

Call for Papers: CrystalFreeIoT2026

The 2026 Workshop on Crystal-Free/-Less Radio and System-based Research for IoT

16 September 2026 // Dresden, Germany

<https://crystalfreeiot2026.github.io>

Eliminating all on-board components of an IoT device by using crystal-free/-less chip-scale wireless system innovation is the future trend of the trillion-node vision. Recent work in this field has drawn significant attention in industry and academia and will usher in a new era of IoT research and development. The key drivers of these developing trends are a focus on system-based research with IoT devices and research platforms, innovation in circuit design, and improvements in system integration. In addition to the design and research on the systems themselves, their practical application to multiple disciplines will play an essential role in the adoption of these technologies in a tremendous number of IoT-based industries. The CrystalFreeIoT workshop will bring together researchers and technical experts to share experiences and state-of-the-art research work under crystal-free/-less radio or system integration and thinking in multiple IoT related topics.

We solicit 6-page paper submissions with systematic design on topics including, but not limited to:

- System-level Design for IoT (including low-power wireless networking, VLSI, standards-compliant or -compatible protocols, new radio designs, data fusion for multiple-sensor systems)
- Crystal-Free Radio Design and Calibration Techniques
- Wireless Indoor Localization
- Cross IoT-Protocols support
- Swarm Robotics and Behaviors Analysis
- Miniaturization of IoT devices
- Synchronization in Wireless System
- Cryptography for IoT devices (PUF, digital fingerprint, etc.)
- Integrated Backscatter Devices and RFID for 3GPP communication
- Sustainable Electronics for Wireless Communication and Backscatter RFID
- Low-power 3GPP compatible wireless architectures

We also welcome poster submissions (with or without demos) in a 2-page short paper format to showcase in-progress research, new problem discussions, or recent results.

Important Dates

- **Workshop Paper Deadline:** 20 June 2026 (AoE)
- **Notification of Paper Acceptance:** 30 July 2026
- **Camera-Ready Deadline:** 5 August 2026

If your paper is accepted to the workshop, it is expected that one of the authors will be available to present in-person.

Submission Instructions

The workshop language is in English. Submitted papers are required to comply with guidelines for ACM conference manuscripts and must not exceed 6 pages in length for regular papers and 2 pages for poster papers.

See the conference website for preparation details and a link to the submission site:

<https://crystalfreeiot2026.github.io>