency communications scenarios. This workshop is expected to attract a number of high quality papers containing the latest project ongoing results. On the other hand, the latest projects results will attract many related researchers to attend the workshop for further discussion.

Until now, to the best of our knowledge, there is no specialized workshops on intelligent wireless emergency communications networks at recent IEEE ICC/GLOBECOM. With the rapidly developing of 5G wireless communications networks and artificial intelligence, it is now very desirable to develop the new technical integrated intelligent wireless emergency communications networks.

TOPICS	 	

This workshop will mainly focus on, but not limited to, the following topics:

- -- Satellite/aerial/terrestrial assisted architecture for intelligent wireless emergency communications networks
- -- Mobile edge infrastructure for disaster emergency communications networks
- -- Resource allocation/service management/security analysis/performance analysis for wireless emergency communications networks
- -- Network planning and scheduling for intelligent wireless emergency communications networks
- -- Artificial intelligence and deep-learning based schemes for wireless emergency communications networks
- -- Quality of service provisioning for the emergency communication systems
- -- Ultra-reliable low latency communications (URLLC)/massive Machine Type of Communication (mMTC) assisted emergency communications networks

- -- Drone assisted wireless emergency communications networks
- -- Medium access control (MAC) protocols designing for wireless emergency communications networks
- -- Testing platform for wireless emergency communications.

SUBMISSION INSTRUCTIONS

The workshop accepts only novel, previously unpublished papers. Prospective authors are encouraged to submit a 5-page (up to 6 pages) standard IEEE conference style paper to this workshop (including all text, figures, and references) through EDAS submission system. One additional page may be allowed but with additional publication fee. Accepted papers must be presented at the workshop. The presenter must register for the workshop before the deadline for author registration. Failure to register before the deadline will result in automatic withdrawal of the paper from the workshop proceedings and the program. Accepted and presented papers will be published in the IEEE ICC 2019 Conference Proceedings and in IEEE Xplore®, and indexed by Engineering Index (EI). The direct link for paper submission is: https://edas.info/N25634.