

Green Communications and Global Wireless Spectrum Management

Objectives

To provide a discussion forum for future technology development trends in Green Communications and Global Wireless Spectrum Management.

Scope

1. This symposium will cover latest technical developments and practical applications in Green Communications and Global Wireless Spectrum Management.
2. This symposium will also address better ideas for green computing and computer communications using latest green technologies.
3. Introduce the state of the art global wireless spectrum management standards development and deployment trends of the world in commercial, military, and civilian sectors and show the direction of future development trends.

Topics Covered

Two-day symposium consists of 3 sub-sessions and 1 panel discussion:

1. **Green Technologies in Various Types of Networks**
 - Local Area Networks
 - Broadband, Mobile and Wireless Access Networks
 - Appliances of Home and Office Networks
 - Other Emerging Networks
2. **Green Information Technology**
 - Trends in Information Technology Energy Use
 - Standards for Purchasing Energy Efficient Computing Equipment
 - Climate Savers Computing Initiatives
 - Server Virtualization
 - Efficient Data Center Cooling Strategies and Design Criteria
 - Future Trends—"Cloud Computing" and Beyond
3. **Energy Consumption: Measurement and Profiling**
 - Energy Consumption Measurement Technologies
 - Energy Consumption Profiling Technologies
4. **Energy Management in Communication Networks**
 - Architectures and Frameworks
 - Hierarchical and Distributed Technologies
 - Remote Power Management including Terminals
 - Harvesting Distributed Energy Generation Technologies

5. **Green Network Device Technologies**
 - Energy Saving Switches, Routers and Base Station Architectures
 - Remote Power Management including Terminals
 - Harvesting Distributed Energy Generation Technologies

6. **Green Protocols and Protocol Extensions**
 - Energy Efficient Transmission Protocols
 - Cross Layer Optimizations
 - International Standardization Efforts for Green Communication Protocols
 - Case Studies of Green Communication Protocol Deployments

7. **Spectrum Management**
 - Interference and Efficiency
 - Spectrum Management Regulating Agencies, Standards, and Policies
 - Management of the Spectrum
 - Frequency Allocation
 - Licensing of Spectrum
 - Spectrum Management and EMC (ElectroMagnetic Compatibility)
 - License Fees and Spectrum Pricing
 - Broadband and Convergence

Symposium Chair and Co-Chairs

Symposium Chair	
Young B. Choi (James Madison University)	
Symposium Co-Chairs	
USA	Korea
Tom Oh Rochester Institute of Technology Jungwoo Ryoo Pennsylvania State University-Altoona	Yong-Seok Choi Electronics and Telecommunications Research Institute (ETRI)