2nd Workshop on High-Performance Wireless Communications in Medical Environments (HP-WCME) 2022

<u>Chairs:</u>

Rui Dinis, Instituto de Telecomunicações, Portugal João Guerreiro, FCT, Nova University of Lisbon Paulo Carvalho, Koala Tech, Caparica

Modern medical procedures require reliable and high-performance communications, with data rates that can range from a few kbps (e.g., when monitoring vital signs) to values that can be above Gbps (e.g., for image and video sensors) and variable QoS requirements. Currently, most medical communications rely on wired links, which lead to significant logistic difficulties and sterilization problems due to the huge number of required cables, namely in surgical environments. Therefore, there is a strong demand for fully wireless communications in medical environments in general and surgical scenarios. These communications can present significant challenges in terms of bit rate, delay, and latency, as well as reliability and security issues.







This workshop will address recent advances in wireless medical communications, including (but not restricted to):

- Low complexity hardware implementations
- Transceiver and antenna design
- Communications for very small sensors
- Security issues in medical scenarios (physical layer security, low complexity ciphers, etc.)
- Spectral and power-efficient communications
- Energy harvesting for medical sensors and implants
- SWIPT techniques
- Low latency communications
- Practical demonstrators

Important dates:

Submission date: July 30, 2022 - https://easychair.org/conferences/?conf=hpwcme22

Acceptance notification: August 20, 2022

Camera-ready papers: September 4, 2022