

Commission B, Fields and Waves
Activity Report
October 2011 – October 2012

1 EuCAP2012

The 6th European Conference on Antennas and Propagation

EuCAP 2012, supported by the top level Associations in Antennas and Propagation, provides, through its presentations and exhibition, the ideal place for the exchange of scientific and technical information, both at academic and industrial levels, and fosters collaboration and cooperation in the Antenna and Propagation domain both at European and global levels. About 600 high quality papers and 300 poster presentations will analyse the impact and role of antennas and propagation technology in present and future applications.

1.1 Statistics

Date: 26–30 March 2012

Venue: Prague Congress Centre

Web page: <http://www.eucap2012.org/>

Number of oral presentations: 669

Number of poster presentations: 263

Oral contributions from Japan: 12

Poster contribution from Japan: 17

1.2 Technical sessions

- Integral Techniques for Electromagnetics (INTELECT)
- Leaky-Wave Antennas
- Novel Methods in Radio Channel Modeling for Smart Environments
- Wireless Sensor Networks (WSNs) for Real Time and Distributed Remote Sensing
- Advances in Techniques, Instruments and Data for Propagation Campaigns
- Electromagnetic Theory and Numerical Techniques
- Approaches in Wireless Optical Propagation and Channel Modeling for Free Space Optical Links
- Non-Foster Active Metamaterials: Theory, Design and Applications
- European Workshop on Conformal Antennas
- Advances in Nano-inspired Applications of Electromagnetics in Medicine and Biotechnologies
- Domain Decomposition Methods
- Antenna Interactions and Coupling
- The New Frontier of Clinical Therapies: Bioeffects and Engineering Issues of Electromagnetic Nanopulses
- Array Antennas Incl. Reflect Arrays
- MIMO, Multi-antenna Systems, Smart and Signal Processing Antennas
- Printed Elements, Baluns and Associated Circuits
- Recent Advances and Applications of Body-Centric Wireless Communications

- Mobile Propagation Channel Measurements and Modelling
- Propagation Models for Millimetre and Sub-millimetre Waves
- Future Radios for Medical and Daily Healthcare Applications
- Precise Measurements of Materials and Media in the MM/ SubMM Ranges
- Imaging Arrays for Space and Astronomy
- Multiband, Wideband, UWB Antennas
- Space Application Antennas
- Convened Interactive Session of the WG on Software
- 60GHz and Beyond: Antennas and Their Integration
- On-body Antennas
- Electro-magnetic Exposure and Interactions
- Free-Space Optical Propagation
- Active and Integrated Antennas
- Aerospace Antenna Testing
- Measurement Imaging, Algorithms and Processing Techniques
- New Materials, Meta-materials, EBG Structures
- Small Antennas
- Transformation Electromagnetics in Antenna Engineering
- Propagation for Fixed Satellite Services
- Compressive Sensing in Electromagnetics and Non-uniform Array Antennas
- Portable Wireless Device Testing
- Cellular and Automotive Application Measurements
- UWB/ mm-Wave MIMO Radar-Systems and Applications
- Microwaves in Medical Diagnostics and Treatment
- Industrial Session
- Automotive Antennas
- Stochastic and Deterministic Channel Modelling
- Polarisation in Propagation and Remote Sensing
- Automotive/ Telematics Antenna Testing
- Reflector and Lens Antennas
- Planar And Conformal Antennas
- Numerical Modeling of Periodic Structures and Metamaterials
- Channel Modeling for Mobile SatCom and SatNav Systems
- Small Antennas, RFID Tags and Sensors
- Antenna Diagnostics and Post-processing
- Mm-Wave Antenna-Systems
- Reconfigurable Antenna Arrays Theory, Implementations and Applications
- Mobile Communication

- Beamforming, Data Processing and Multiple Beam Antennas
- Millimetre / Sub-millimetre Wave and THz Technologies
- Re-configurable Antennas
- Propagation Aspects in Wireless Sensor Networks
- Propagation for Mobile Satellite Services and Navigation
- Recent Technical Advances in Antenna Test Systems
- Wave Propagation Modeling in Vegetated and Built-Up Areas
- Joint Antenna-Channel Issues in Body Area Networks
- Antennas for Remote Sensing and Radio Astronomy
- RFID's, mmID's and Power Scavenging: Status and Challenges
- Other Measurement Topics
- Other Antenna Topics
- Medical Applications
- Wave and Sub-mm Waves RCS and Scattered Field Measurements

2 PIERS 2012 in Kuala Lumpur

The 31st PIERS(Progress In Electromagnetics Research Symposium) in Kuala Lumpur, Malaysia
 PIERS provides an international forum for reporting progress and recent advances in all aspects of electromagnetics. Spectra range from statics to RF, microwave, photonics, and beyond. Topics include radiation, propagation, diffraction, scattering, guidance, resonance, power, energy and force issues, and all applications and modern developments.

2.1 Statistics

Date: March 27–30, 2012

Venue: Sunway Resort Hotel & Spa

Web page: <http://www.piers.org/piers2012KualaLumpur/>

Total submitted abstracts: 1038

- Final accepted abstracts: 732

- Final accepted full-length papers: 414

- Final Oral Talks: 570

- Final Posters: 162

- Oral Presented Talks: 509

- Total Sessions: 69

- Registered/Paid participants: 602 from 50 countries

- Local participants from Malaysia: 62

- Others from: Japan:72, Taiwan:61, China:36, India:31, France:29, Singapore:29, Korea:24, USA:24, Germany:22, U

2.2 Technical sessions

- Biomedical Electromagnetic Instruments, EM Condensed Materials and Imaging
- Inverse Scattering Problems: Theories, Computations, and Applications
- Antennas, Waves and Shielding
- Next Generation Broadband Access

- Metamaterials and Applications
- Microwave Energy Application for Materials and Environmental Processing
- Observing the Terrestrial Environment at HF
- Optics and Photonic Crystals
- Electromagnetic Theory and Design on the Optical Dispersive Materials, Invisible Cloak and Photonic Crystals
- Microwave Remote Sensing
- SAR/ISAR and Its Applications
- The Biological Effects of Exposure to Extremely Low Frequency (ELF) Electromagnetic Radiation
- RF Safety Issues
- Radio Propagation, Ionospheric Propagation
- Distributed Coding and Cooperative Communications
- Millimetre and Submillimetre Wave Radar Systems — Theory and Applications
- Extended/Unconventional Electromagnetic Theory, EHD (Electro-hydrodynamics)/EMHD (Electromagneto-hydrodynamics), and Electro-biology
- Microwave/Terahertz Photonics Technologies and Their Applications
- Laser-induced Periodic Surface Nanostructures: Fundamental Fabrication Mechanisms, Nanoscale-dominated Physical and Chemical Properties 1
- Solution Strategies for Inverse Scattering Problems
- Antennas for Mobile Communication 1
- Wireless Network and Applications 1
- Filter, Transmission Line and Waveguide
- Electromagnetic Modeling, Inversion and Applications
- Quantum and Classical Aspects of Novel Photonic Materials
- Laser-induced Periodic Surface Nanostructures: Fundamental Fabrication Mechanisms, Nanoscale-dominated Physical and Chemical Properties 2
- Nano Scale Electromagnetics
- Ground Penetrating Radar Methods for Subsurface Investigations
- EM Scattering Models and Applications
- Antennas for Mobile Communication 2
- UWB and Reconfiguration Antennas
- Wireless Network and Applications 2
- Microwave and Millimeter Wave Circuits and Devices
- Power Electronics
- Microwave and Millimeter-wave Measurements
- Optics, Photonics, and Biophotonics for Young Scholars and Researchers 1
- Plasmonic Nanophotonics I - Experiment
- SAR Systems and Signal Processing
- Design and Mathematical Modeling of Wide band Antennas

- FDTD Methods and Applications
- Systems and Components, Electromagnetic Compatibility 2
- Electromagnetic Waves Propagation in the Atmosphere and Remote Sensing
- Optics, Photonics, and Biophotonics for Young Scholars and Researchers 2
- Generation, Transform, Propagation and Applications for Laser Beams
- Plasmonic Nanophotonics II - Theory, Design and Simulation
- Electromagnetic Inverse Problems in Medicine and Biology
- Advanced Artificial Materials for Sensing and Imaging
- Antenna Arrays in Wireless Communications and Biomedical Applications
- Computational Electromagnetics, Spectra, Time, and Frequency Domain Techniques
- Microwave and Millimeter Wave Circuits and Devices, CAD
- RF and Wireless Communication, Multipath
- Fiber Optics, Optical Sensors
- Fano Effect in Nanophotonics: Fundamentals and Applications
- Imaging and Detection, Inverse Problem
- Innovative Instruments and Processing for Understanding Phenomenology through Remote Sensing
- Antenna Theory and Radiation 1
- Novel Mathematical Methods in Electromagnetics
- Microwave and Millimeter Wave Devices
- Frequency Selective & Retarding Surfaces for Microwave and Millimetre-wave Applications
- Electromagnetic Theory
- Physics and Applications of Structured Light
- Lightning Electromagnetics
- Remote Sensing of the Earth, Ocean, and Atmosphere
- Microstrip and Printed Antennas, Array Antennas
- Accelerated Computational Electromagnetics
- Plasmas, Composite Media, Materials Science
- Electromagnetic, Electronics and Signal Processing Research in Biomedical Engineering

3 2012 IEEE APS and USNC-URSI National Radio Science Meeting

The 2012 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting

The event represents the premier international symposium in the field of antennas and propagation. Its robust technical program is corroborated by many workshops, short-courses, a student paper contest, a student design contest. 2012 the Women in Electromagnetics workshop was jointly held.

3.1 Statistics

Date: July 8–14, 2012

Venue: Sheraton Chicago Hotel and Towers

Web page: <http://s15.a2zinc.net/clients/IEEE/APSURSI2012/public/enter.aspx>

Number of oral presentations: 1259

Number of poster presentations: 420

Oral contributions from Japan: 28

Poster contribution from Japan: 17

3.2 Technical sessions

- Applications of Numerical Methods
- Fast Solution, Model Reduction, and Domain Decomposition for Finite Element Analysis
- Millimeter-Wave Antennas
- THz Sources, Systems, and Applications
- Electrodynamics and Applications of Carbon Nanotube and Graphene Systems
- The Legacy of Harold A. Wheeler
- Globalization of Engineering Education: Perspectives and Panel Discussion
- Beamforming, Nulling, and Direction of Arrival Estimation
- Magnetic Resonance Imaging
- Biomedical Systems
- Electronic Devices, Circuits, and Applications
- Microstrip antennas
- Radar Systems, Target Phenomenology and Processing
- Modeling for Wireless Propagation Channels
- Wireless Communications and Propagation Effects
- High Frequency Techniques
- High Frequency and Asymptotic Methods
- Ionospheric Modeling and Propagation
- Antenna Theory
- Adaptive and Wideband Arrays
- Multiband Antennas
- Microwave Lens Antennas
- Diagnostic and Therapeutic Applications of Hyperthermia
- Parallel and Special-Processor Based Numerical Methods
- Vehicular Antennas
- Antenna Measurements and Measurement Systems
- Arrays for Cognitive Networking
- Radio Communication Systems
- Electromagnetic Effects of Materials
- Integral Equation Solvers for Large and Multi-Scale Problems

- Impedance Matching and Decoupling for MIMO Systems
- Fields and Waves in Metamaterials
- Metamaterials and Metastructures
- Small Antennas: Wideband, Multiband, High-Frequency and On-Body Applications
- Remote Sensing, Imaging, and Inverse Scattering
- Antenna Feed Systems for Space and Terrestrial Applications
- Prof. Robert Kouyoumjian Memorial Session: Asymptotic HF and Hybrid Methods
- Spiral and Sinuous Antennas
- Antenna Arrays: Theory and Design
- Dosimetry and EM Exposure Assessment
- Electromagnetic Imaging and Sensing Applications in Biology and Medicine
- RF/Microwave Technology for Cancer Detection and Treatment
- Microstrip antennas and printed devices
- Scattering and Diffraction
- Random and Complex Media Effects
- Electromagnetic Environment and Interference
- Dual-Polarized and Circularly Polarized Antennas
- Radar and Imaging Systems
- UWB Antennas
- Electromagnetics Education
- Optimization Methods in Electromagnetics
- Time-Domain Numerical Methods
- Finite Difference Time Domain Techniques
- Wireless On-Body and WLAN Antennas
- Near-Field Techniques and Applications
- Reflector antennas
- Reflectarrays
- Reflectarray systems and applications
- Antenna Testing
- Advances in Integral Equation Methods
- Discontinuous Galerkin Finite Element Methods
- Finite-Element Methods: Theory and Applications
- Dielectric and Dielectric-Loaded Antennas
- Wideband and Multiband Dielectric Resonator Antennas
- Metamaterial Surfaces and Cloaks
- Nanoscale Electromagnetics
- Antenna Applications of Metasurfaces
- Wireless Systems and RFID in Complex Environments

- Small Antennas: Low Frequency Applications
- Remote Sensing
- RFID - Systems
- Electromagnetic Bandgap Materials
- Design and Analysis of Dielectric Resonator Antennas
- Non Foster Matching
- Flexible 2D and 3D Printed Antennas
- Theoretical, Algorithmic, and Technological Advances in Electromagnetic Inverse Scattering
- Future Trends in Radar
- Terahertz Technology
- Phased Array Antennas
- Electromagnetic Imaging for Breast Cancer Detection
- Antennas for Biomedical Applications
- Scattering by Random or Complex Media
- Scattering, Diffraction, and RCS
- Measurements of Antennas and Wireless Systems
- Pattern Reconfigurable Antennas
- UWB Antennas in Communications
- UWB Antenna Arrays Colorado
- Optimization Techniques
- Electromagnetic Design Optimization
- Advances in FDTD Methods and Analysis
- Advances in Non-Standard FDTD Methods
- Antenna Feeds and Matching
- Printed Dipole, Slot, and Planar Inverted-F Antennas
- Experimental Performance Analysis of Urban and Terrestrial Wireless Systems
- Reflectarray elements and synthesis
- Integral Equation Methods
- MIMO Channel Characterization and Performance Evaluation
- Metamaterial Antennas and Applications
- RFID- Novel structures
- Small Antennas: Design Concepts
- Leaky-Wave and Traveling-Wave Antennas
- Transformation Electromagnetics
- Transmission and Absorption in Metamaterials
- Applications of Frequency Selective Surfaces
- Analysis and Design of Frequency Selective Surfaces
- Absorbers and Scattering Control

- Antennas with Novel Materials
- AMTA Special Session - Advances in RF Measurement Technology
- Challenging canonical scattering problems and new EM problems involving special materials
- Evaluation Techniques for Compact Multi Element Antennas for MIMO
- Slotted and Guided Wave Antennas
- Phased Array Antennas
- Human Body Interaction with Antennas and Other Electromagnetic Devices
- Advances in Numerical Methods
- Microstrip Antenna Arrays
- Microstrip and Slot Arrays
- Inverse Scattering and Imaging: Methods and Algorithms
- Inverse Scattering and Imaging: Technologies and Applications
- Reconfigurable Antennas
- Frequency Configurable Antennas
- Advances in UWB Antennas and Systems
- Broadband/wideband antennas
- Multi-Frequency Antennas: Mobile Communications
- Advances in Adaptive and Smart Antenna Systems
- Transients and Time-Domain Techniques
- Time-domain techniques and analysis
- Millimeter Wave Printed Antennas
- Slot Antennas and Arrays
- Propagation in Complex Environments
- Comm. Channel Management
- Fast Integral Equation Solvers and Stable Discretizations
- Sensor Networks and Sensor Arrays
- Antennas for MIMO and Diversity Systems
- Chirality and Bianisotropy in Metamaterials
- Circuit-Based Metamaterials
- Plasmonics
- RFID antenna performance on materials
- Small Antennas: Designs and Applications
- Wireless Power Transfer
- Hybrid Methods and Method Comparisons
- Fast Methods
- Electromagnetic Properties of Advanced Materials and Circuits
- EM Metrology and Materials

- Cognitive radio: improvements through the integration of electromagnetic and communications theory
- Advances in Commercial Electromagnetic Simulation Tools
- Guided Waves and Wave-Guiding Structures
- Antennas for Mobile Handsets
- Antennas for mobile and wireless applications Huron
- Numerical Techniques 556 Analysis and Application of Numerical Methods
- Microstrip-Fed Arrays
- Modeling in Urban and Terrestrial Communication Systems
- Analytical and Numerical Techniques in Scattering and Imaging
- Rough Surface Scattering Phenomenology
- Reconfigurable Arrays
- Wideband Antennas 560 Wideband Antennas and Arrays
- Multi-Frequency Antennas: Design and Analysis
- Satellite Communication Antennas
- Radar Imaging and Non-Intrusive Monitoring
- Theoretical and Nonlinear Electromagnetics
- Electromagnetic Theory
- Analysis of Propagation and Radiation in Complex Media
- Propagation effects
- MIMO Communication Strategies
- Volumetric Metamaterials
- Nano-electromagnetics
- Non-Antenna Applications of Metasurfaces
- RFID Reader Design
- Sensing the Environment
- Small mobile antennas

4 PIERS 2012 in Moscow, Russia

The 32nd PIERS(Progress In Electromagnetics Research Symposium) in Moscow, Russia

PIERS provides an international forum for reporting progress and recent advances in all aspects of electromagnetics. Spectra range from statics to RF, microwave, photonics, and beyond. Topics include radiation, propagation, diffraction, scattering, guidance, resonance, power, energy and force issues, and all applications and modern developments.

4.1 Statistics

Date: August 19–23, 2012

Venue: Povolzhskiy State University of Telecommunication and Information

Web page: <http://www.ivtn.ru/piers-2012/index.php>

- Total number of Sessions: 58

- Final Oral Talks: 510

- Final Posters: 235

- Oral Presented Talks: 426

- Registered/Paid participants: 420 from 50 countries

- Local participants from Russia and countries of the former Soviet Union (FSU): 99

- Participants from the non-FSU countries: in total 321, including China: 29, Japan: 28, USA: 25, Korea: 24, Turkey: 1

4.2 Technical sessions

- Fiber, Optics and Photonics, Laser
- Active Metamaterials
- Theory and Methods of Digital Signal and Image Processing 1
- Patch Antenna and Array
- Novel Mathematical Methods in Electromagnetics 1
- Nonlinear Electromagnetic Problems
- Scattering, Diffraction, and Inverse Scattering
- Extended/Unconventional Electromagnetic Theory, EHD(Electro-hydrodynamics)/EMHD(Electro-magneto-hydrodynamics), and Electro-biology 1
- Modelling of Electromagnetic Structures: Application to Electrical Machines
- Microwave Processing of Materials ? Recent Advances in Modeling and Experimentation
- Theory and Methods of Digital Signal and Image Processing 2
- Small Size Antenna
- Novel Mathematical Methods in Electromagnetics 2
- Nano Scale Electromagnetics, MEMS
- Extended/Unconventional Electromagnetic Theory, EHD(Electro-hydrodynamics)/EMHD(Electro-magneto-hydrodynamics), and Electro-biology 2The Electrodynamics of Inhomogeneous Media and Gradient Metamaterials 1
- Advancements in Phase-space Representations
- Microwave Photonics Techniques, Technology & Applications
- Inverse Problems
- Near to Mid-range Wireless Power Transfer Technology: Principles and Applications 1
- Advanced Mathematical and Computational Methods in Electromagnetic Theory and Their Applications
- Medical Electromagnetics, Biological Effects, MRI
- Electromagnetic Modeling, Inversion and Applications
- The Electrodynamics of Inhomogeneous Media and Gradient Metamaterials 2
- Nonlinear Guided Wave Phenomena and Optical Solitons

- Progress in Metamaterials Research
- Remote Sensing of Earth Critical Parameters
- Near to Mid-range Wireless Power Transfer Technology: Principles and Applications 2
- Computational Electromagnetics
- Medical Electromagnetics, RF Biological Effect
- Transport and Localization in Periodic and Disordered Media
- Mobile Antennas, Printed Antennas, and Array Antennas
- Fiber Lasers and Fiber Micro/Nano-Photonic Components
- Microwave and Millimeter Wave Circuits and Measurement
- Remote Sensing, Imaging and Detection
- Antenna Technologies for Broadband and High-speed Wireless Systems
- Computational Techniques
- Applications of EM Field in Medicine
- Electromagnetic Theory
- Magnetism, Magnetic and Multiferroic Materials, Structures and Devices
- Advanced Photonics-based Devices and Equipment
- Optics and Nanoplasmonics, Nano Scale Electromagnetics
- Electromagnetic Probing of Atmosphere and Ionosphere
- Optics and Nanoplasmonics, Nano Scale Electromagnetics Electromagnetic Probing of Atmosphere and Ionosphere
- Antenna Theory and Radiation
- Asymptotic and Hybrid Methods in Electromagnetics
- The Modern Hybrid Methods in the Problems of Computational Electromagnetics
- Microwave and Millimeter Wave Circuits and Devices, CAD
- Smart Functional Materials for Non-destructive Control and Stress Monitoring
- Various Models for Electrodynamics and Applications to Moving Media
- Electromagnetic Theory and Design on the Optical Dispersive Materials, Invisible Cloak and Photonic Crystals
- Present and Future of TeraHertz Science & Technology including Application in Remote Sensing, Imaging, and Communications
- Earth Electromagnetic Environment and Radiowave Propagation & Scattering: Modelling, Observation and Measurements
- Modern Aspects of Wave Multiple Scattering in Dense Random and Ordered Media
- Antennas, Shielding and EMC Measurement
- Optical Linear and Non-linear Near-field and Confocal Microscopy
- Wireless Network and Applications
- Eigenfunction Expansion Based Analysis of Electromagnetic Structure

5 ICEAA 2012 and IEEE APWC

2012 International Conference on Electromagnetics in Advanced Applications and the 2012 IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (IEEE APWC)

As of 2011, the IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (IEEE APWC) is being held jointly with ICEAA. Additionally, a new event, the Electromagnetic Environment and Interference Symposium (an URSI Commission E initiative), is being incorporated into ICEAA 2012. The scope of the combined ICEAA/IEEE APWC/Commission E event encompasses a broad range of topics in the field of antennas and engineering electromagnetics in general.

5.1 Statistics

Date: September 2-7, 2012

Venue: Southern Sun Cape Sun Hotel

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

- Number of presentations: 354

- Contributions from Japan: 21

5.2 Technical sessions

- Radio Astronomy
- Modern Problems of Mathematical and Computational Electromagnetics and their Advanced Applications
- Advanced Applications of the Mathematical and Computational Electromagnetics
- EMC and its Technologies
- Fast Computational Methods
- Inverse scattering, RCS and asymptotic techniques
- Electromagnetic Theory of Metamaterials
- Ultra-wideband Systems for Biomedical Diagnostics
- Asymptotic and Hybrid Methods
- Multiband, Wideband, and Functional Antennas
- Electromagnetic Properties of Materials
- EM Measurements
- Optoelectronics and Photonics
- Imaging Arrays for Radio Astronomy
- Electromagnetic Modeling of Devices and Circuits
- Computational Electromagnetics
- Imaging, Inversion and Optimization
- EM Theory
- Wireless Power Transmission
- Electromagnetics for Medical Applications
- Complexity and Uncertainty in EMC Studies
- Modelling of Complex Electromagnetic Devices
- Wireless Networks

- Channel Modeling
- Frontiers in Integral Equation Methods
- Antennas and Arrays
- HPEM: Environments, Modeling and Measurements
- EMC/EMI/EMP
- Recent Advances in Integral Equation and Finite Element Methods
- Network Methods Applied to Electromagnetic Field Computation
- Bioelectromagnetics
- EM Applications to Biomedicine
- Fields and Waves
- Recent Advances in Computational EM
- Multi-band and UWB Antennas
- Antennas and Propagation, Systems and Applications
- Nano-Electromagnetics: Novel Materials, Phenomena and Devices
- EM Applications to Nanotechnology
- Finite Methods
- Advanced Electromagnetics
- Mathematical Advances in Electromagnetics
- Effects of EM pulses on Digital Systems
- Celebrating Sixty Years of Geometrical Theory of Diffraction

6 ISAP2012

The 2012 International Symposium on Antennas and Propagation

This is one of three major international conferences in the fields of Antennas and Propagation in the world.

6.1 Statistics

Date: October 29 - November 2, 2012.

Venue: Nagoya Congress Center

Web page: <http://www.isap12.org>

- Number of presentations: 410

- Contributions from Japan: 224

6.2 Technical sessions

- Advanced Applications of Small Antennas
- Millimeter-wave antennas
- Millimeter-wave / THz antennas
- Emerging techniques in radar
- SAR Polarimetry and Interferometry
- Microstrip antennas and arrays

- Slot antennas and arrays
- Various Wireless Power Transmission
- Wireless power transmission technologies
- Medical applications
- Recent antennas' activities in europe
- Antennas and feeding circuits for millimeter-wave sustems
- MIMO and Cooperative Communication Technologies
- Multiband / wideband antennas
- Mobile and indoor propagation
- Mobile channel characterization and modeling
- DOA
- High frequency and asymptotic methods
- Scattering and diffraction
- Inverse problems
- New trends in MIMO systems
- Reconfigurable antennas
- UWB antennas
- Array antennas
- Metamaterial antennas
- Computational Electromagnetic
- Body-Centric Wiress Communications
- Antenna measurement technologies
- Reflector/Lens Antennas and Feeds Session
- Phased array and related topics
- Microstrip and Printed Antennas
- Small antennas
- EMI / EMC
- Mobile antennas
- Aperture antennas
- Wire antennas
- Recent Studies on Earth-Space Propagation Paths
- Propagation in Terrestrial and Space Enviroments
- Metamaterial Antennas and Systems with FSS, EBG, MTM, & Advanced Materials
- EBG and Metamaterials

7 Future Conferences

7.1 APMC 2012

The 2012 Asia-Pacific Microwave Conference

Date: Dec. 4–7, 2012

Venue: Ambassador Hotel, Kaohsiung, Taiwan

Web Page: <http://www.apmc2012.com/index.html>

7.2 iWAT 2013

2013 International Workshop on Antenna Technology

Date: March 4–6, 2013

Venue: Karlsruhe Institute of Technology, Karlsruhe, Germany

Web Page: <http://www.iwat2013.de/>

7.3 33rd PIERS in Taipei

The 33rd PIERS in Taipei, Taiwan.

Date: March 25–28, 2013

Venue: TBD

Web page: <http://www.piers.org/piers2013Taipei/>

7.4 EuCAP 2013

The 7th European Conference on Antennas and Propagation

Date: April 8–12, 2013

Venue: The Swedish Exhibition & Congress Centre in Gothenburg, Sweden

Web Page: <http://www.eucap2013.org/>

7.5 URSI EMTS 2013

The 2013 URSI International Symposium on Electromagnetic Theory (EMTS 2013)

Date: May 20–24, 2013

Venue: International Conference Center Hiroshima, Hiroshima, Japan

Web page: <http://ursi-emts2013.org/>

7.6 IEEE APS 2013 and USNC-URSI 2013

The 2013 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting

Date: July 7–12, 2013

Venue: The Hilton Orlando Lake Buena Vista in Lake Buena Vista, Florida, USA.

Web page: <http://www.2013apsursi.org/>

7.7 34th PIERS in Stockholm

The 34th PIERS 2013 in Stockholm, Sweden

Date: August 12–15, 2013

Venue: TBD

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

7.8 ICEAA and IEEE APWC 2013

The 2103 International Conference on Electromagnetics in Advanced Applications, and IEEE–APS Topical Conference on Antennas and Propagation in Wireless Communications

Date: September 9–13, 2013

Venue: Centro Congressi TORINO INCONTRA, Torino, Italy.

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