

# Commission B, Fields and Waves

## Activity Report

### July 2014 – Dec. 2014

## 1 ICCE 2014

### The Fifth International Conference on Communications and Electronics

The International Conference on Communications and Electronics (ICCE) is becoming a reputable bi-annual international conference series in the scientific community on the areas of Electronics and Communications recently. Following the past successful conferences, the fifth ICCE (ICCE 2014) looked for significant contributions to various topics in communications engineering, networking, microwave engineering, signal processing and electronic engineering. The conference also included tutorials, workshops, and technology panels given by world-class speakers.

#### 1.1 Statistics

Date: July 30–August 1, 2014

Venue: Danang, Vietnam.

Web page: <http://www.icce-2014.org/>

Number of submitted papers: 228

Number of full accepted papers: 96

Number of poster papers: 29

Full acceptance rate: 42,1%

Number of countries: 24

#### 1.2 Technical sessions

- Fiber-Optic Communications 1
- Future Internet
- Fiber-Optic Communications 2
- Software-Defined Networking
- Wireless Communications 1
- Energy-aware Networking
- Cognitive Radio
- Ad hoc and Sensor Networks
- Free Space Optical Communications
- Wireless Communications 2
- Wireless Communications 3
- Network Infrastructure and Services
- DSP on FPGA
- Smart Sensor & Analog Devices 1

- Smart Sensor & Analog Devices 2
- ASIC Design and Verification
- Computer and Memory Systems
- Multi-band and Wide-band Antennas
- Antennas and Propagation
- Microwave Components, Subsystems and Applications
- Image and video processing I
- Image and video processing II
- Signal detection and estimation
- CrowdSourcing and Crowdsourcing Applications
- Information Hiding and Security in Communications: Recent Developments I
- Information Hiding and Security in Communications: Recent Developments II

## 2 ICEAA and IEEE APWC 2014

### **The 2104 International Conference on Electromagnetics in Advanced Applications, and IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications**

The sixteenth edition of the International Conference on Electromagnetics in Advanced Applications (ICEAA 2014) was supported by the Politecnico di Torino, by the University of Illinois at Chicago, by the Istituto Superiore Mario Boella and by the Torino Wireless Foundation, with the principal cosponsorship of the IEEE Antennas and Propagation Society and the technical cosponsorship of the International Union of Radio Science (URSI). It was coupled to the fourth edition of the IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (IEEE APWC 2014). The two conferences consisted of invited and contributed papers, and share a common organization, registration fee, submission site, workshops and short courses, and social events. The proceedings of both conferences were published on IEEE Xplore.

#### 2.1 Statistics

Date: August 3–9, 2014

Venue: Palm Beach, Aruba.

Web page: <http://www.iceaa-offshore.org>

Invited Talks:1

Oral Talks: 247

#### 2.2 Technical sessions

- Numerical Methods in Electromagnetics
- Wideband Antennas
- Antennas
- Antennas and Arrays

- Analysis and Simulation of Complex Media and Networks
- Transformation Electromagnetics and Metamaterials
- Optimal Antennas
- Recent Advancement of Electromagnetic Theory
- Challenges in Mathematical and Computational Electromagnetics and Its Applications
- Finite Methods
- Fast Computational Methods
- Antennas and Signal Processing for Radio Astronomy, Earth, and Space Science Instruments
- EMC and other Related Technologies for Rail Transportation
- Spectrum Sharing in Radar and Communications Systems: an Electromagnetics and Signal Processing Based Approach
- Electromagnetic Modeling of Devices and Circuits
- Novel Antennas for Automotive and Vehicular Applications
- Emerging Antenna Technologies, Multiband Antennas, and Wideband Antennas
- Recent Advances in Integral Equation and Finite Element Methods
- Traveling-Wave Structures and Leaky-Wave Antennas
- Channel Modeling and MIMO Systems
- Fields and Waves
- RFID Technologies
- Exotic Media, Metamaterials and Metasurfaces
- Detection, Direction-Finding, and Beam Steering Arrays
- Propagation Modeling for Communications and Directional Aware Networking
- Mathematical Advances in Electromagnetics
- Materials and Nonon-Linear Electromagnetics
- Electromagnetic Theory and Measurements
- Antennas and Electromagnetic Devices Inspired by Electromagnetic Band Gap
- Compact Antenna Arrays -? Design, Technologies, Applications
- High-Power Electromagnetics
- Radar imaging and Inverse Scattering
- Technologies for mm and Sub-mm Waves

### 3 iWEM 2014

#### 2014 IEEE International Workshop on Electromagnetics: Applications and Student Innovation Competition

iWEM started in Taipei in 2010 for the first time as “ International Conference on Applications of Electromagnetism and Student Innovation Awards ” (2010 ICAE/SIA), and it then continued but renamed in Taipei in 2011 as “ IEEE International Workshop on Electromagnetics: Applications and Student Innovation Competition ” (2011 IEEE iWEM). Supported by IEEE, this workshop series will be held in rotation in Taiwan, China, Hong Kong, and Japan. Different from other recognized conferences and/or workshops, this workshop series focuses more on student innovation competition and runs in a single session format. It provides not only an international platform for scientists and engineers to exchange their ideas, but also a good venue for young scholars and students to demonstrate their innovative results (which may lead to awards). IEEE iWEM2014 is organized by the IEEE AP-S Japan Chapter and IEEE Sapporo Section and technically co-sponsored by IEICE Communications Society, IEEE AP-S Fukuoka/Kansai/Nagoya Chapters. The venue of the workshop is Hokkaido University, Sapporo, Hokkaido, Japan. Sapporo is the largest city on the northern Japanese island of Hokkaido. All accepted papers will be included in IEEE Xplore.

#### 3.1 Statistics

Date: August 4–6, 2014

Venue: Conference Hall, Hokkaido University, Sapporo, Hokkaido, Japan

Web Page: <http://ewh.ieee.org/r10/tokyo/aps/iWEM2014/index.html>

Keynote speech: 1

Invited papers: 4

The number of reviewed papers: 141

-Accepted papers: 137 (Incl. 2 Withdrawn papers)

Papers in the program: 140 (Incl. Keynote & Invited papers)

#### 3.2 Technical sessions

- Design Techniques and Theory for Printed Antennas
- Novel Techniques for Future Wireless Systems
- Advanced Wireless Propagation and Systems
- New Antenna Techniques
- Antenna Systems
- Novel Microwave Circuits and Subsystems
- Mobile Propagation
- Advanced Antenna Measurement
- Antennas for Wireless Applications I
- Antennas and Numerical Techniques for Biomedical Applications
- Antennas for Wireless Applications II

## 4 35th PIERS in Guangzhou

### The 35th PIERS 2013 in Guangzhou, China

Progress in Electromagnetics Research Symposium (PIERS) provides an international forum for reporting progress and recent advances in the modern development of electromagnetic theory and its new and exciting applications since 1989. Topics include radiation, propagation, diffraction, scattering, guidance, resonance, power, energy and force issues, and all other modern developments, with spectra ranging from statics to RF, microwave, photonics, and beyond. The Progress in Electromagnetics Research Symposium (PIERS) is sponsored by The Electromagnetics Academy.

#### 4.1 Statistics

Date: August 25–28, 2014

Venue: Langham Place, Guangzhou

Web page: <http://www.piers.org/> Paper Submissions: 2040

Registered/Paid Participants: 1399

Countries: 50

Plenary/Keynote/Tutorial talks: 49

Invited Talks: 350

#### 4.2 Technical sessions

- Plenary Session
- Poster Session 1
- Casimir Effect and Heat Transfer
- Integrated Microwave Photonics
- Solid-state Quantum Photonics
- Inorganic & Semiconductor Photovoltaics
- Light Management for Photovoltaics
- Plasmonic Nanophotonics 1 — Experiment, Measurement and Fabrication
- Nano-focusing and Applications
- Tunable and Reconfigurable Metamaterials and Plasmonics 1
- Photoacoustic Tomography and Sensing
- Nonlinear Optics: Structured Materials, Functional Devices and Applications 1
- Plasmonic, Metallic, or Dielectric Nanolasers
- Semiconductor Lasers
- Functional Optical Fiber Devices
- Integrated Nanophotonics for Optical Interconnects in Data Centers
- Advances in Optical Networking: Parts 1

- Onchip Multiplexing Technologies and Devices for Optical Interconnects
- Recent Progress on Magnetic and Multiferroic Materials
- Si-based Microwave Devices and ICs
- Specialty Optical Fibers: Design, Applications, Devices, and Process
- Optimal Antennas
- THz Antennas and Systems
- Inverse Problems: Theories, Computations, and Applications
- Microwave Imaging: Detection, Localization and Profiling
- Oral Presentations for Best Student Paper Awards — SC4: Antennas and Microwave Technologies
- Oral Presentations for Best Student Paper Awards — SC1: CEM, EMC, Scattering & EM Theory
- Oral Presentations for Best Student Paper Awards — SC5: Remote Sensing, Inverse Problems, Imaging, Radar and Sensing
- Poster Session 2
- Education for Electromagnetics
- Radio-over-Fiber Systems
- Organic and Hybrid Solar Cells 1
- Plasmonic Nanophotonics 2 — Design, Modeling and Simulation
- Transfromation Optics 1
- Disordered Photonics
- Optical Resonances and Microresonators
- Effective Medium Theories and Homogenization
- Optical Fiber Sensing Devices
- Advances in Optical Networking: Parts 2
- Recent Advances in Magneto-impedance Sensors
- Advanced Magnetic Materials for Microwave Applications
- Array Antenna for Wireless Communication
- Wireless Power Transfer
- Remote Sensing
- Oral Presentations for Best Student Paper Awards — SC3: Optics and Photonics
- Oral Presentations for Best Student Paper Awards — SC2: Metamaterials, Plasmonics and Complex Media

- Poster Session 3
- Advances in Multiscale, Multiphysics Computation
- THz Metamaterials and Applications
- Optical Microcavities in Biosensing
- Organic and Hybrid Solar Cells 2
- Graphene Photovoltaics
- Wave Manipulations by Metasurfaces Organized by Shulin Sun and Jiaming Hao
- Thermal and Acoustic Metamaterials
- Optical Metamaterials and Applications
- Biophotonics — Clinical and Preclinical Applications
- Advanced Micro-/Nano-fabrication for Optical Sensing and Imaging Applications
- Nonlinear Optics: Structured Materials, Functional Devices and Applications 2
- Light Harvesting for Energy and Optoelectronic Applications
- Fiber Optic Sensing Technologies for Structural Health Monitoring and Applications
- Ultrasensitive Optical Sensors
- Physics and Applications of Photonic Crystals, Materials, and Nanostructures
- Photonic Crystals
- Computational Techniques in Electromagnetics and Applications
- Electronics and Optoelectronics Using Two-dimensional Materials and Their Heterostructures
- Compact Microwave Filters
- Recent Progresses in Monolithic and Multilayer/Planar Integrated Circuits and Components
- Reconfigurable Antennas
- Remote Sensing of the Atmosphere, Ocean, Hydrology and Cryosphere
- Synthetic Aperture Radar Imaging and Advanced Radar Techniques
- High-speed Optical Communications and Advanced Optical Signal Processing
- Poster Session 4
- Sesquicentennial Commemoration Session for Maxwell's Equations 1
- Microwave Photonics Components and Systems
- Light Emitting Diodes
- Organic Light Emitting Diodes 1
- Tunable and Reconfigurable Metamaterials and Plasmonics 2

- Microwave Metamaterials 1
- Laser Spectroscopy for Sensing and Environmental Monitoring 1
- Optical Signal Processing
- Luminescent Materials, Devices and Application
- Quantum Optics
- Nanoimprint and Applications
- Heterogeneous Photonic Integration Technologies and Devices on Silicon
- Advanced Mathematical and Computational Methods in Electromagnetic Theory and Their Applications
- Novel Frequency Selective Structures
- Graded Index Structures and Metamaterials for Antenna Applications
- Antenna and Array 1
- Inverse Problems, Diagnostics, and Estimation
- Biophotonics — Analytical Biophotonics
- Poster Session 5
- Sesquicentennial Commemoration Session for Maxwell's Equations 2
- Plasmonics: Beyond Local-response Dynamics
- Photonics and Optoelectronics in Industry
- Organic Light Emitting Diodes 2
- Graphene for Plasmonics and Sensing
- Functional Chiral Metamaterials
- Structured Light
- Novel Techniques for Subwavelength-focusing and Super Resolution Imaging 1
- Nonreciprocal Electromagnetics and Photonics
- Liquid Crystals
- Advanced Display Technologies
- Zero-index Media, Extremely Anisotropic Media, and Nonlocal Photonic Media
- Photonic Crystal and Multi-material Fibers
- Fibers and Fiber Devices for Optical Communications
- Chaotic/Random Lasers and Their Applications
- Spectroscopy and Nanoscopy for Sensing and Imaging



- Microwave and Millimeter-wave Measurements and Sensing
- Novel Materials and Technologies for Microwave Components
- MIMO Systems and Applications
- Antenna-channel Interactions and Multipath Wireless Channels
- Advanced Antenna Theory and Techniques
- RFID Antennas
- Application/Effects of EM Field/Radiation in Medicine/Bio and in Ecological Industrial Technologies
- Biophotonics — Biophotonics Imaging
- Antennas and RF Devices Based on Superconductors and Other Advanced Materials
- Real-time High-speed Measurements for Communication, Biomedical & Industrial Appl.
- Design and Simulation of Electromagnetic and Optical Devices 1
- Organic Transistors/Integrated Circuits and Dye-sensitized Solar Cells
- Plasmonics for Sensing Applications
- Transformation Optics 2
- Novel Techniques for Subwavelength-focusing and Super Resolution Imaging 2
- High Power Fiber Lasers 1
- Plasmon Enhanced Light-matter Interactions
- Photonics-applied Electromagnetic Measurement: Fundamental Study, Applications, and Standards
- Ultrafast Optics
- Nanoantennas
- Advanced Numerical Techniques in Computational Electromagnetics
- Extended/Unconventional Electromagnetic Theory, EHD(Electro-hydrodynamics)/EMHD(Electromagneto-hydrodynamics), and Electro-biology
- Remote Sensing of the Earth, Ocean, and Atmosphere
- Metamaterials for Antenna Applications: Practical Solutions
- Nanoparticle-assisted Bioimaging and Sensing
- Design and Simulation of Electromagnetic and Optical Devices 2
- Optoelectronic and Photonics Devices
- Fano Resonance in Nanoscale Structures
- Active Nanophotonics: Design of Nano-devices/Structures and Their Interaction with Molecules

- Science and Applications of Electromagnetic Vortices and Orbital Angular Momentum (OAM)
- Novel Optical Imaging Methods for Biomedical Applications, Spectroscopic and THz Bioelectromagnetics
- Microwave Metamaterials 2
- Laser Spectroscopy for Sensing and Environmental Monitoring 2
- Optical Polarization and Coherence in the Near-field Range
- High Power Fiber Lasers 2
- High Speed Interconnects for High Performance Computing
- Characterization, Propagation and Application of Beams with Controlled Polarization, Coherence and Phase
- Microwave and Millimeter Wave Circuits and Devices, CAD
- Antenna and Array 2
- Novel Mathematical Methods in Electromagnetics
- Computational Electromagnetics
- Antennas, Shielding, HPEM and EMC Measurement

## 5 APMC 2014

### The 2014 Asia-Pacific Microwave Conference

The 2014 Asia-Pacific Microwave Conference (APMC 2014) was held at the Sendai International Center, Sendai, Japan, on November 4-7, 2014. Sendai is one of the historic sites for microwave and antenna engineering and is the birthplace of Yagi-Uda antenna. This conference is organized and sponsored by The Institute of Electronics, Information and Communication Engineers (IEICE) of Japan, and is supported by Ministry of Internal Affairs and Communications. It will be cooperatively sponsored by IEEE MTT-S, IEEE AP-S, EuMA, URSI, IEEE MTT-S Japan/Kansai/Nagoya Chapters, IEEE Sendai Section, IEICE Technical Committee on Microwaves, IEICE Technical Committee on Electronics Simulation Technology, IEICE Technical Committee on Microwave Photonics, Japan Institute of Electronics Packaging, Japan Society of Electromagnetic Wave Energy Applications, IEEJ Investigative Committee on Innovative Electromagnetic Technologies and Their Applied Developments.

#### 5.1 Statistics

Date: Nov. 4–7, 2014

Venue: Sendai International Center, Sendai, Japan

Web Page: <http://www.apmc2014.org> Plenary/Keynote/Tutorial talks: 2

Oral Presentation: 281

Poster Presentations: 239

## 5.2 Technical sessions

- Multifunctional Filters
- Couplers and Power Dividers
- Broadband and Multiband Antennas I
- Waveguide and Transmission-Line Structures
- Advanced Passive Components and Tunable Devices
- Electromagnetic Compatibility
- Wideband Filters and Couplers
- Distortion Compensation Techniques
- Array Signal Processing and Antenna Measurements
- Metamaterials and Periodic Structures I
- THz and Millimeter-Wave Integrated Circuit Technology
- Space Microwave Wireless and Sensing Technology
- Let Us Talk and Share Ideas for Increasing Women in APMC -Women in Engineering (WIE)-
- GaN Focus Session I : RF GaN Status and Future
- Broadband and Multiband Antennas II
- Metamaterials and Periodic Structures II
- Low Noise and High Power Amplifiers and Applications
- High Speed Digital Circuits and System Integrity
- Mobile and Wireless Communication System Technologies I
- Novel Low Noise Amplifiers And Related Technologies
- Microwave Measurement and Material Characterization
- Biomedical Applications and RFID Tag Antennas
- Millimeter-Wave and Terahertz Antennas
- Japanese Industrial Session
- EuMA Special Session
- Antennas and Propagation Technologies for MIMO Communications
- Microwave Measurement and Material Characterization
- Small-Scale Communication and Sensing Systems
- National ICT R&D Projects in Japan
- Advanced Microwave Technologies in East Asia

- Mobile and Wireless Communication System Technologies II
- Millimeter-Wave High Power Transmitter and Switch Based on GaN and CMOS
- Advances in Far-Field Wireless Power Transfer Systems
- Antennas for Mobile Communications
- Millimeter-Wave Communication and Radar System
- Recent R&D topics in East Asia
- Resilient ICT Session for Disaster Relief
- GaAs- and Si-Based Power Amplifiers
- Near Field and Grid Solutions for Wireless Power Transfer
- Couplers and Power Dividers II
- Outstanding Asian Young Researchers
- Broadband and Multiband Antennas III
- Future Mobile and Wireless Communication Systems
- GaN Focus Session II : Power GaN Status and Future
- Recent Advances in Bandpass Filters
- Doppler Radar for Smart Buildings and Mobile Health
- Design of Novel CMOS and Millimeter-Wave VCOs
- Antenna theory and CAD
- Historical Review of Microwave Devices in Japan
- High Efficiency GaN HEMT Power Amplifiers for Wireless Communications
- Wireless Power Transfer Technologies I
- Radar, Remote Sensing and Imaging Systems I
- Mixers and Frequency Converters Technology for RF-Frontends
- Radio Wave Propagation Studies in Various Environments
- Millimeter-Wave / Terahertz Devices and Systems
- ET & EER Technologies
- Wireless Power Transfer Technologies II
- Radar, Remote Sensing and Imaging Systems II
- Millimeter-Wave and THz Tranceivers and Building Blocks
- Novel Design Techniques of Planar Microwave Filters
- Recent Progress in Wireless

## 6 IEEE CAMA 2014

### The 2014 IEEE Conference on Antenna Measurements & Applications

The 2014 IEEE Conference on Antenna Measurements & Applications (CAMA) was held at Antibes Juan-les-Pins Convention Centre in Nov. 16-19, 2014. The conference was cosponsored by the IEEE Antennas and Propagation Society (AP-S). The conference covers all areas related to antenna measurements in controlled and non-controlled (in-situ) environments, antenna testing, electromagnetic measurement techniques including systems considerations.

#### 6.1 Statistics

Date: Nov. 16-19, 2014

Venue: Antibes Juan-les-Pins Convention Centre, French

Web page: <http://www.2014ieeecama.org>

Invited Talks: 3

Oral Talks: 157

Poster Talks: 0

#### 6.2 Technical sessions

1. Antenna Testing
2. Electromagnetic Measurement Techniques Including Systems Considerations
3. Electromagnetic Metrology
4. Scattering and Diffraction Measurements
5. Radar Measurements
6. Terrestrial and Space-based Communications Including Wireless, Mobile, Satellite and Telecommunications
7. Multi-antenna systems
8. Transmitting and Receiving Antennas
9. Electromagnetic Systems
10. Microwave
11. Millimeter-wave and Sub-millimeter Techniques and Technology
12. RFID
13. Inverse and Imaging Techniques
14. Industry Applications
15. Biomedical and Medical Applications
16. Civil Engineering
17. Geophysical Measurement Techniques
18. Homeland Security

## 7 ISAP 2014

### International Symposium on Antennas and Propagation 2014

This year ISAP 2014 is the 19th ISAP, which started in 1971. The main objective of this symposium aims to provide an international platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and developments in Antennas, Propagation, EM Wave Theory, and AP-related fields. This symposium also provides opportunities for the delegates to exchange new ideas and application experiences face to face, to establish business or research relations and to find global partners for future collaboration.

#### 7.1 Statistics

Date: December 2–5, 2014

Venue: Grand Hi-Lai Hotel, Kaohsiung, Taiwan

Web Page: <http://isap2014.org/index.html>

Number of submissions: 363

Number of acceptance: 341 (182 orals + 159 posters)

Number of papers in the final program: 318 (171 orals + 147 posters)

Keynote speakers: 2 Invited speakers: 11

#### 7.2 Technical sessions

- Antenna and Microwave Measurement
- Computational EM (Special session)
- DOA Estimation and RCS of Antennas
- Millimeter-wave Antenna Arrays
- Mobile Device Antennas (I)
- Microwave Circuits for Wireless Applications
- Large Antenna or Array: Analysis and Applications
- SAR Signal Processing
- Antennas with AMC, EBG or Metamaterials
- Reconfigurable Antennas (I)
- Student Paper Contest
- EM Theory
- AP-related Applications (I)
- Metamaterial and Metasurface Devices
- Novel EM Devices and Circuits
- Wave Propagation for Vehicles
- Millimeter-wave Antennas and Devices

- Multiband and Wideband Antennas (I)
- Antenna Feed Structures
- Antenna Theory and Applications
- Indoor, Tunnel, RC Propagation
- Linearly Polarized Antennas for Wireless
- Handset Antennas (Special Session)
- Antennas and Systems for RFID or UAV
- Antenna Arrays
- Radar Systems and Signal Processing
- Tablet and Notebook Antennas
- Reconfigurable Antennas (II)
- Antennas (I)
- AP-related Applications (II)
- MIMO Antennas (I)
- IEEE AP-S Workshop on EM Education
- Circularly Polarized Antenna Arrays
- Propagation for Satellite Communicat.
- Antennas for Wireless Applications
- MIMO Antennas (II)
- Antennas (II)
- Antennas for Wireless Applications
- Propagation
- Antenna Arrays for Wireless Applications
- Propagation for Wireless Communicat.
- Antennas for BiomedicalApplications
- Mobile Device Antennas (II)
- Multiband and Wideband Antennas (II)
- Compact Circularly Polarized Antennas
- Wireless Power Transmission
- UHF RFID Reader and Tag Antennas

## **8 Future Conferences**

### **8.1 VJISAP 2015**

2015 Vietnam-Japan International Symposium on Antennas and Propagation

Date: January 7–9, 2015

Venue: Ho Chi Minh, Vietnam

Web Page: [https://www.ieice.org/~ap\\_\\_ac/jpn/index.php?vjisap2015](https://www.ieice.org/~ap__ac/jpn/index.php?vjisap2015)

### **8.2 iWAT 2015**

2015 The International Workshop on Antenna Technology

Date: March 4–6, 2015

Venue: Seoul, Korea

Web Page: <http://www.iwat2015.org/>

### **8.3 EuCAP 2015**

The 9th European Conference on Antennas and Propagation

Date: April 12–17, 2015

Venue: Lisbon, Portugal

Web Page: <http://www.eucap2015.org/>

### **8.4 ATRASC 2015**

1st URSI Atlantic Radio Science Conference (URSI AT-RASC)

Date: May 18–25, 2015

Venue: Gran Canaria, Spain

Web page: <http://www.at-rasc.com/call.asp>

### **8.5 PIERS 2015 in Prague**

The 35th PIERS 2013 in Guangzhou, China

Date: July 6–9, 2015

Venue: Prague, Czech Republic

Web page: <http://www.piers.org/>

### **8.6 IEEE APS URSI CNC/USNC 2015**

The 2015 IEEE AP-S Symposium on Antennas and Propagation and URSI CNC/USNC Joint Meeting - Vancouver 2015

Date: July 19–25, 2015

Venue: Vancouver, Canada

Web page: <http://www.piers.org/>

### **8.7 ICEAA 2015, IEEE APWC 2015**

2015 International Conference on Electromagnetics in Advanced Applications, IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications

Date: September 7-11, 2015

Venue: Torino, Italy

Web Page: <http://www.iceaa.net/>