

# WPTCE 2025

IEEE Wireless Power Technology Conference and Expo  
Rome, Italy, June 3-6, 2025



**WPTCE2025** is the largest event in the world for wireless power research and industry engagement, covering a wide range of topics, applications, frequencies, and power levels.

**Conference venue:** Engineering Faculty, Sapienza University, Rome, Italy

## Technologies for wireless power

- Near-field inductive transfer
- Near-field capacitive transfer
- Far-field and radiative wireless power transfer
- Acoustic, optical and solar transfer
- Directional and omni-directional transfer
- Static and dynamic wireless charging
- Simultaneous wireless information and power transfer (SWIPT)

## Materials, methods and circuits in wireless power

- High frequency power transmitters and rectifiers
- Near field couplers
- Power converter topologies for WPT
- Power devices for power converters
- Power management
- Control of WPT systems
- High frequency coils, antennas, rectennas and rectenna arrays
- Backscattering, RFIDs and electronic tags
- Energy harvesting / scavenging
- Compensation techniques
- Thermal, mechanical, structural system
- Materials, metamaterials and components in wireless power
- Communications
- EMC/EMI, power quality
- EMF safety, IMD and biological effects
- Foreign object detection
- Machine learning in wireless power

## Application fields of wireless power technologies

- Automotive and ground transportation systems
- Consumer electronics
- UAV/UGV/robots
- Mobile devices
- Kitchen and home appliances
- Wearable and implantable devices
- Aerospace
- Smart environments, buildings, industrial plants
- Precision agriculture and predictive maintenance
- Marine, underwater and complex environments
- Internet of Things (IoT), sensors
- Standards, regulations
- Techno-economics, policy and societal impact
- System integration

## All Other WPT Technologies and Applications



## Important Dates

November 11, 2024 | Special Session Proposal

January 7, 2025 | Paper Submission

March 3, 2025 | Acceptance Notification

April 1, 2025 | Final Paper Submission

## WPTCE Steering Committee

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## Website

<https://ieee-wptce.org/>

## Contact

[wptce2025@gmail.com](mailto:wptce2025@gmail.com)