



Sustainable Communications for Renaissance

Call for Papers

1st Workshop on Underwater Communication, Access and Networking (UCAN)

SCOPE

In future 6G wireless networks scenario, ocean networks will play a relevant role in the context of heterogeneous overlapping network layers, from ground up to space ones. Research activities on Underwater Wireless Communication (UWC) is paramount to enabling new services and push the Internet of Underwater Things paradigm (IoUT), with the vision to extend the underwater communication to terrestrial communication. Two are the most promising technology that can be the enablers of underwater communications i.e. the ultrasound acoustic and the optical wireless.

The full-day workshop on Underwater Communication, Access and Networking (U-CAN) aims to bring together researchers and software and hardware developers from academia and industry, working in OWC, to present, share and discuss their latest research results. High technical quality papers will be solicited to be presented at the Workshop.

TOPICS OF INTEREST

We seek original completed and unpublished work not currently under review by any other journal/magazine/conference. Topics of interest include, but are not limited to:

- Channel modelling and attenuation models (acoustic and optical)
- Channel capacity analysis (acoustic and optical)
- Diversity techniques for UWC (acoustic and optical)
- Underwater localization (acoustic and optical)
- Underwater sensing (acoustic and optical)
- Hybrid acoustic/OWC technology for underwater networks
- MIMO for UOWC (acoustic and optical)
- Modelling of various noises in underwater wireless communications (acoustic and optical)
- Modulation, coding and detection schemes
- Mobile-to-infrastructure and mobile-to-mobile optical communication
- Novel (photonic) devices and components OWC
- UWC: architecture, PHY/MAC design, cross-layer design etc.
- Internet of Underwater Things
- UWC networking (acoustic and optical)
- Cooperative terrestrial-underwater channel
- Cyber-attacks and detection in UWC

PAPER SUBMISSION

All papers for Workshops should be submitted via EDAS.

Full instructions on how to submit papers are provided on the IEEE ICC 2023 website:

<https://icc2023.ieee-icc.org/>

WORKSHOP CO-CHAIRS

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IMPORTANT DATES

Paper Submission Deadline:

20 January 2023

Paper Acceptance Notification:

6 March 2023

**Camera Ready and Registration for
accepted papers:**

15 March 2023

WEBPAGE LINK

icc2023.ieee-icc.org