

**Report on the 2012 IEEE AP-S/USNC-URSI**

Danilo Erricolo, Mahta Moghaddam, Christos Christodoulou

The 2012 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting was held from July 8 –July 14 in Chicago, IL, USA. On behalf of its Steering Committee, we are thankful to all of the attendees for their participation and scientific contributions, which resulted in the symposium breaking numerous records. We received overwhelming positive feedback and hope you benefitted from many of the innovations of the 2012 symposium, including the impressive plenary speakers at the Global Plenary Session and the Funding Opportunities Plenary Session. We strived to make the attendees and their families, representing 54 countries, feel welcome. We provided numerous opportunities for interaction during the oral and poster sessions, the Opening Reception at the world-famous Art Institute of Chicago, the continental breakfasts before the plenary sessions, the sold-out Awards Banquet, the Student/GOLD Reception luncheon, the Women-in-Engineering Reception at Navy Pier, and the various formal and informal meetings at the conference hotel. The conference hotel, the Sheraton Chicago Hotel & Towers, was selected also because of its layout that facilitated interaction among people, by providing large common spaces and keeping all attendees sufficiently close to each other. The Hospitality Suite welcomed a record number of registered guests, and the first-ever program for children of those attending the Awards Banquet was a success.

We would like to thank Dr. Steven Best, 2012 IEEE AP-S President, and the IEEE AP-S AdCom Committee, and Dr. Steven C. Reising, the USNC-URSI Chair, and USNC-URSI, and the Joint Future Symposia Committee, for their support of the year 2012 symposium and all of its innovations.

We also would like to thank the Steering Committee who worked tirelessly to plan this symposium. Particularly, we would like to acknowledge Prof. Susan Hagness, Technical Program Committee Chair; Prof. Tony Grbic and Prof. Nader Behdad, TPC Co-Chairs; Vittorio Picco, Webmaster and Exhibits Co-Chair; and all of the student and faculty volunteers who helped us lend a personal touch by being responsive and fluent in more than 12 languages.

**Innovations of the 2012 IEEE AP-S/USNC-URSI Symposium**

The achievements of the Steering Committee included the following:

* Created a very interesting technical program by
  + providing 2 plenary sessions,
  + organizing 1585 oral and poster presentations.
* Provided an exceptional social program to make everyone feel welcome. Events included
  + Opening Reception at Art Institute of Chicago on Sunday evening and,
  + Odyssey Dinner Cruise on Monday evening.
* Made the event economically feasible by
  + Reducing by $60 the student registration fee;
  + Reducing by 75% the short course registration fee, thanks to the AdCom support;
  + Introducing Poster Printing Service, where posters would be printed onsite and made available at the registration desk for only $54 for a 36" x 60" (approx. 91 x 152 cm) color poster, thanks to DTI, Inc.
* Improved the experience of attendees by
  + Making the abstracts of Technical Program available online during the week of the conference;
  + Extending the Student/ GOLD Reception on Monday thanks to the support of AdCom;
  + Hosting the Women in Engineering Reception offsite at Riva Restaurant at Navy Pier, on Tuesday evening;
  + Accommodating religious and dietary restrictions at all events, inside and outside;
  + Providing information about the city of Chicago through the conference website in 8 different languages to facilitate international visitors
  + Introducing the Children Program during the Awards Banquet, where children would be entertained by performing art projects under the supervision of art educators specially trained for children;
  + Staffing the Registration Desk with people fluent in more than 12 major languages.
  + Hiring a photographer to collect memories of the symposium.

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| **Some Statistics** | |
| Number of attendees | 1902 |
| Number of students | 575 |
| Number of countries represented | 54 |
| Paper presented | 1585 |
| Number of reviewers | ≌ 230 |
| Number of plenary sessions | 2 |
| Number of short courses offered | 18 |
| Total attendance at short courses | 236 |
| Attendance at Monday Plenary Session | >800 |
| Attendance at Tuesday Plenary Session | >800 |
| Attendance at the Opening reception at the Art Institute of Chicago | >1000 |
| Attendance at GOLD/Student Reception on Monday | ≌ 300 |
| Attendance at Reviewers’ Luncheon on Tuesday | >300 |
| Attendance at Women in Engineering Reception on Tuesday | >250 |
| Attendance at Awards Banquet on Wednesday | 604 |
| Number of Gold Sponsors and Exhibitors | 5 |
| Number of Silver Sponsors and Exhibitors | 4 |
| Total Number of Sponsors and Exhibitors | 42 |
| Number of languages spoken at registration desk | >12 |

In the following, we show some of the pictures taken during the conference. All picture credits go to Chicago Corporate Photography.

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| Prof. Danilo Erricolo  University of Illinois at Chicago  General Chair, 2012 IEEE AP-S/USNC-URSI | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\6. Tuesday Luncheons\IMG_9172.jpg |
| and  Prof. Mahta Moghaddam  University of Southern California  Vice General Chair, 2012 IEEE AP-S/USNC-URSI |
| Prof. Christos Christodoulou  University of New Mexico  Chair, IEEE AP-S Awards Committee | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\8. Wednesday Portraits\_MG_9688.jpg |

## 2012 IEEE AP-S Awards Banquet Ceremony

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3401.jpg  Figure . Prof. Christos Christodoulou, Chair, IEEE AP-S Awards Committee, is the master of ceremony at the 2012 IEEE AP-S Awards Banquet. | | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3629.jpg  Figure . Prof. Danilo Erricolo, General Chair of the Steering Committee, gives the welcome address. | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3673.jpg  Figure . 2011 IEEE President Prof. Moshe Kam introduces Prof. Nader Engheta, who received the 2012 IEEE Electromagnetics Award. | | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3708.jpg  Figure . 2012 IEEE Fellow Prof. David Davidson (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3716.jpg  Figure . 2012 IEEE Fellow Prof. Jiro Hirokawa (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3723.jpg  Figure . 2012 IEEE Fellow Prof. Kathleen Melde (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3730.jpg  Figure . 2012 IEEE Fellow Prof. Agostino Monorchio (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3737.jpg  Figure . 2012 IEEE Fellow Prof. Jordi Romeu Robert (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3745.jpg  Figure . 2012 IEEE Fellow Prof. Kunio Sawaya (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3751.jpg  Figure . 2012 IEEE Fellow Prof. Scott Tyo (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3759.jpg  Figure . 2012 IEEE Fellow Prof. Yiannis Vardaxoglou (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3768.jpg  Figure . 2012 IEEE Fellow Prof. Junji Yamauchi (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3774.jpg  Figure . 2012 IEEE Fellow Dr. William Palmer (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3784.jpg  Figure . 2012 IEEE Fellow Prof. Zhenge Feng (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3791.jpg  Figure . 2012 IEEE Fellow Prof. Edward Yung (left) is congratulated by 2012 IEEE AP-S President Dr. Steven Best. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3800.jpg  Figure . Prof. Constantine A. Balanis (left) receives the 2012 IEEE AP-S Distinguished achievement award “For contributions to electromagnetics through excellence in book authorship, inspiring and trailblazing teaching, and diversified research.” | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3829.jpg  Figure . Prof. Magdy F. Iskander (left) receives the 2012 IEEE AP-S Chen-To Tai Distinguished Educator Award “For innovation and distinguished contribution to engineering education and STEM outreach programs.” | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3851.jpg  Figure . Prof. Peter S. Hall (left) receives the 2012 IEEE AP-S John Kraus Antenna Award “For contributions to the design and understanding of printed circuit antennas, active integrated antennas, small terminal antennas and wearable antennas.” | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3875.jpg  Figure . Prof. Jamesina J. Simpson (left), 2012 IEEE AP-S/USNC-URSI Special Session Chair, receives the 2012 IEEE AP-S Donald G. Dudley Undergraduate Teaching Award “For passionate one-on-one teaching, mentoring, and advising of a diverse group of undergraduate students through courses, research, and project.” | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3899.jpg  Figure . Prof. Y.P. Zhang (left) receives the 2012 IEEE AP-S Sergei A. Schelkunoff Prize Paper Award for the article [1]. | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3910.jpg  Figure . Prof. Yilong L. Lu (left) receives the 2012 IEEE AP-S Sergei A. Schelkunoff Prize Paper Award for the article [1]. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3904.jpg  Figure . Dr. Duixian Liu (center) receives the 2012 IEEE AP-S Sergei A. Schelkunoff Prize Paper Award for the article [1]. | |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3918.jpg  Figure . Chad E. Patterson (left) receives the 2012 IEEE AP-S Harold A. Wheeler Prize Paper Award for the article [2]. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3925.jpg  Figure . Prof. John Papapolymerou (left) receives the 2012 IEEE AP-S Harold A. Wheeler Prize Paper Award for the article [2]. | |

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3931.jpg  Figure . Alex M. H. Wong (left) receives the 2012 IEEE AP-S R.W.P. King Paper Award for the article [3]. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3947.jpg  Figure . Prof. Nader Behdad (left) receives the 2012 IEEE AP-S Piergiorgio L.E. Uslenghi (right) Letter Prize Award for the article [4]. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3953.jpg  Figure . Atabak Rashidian (left) receives the 2012 IEEE AP-S Edward E. Altshuler Prize Paper Award for the article [5]. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3962.jpg  Figure . Prof. Hsi-Tseng Chou (center) receives the 2012 IEEE AP-S Best Chapter Award for the Taipei, Taiwan chapter from Prof. Shen Zhongxiang (left) and Dr. Steven Best (right). |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_0460.jpg  Figure . Dr. Lorena I. Basilio, 2012 IEEE AP-S/USNC-URSI Student Paper Contest Chair, announces the three winners of the 2012 IEEE AP-S Student Paper Award competition. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3981.jpg  Figure . Jason C. Soric (center) receives from Prof. Balanis (left) and Dr. Best (right) the third-place 2012 IEEE AP-S Student Paper Award for the presentation “Experimental Demonstration of a Conformal Mantle Cloak for Radio-Waves” co-authored with Andrea Alù, Aaron Kerkhoff and David Rainwater. |

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4002.jpg  Figure . Amit M. Patel (center) receives from Prof. Balanis (left) and Dr. Best (right) the second-place 2012 IEEE AP-S Student Paper Award for the presentation “Dispersion Analysis of Printed-Circuit Tensor Impedance Surfaces” co-authored with Prof. Anthony Grbic. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4015.jpg  Figure . Jonathan P. Doane (center) receives from Prof. Balanis (left) and Dr. Best (right) the first-place 2012 IEEE AP-S Student Paper Award for the presentation “A 6.3:1 Bandwidth Scanning Tightly Coupled Dipole Array with Co-Designed Compact Balun,” co-authored with Dr. Kubilay Sertel and Prof. John L. Volakis. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_0539.jpg  Figure . Prof. Ozlem Kilic, 2012 IEEE AP-S/USNC-URSI Student Design Contest Chair, announces the three winners of the 2012 AP-S Student Antenna Design Award. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_0557.jpg  Figure . Lang Wang (center), of the team "The Furious Five" from the University of Electronic Science and Tech of China, receives from Prof. Balanis (left) and Dr. Best (right) the 2013 AP-S Student Antenna Design Award 3rd Prize for the project entitled "DNA Inspired Double-Helix." |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_0565.jpg  Figure . Carlos-Andres Viteri-Mera (left) and Jesus Alberto Viveros Delgado (second from right) of the team "UDN" from the Universidad de de Nariño, Colombia, receive from Prof. Balanis (second from left) and Dr. Best (right) the 2012 AP-S Student Antenna Design Award Second Prize for the project “A Bio-inspired Patch Antenna Array using Fibonacci sequences in trees.” | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4067.jpg  Figure . The team “Predator” from the Taiwan National University receives from Prof. Balanis and Dr. Best the 2012 AP-S Student Antenna Design Award First Prize for the project “Rattlesnake Antenna System”. From left to right: Prof. Balanis, Bing Zhang Tsai, Li-Yuan Fang, Chin-Chia Chang, Shih-An Yang, Dr. Best. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4094.jpg  Figure . Dr. Debatosh Guha (left) receives the 2012 Raj Mittra Senior Researcher Award from Prof. Raj Mittra (center) and Dr. Best (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4107.jpg  Figure . Oscar Quevedo-Teruel (second from left) receives the 2012 Raj Mittra Junior Researcher Award from Prof. Raj Mittra (second from right), Prof. Wilton (left) and Dr. Best (right). |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4119.jpg  Figure . Prof. Magdalena Salazar Palma (left) receives a plaque for her service as 2011 IEEE AP-S President from Dr. Steven Best (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4156.jpg  Figure . Prof. Danilo Erricolo (left) receives a certificate for his service as General Chair of the 2012 IEEE AP-S Symposium from Dr. Steven Best. |

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3362.jpg  Figure . Some attendees enjoy the reception before the Awards Banquet. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4212.jpg  Figure . From left to right: Filippo Costa, Pierpaolo Usai, Gabriella Nastasia, Giovanna Monorchio, Prof. Agostino Monorchio, Davide Bianchi, Prof. Giuliano Manara, Prof. Simone Genovesi. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3453.jpg  Figure . Dr. Lorenzo Lo Monte (left) and Dr. Giuseppe Carluccio (right). |

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3458.jpg  Figure . WIPL-D Gold Exhibitors: Prof. Dragan Olcan (left), Prof. Branko Kolundzija (center), and Sladjana Maric (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3482.jpg  Figure . From left to right: Prof. Daniel Stancil, Prof. Branislav Notaros, Olivera Notaros, Kathy Stancil. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3388.jpg  Figure . Dr. Harun Taha Hayvaci (right). |
| Figure . Prof. Nader Behdad, 2012 IEEE AP-S/USNC-URSI TPC Co-chair. | Figure . Prof. Anthony Grbic 2012 IEEE AP-S/USNC-URSI TPC Co-chair. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4439.jpg  Figure |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\8. Wednesday Portraits\_MG_9819.jpg  Figure . Prof. Stuart Long (left), IEEE AP-S Joint Meetings Committee Coordinator and Judy Long (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\8. Wednesday Portraits\_MG_9729.jpg  Figure . From left to right: Prof. Moshe Kam, 2011 IEEE President, Prof. Nader Engheta, 2012 IEEE Electromagnetics Award Recipient, and Dr. Steven Best, 2012 IEEE AP-S President. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\8. Wednesday Portraits\_MG_9763.jpg  Figure . Dr. Giuseppe Carluccio (left) and Vittorio Picco (right), 2012 IEEE AP-S/USNC-URSI Communications Co-Chair and Webmaster and Exhibits Co-Chair, respectively. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\8. Wednesday Portraits\_MG_9828.jpg  Figure . Prof. Constantine A. Balanis (center) and his family. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\8. Wednesday Portraits\_MG_9839.jpg  Figure . Dr. Charles Rhoads (right), 2007 IEEE AP-S President, and his family. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\8. Wednesday Portraits\_MG_9801.jpg  Figure . The family of Prof. David B. Davidson (top right): his wife Amor, Ethan (bottom left) and Bruce (bottom right). |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3702.jpg  Figure . Children having fun at the Brickton Art Center Program while their parents attend the Awards Banquet. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4281.jpg  Figure . From left to right: Prof. Danilo Erricolo, Prof. Stefano Maci, Shinobu Ando, and Prof. Makoto Ando, 2009 IEEE AP-S President. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3491.jpg  Figure . Prof. Michal Okoniewski (left) and Prof. Leo Kempel (right). |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3513.jpg  Figure . Dr. Sudhakar Rao (left), Dr. Robert Hoferer (center), and Margarita Talavera-Hoferer (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3523.jpg  Figure . Prof. Vincenzo Galdi, Prof. Filiberto Bilotti, Prof. Nader Engheta, Susan Engheta, Prof. Alessandro Toscano, and Alessio Monti. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3503.jpg  Figure . Prof. Chalmers M. Butler (left), URSI Liaison of the 2012 IEEE AP-S/USNC-URSI, and Prof. Roger Harrington (center). |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_3570.jpg  Figure . Raven Uslenghi (left), and Piergiorgio L. E. Uslenghi (right), URSI Vice-President and AP-S Liaison of the 2012 IEEE AP-S/USNC-URSI. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4260.jpg  Figure . Prof. Magdy F. Iskander (left), Prof. Louis Jofre (center) and Jordi Romeu (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4325.jpg  Figure . Hasan Mirzaei (left), Ali Mehrabani (center) and Maria Pour (right). |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4269.jpg  Figure . Sue Stone (left) and Marie Erricolo (right) the 2012 IEEE AP-S/USNC-URSI Chairs of Local Arrangements and Hospitality. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4333.jpg  Figure . Cathy Macphie (left) and Prof. Robert Macphie (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\9. Wednesday Awards\_MG_4442.jpg  Figure . People dancing after the banquet. |

## Plenary sessions

We received great feedback about the two plenary sessions and the opportunities for interaction during the breakfasts that preceded them.

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\IMG_7734.jpg  Figure . Plenary Session "Global Research Opportunities" on Monday morning. From left to right: Prof. Danilo Erricolo, Prof. Moghaddam, Ms. Heidi Shyu (U.S. Army), Prof. Lawrence B. Schook (VP Research, University of Illinois, USA), Dr. George Komar (Associate Director, Earth Science Technology Office, NASA, USA), Dr. Biber (Healthcare Sector, Siemens AG, Germany), and Dr. Julio Navarro (Senior Technical Fellow, Boeing, USA). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\5. Tuesday Exhibitions\IMG_8844.jpg  Figure . Plenary Session “Funding Research Opportunities” on Tuesday morning. From left to right: Dr. Mahbub Hoque (Chief Scientist, CERDEC, U.S. Army), Dr. Dr. William Chappell (Program Manager, DARPA, USA), Dr. Devereux Palmer (Program Manager, Army Research Office, USA), Dr. Brian M. Kent (Chief Scientist, Sensors Directorate, Air Force Research Laboratory, USA), Dr. Robert Trew (Division Director, National Science Foundation, USA), and Prof. Danilo Erricolo. |

## Opening Reception at the Art Institute of Chicago

The Opening Reception took place at the Art Institute of Chicago on Sunday July 8 from 18:00 to 22:00. The Museum was open only for our attendees, who had access to the Impressionists Gallery and the Modern Art Gallery. Docents were available to explain the beautiful masterpieces present in the second largest museum of art in the United States and also the second largest collection in the world of Impressionist arts, after the Musée d’Orsay in Paris. In addition, thanks to the generous sponsorship of the Ming Hsieh Institute of the University of Southern California, we could give access to the Roy Lichtenstein Special Exhibit, which was opened a few weeks earlier by First Lady Michelle Obama in occasion of the 2012 NATO G8 meeting, and would travel only to Washington D.C, London and Paris.

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| Figure . The Art Institute of Chicago. | Figure . Entrance to the Impressionism Gallery. | Figure . The painting of a Paris street during rainy weather by Gustave Caillebotte. |

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| Figure . Prof. Steven C. Reising, USNC-URSI Chair, gives his introductory remarks. | Figure . | Figure . |
| Figure . | Figure . | Figure . Night view of the Art Institute from Monroe Street. |
| Figure . "A Sunday Afternoon on the Island of La Grande Jatte" by Georges-Pierre Seurat. | Figure . The Roy Lichtenstein Special Exhibit. | Figure . Self portrait of Vincent van Gogh. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_9732.jpg  Figure . Dr. Enrica Martini (left) and Elena Pucci (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_7601.jpg  Figure . From left to right: Prof. Jeff Young, Elizabeth Young, Dr. Peder Hansen, Mary Hansen. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_7545.jpg  Figure . Prof. Andrea Alù (center) and Prof. Mario Silveirinha (right). |

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_7544.jpg  Figure . From left to right: Karen Komar, Dr. George Komar, and Prof. Steven C. Reising, USNC-URSI Chair. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_7595.jpg  Figure . From left to right, first row: Prof. Amir Mortazawi, Prof. Kamal Sarabandi, Prof. Mahta Moghaddam, Prof. Gianluca Lazzi, Prof. Nader Behdad; second row: Adrian Lazzi and Prof. Erdem Topsakal. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_7549.jpg  Figure . From left to right: Prof. Per-Simon Kildal, Prof. Filippo Capolino and Prof. Matteo Albani. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_9733.jpg  Figure . Prof. Yahia Antar. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_9734.jpg  Figure . Prof. Ludger Klinkenbusch. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_9838.jpg  Figure . From left to right: Dr. Francesca Vipiana, Prof. Alberto Toccafondi, Prof. Alesandro Toscano, and Prof. Alessia Polemi. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_9860.jpg  Figure . From left to right: Prof. David R. Jackson, Prof. Yahya Rahmat Samii, Prof. Donald Wilton, and Prof. Constantine A. Balanis. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_7548.jpg  Figure . From left to right: Jacquelyn Huff, Prof. Gregory Huff, and Prof. Robert D. Nevels, 2010 IEEE AP-S President. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\_MG_2286.JPG  Figure . Prof. Makoto Ando (center), URSI Vice-President. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_7538.jpg  Figure 74. From left to right: Jason Cox, Tiffany Iskander, Sonia Iskander, Prof. Magdy F. Iskander, Prof. Danilo Erricolo, Prof. Magdalena Salazar Palma, 2011 IEEE AP-S President, Prof. Tapan K. Sarkar, 2013 IEEE AP-S President Elect. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_7543.jpg  Figure . From left to right: Dr. Randy Haupt, Dianne Paris, Dr. Larry Cohen. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\1. Sunday Reception\IMG_9832.jpg  Figure . Val Bird (left) and Dr. Trevor Bird (right), 2012 IEEE AP-S President Elect. |

## Odyssey Dinner Cruise

The Odyssey Dinner Cruise was a great success and it was offered at a significantly discounted cost due to the volume of business that IEEE has brought in the past.

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\4. Monday Boat Cruise\IMG_8506.jpg  Figure . From left to right: Mohammadreza F. Imani, Chau Nguyen, Gurkan Gok, Prof. Danilo Erricolo, Carl Pfeiffer, Yi Lan, Amit Patel, and Brett Kuprel. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\4. Monday Boat Cruise\IMG_8520.jpg  Figure . Dr. Dev Palmer (left), Prof. Bill Joines (center) and Prof. Jennifer T. Bernhard (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\4. Monday Boat Cruise\IMG_8471.jpg  Figure . From left to right: Clifton Courtney, Dr. Robert Kipp, Matt Miller, Matthew Young. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\4. Monday Boat Cruise\IMG_8470.jpg  Figure . Prof. Magdalena Salazar Palma (left) and Prof. Silvio Ernesto Barbin (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\4. Monday Boat Cruise\IMG_8564.jpg  Figure . Takako Nishikata and Joanna Bovee. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\4. Monday Boat Cruise\IMG_8247.jpg  Figure . Prof. Jiro Hirokawa (left), Prof. Yoshihiko Konishi (center), and Dr.Satoshi Yamaguchi (right). |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\4. Monday Boat Cruise\IMG_8259.jpg  Figure .Prof. Juan R. Mosig (left) and Prof. George V. Eleftheriades (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\4. Monday Boat Cruise\IMG_8469.jpg  Figure | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\4. Monday Boat Cruise\IMG_8249.jpg  Figure . Prof. Kiyohiko Itoh (center) and Dr. Takashi Hikage (right). |

## Student and Graduate of the Last Decade (GOLD) Reception/Luncheon

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_7881.jpg  Figure | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_8062.jpg  Figure . Prof. Karl Warnick, IEEE AP-S Education Committee Co-Chair. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_8157.jpg  Figure |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_8112.jpg  Figure | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_8105.jpg  Figure . Prof. David Kelley, IEEE AP-S Education Committee Chair. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_8002.jpg  Figure |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_8174.jpg  Figure . Jose Siles. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_8214.jpg  Figure . Borja Gonzales Valdes (left), Kathryn Williams (center), and Prof. Carey M. Rappaport (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_8188.jpg  Figure . Dr Siamak Ebadi (seated at center). |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_7996.jpg  Figure . Prof. Anthony Grbic (center). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_7925.jpg  Figure | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\3. Monday Luncheons\IMG_7989.jpg  Figure |

## Women In Engineering Reception

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_2987.jpg  Figure | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_2803.jpg  Figure . Christel Amburgey (left). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_2976.jpg  Figure . Prof. Parveen Wahid, IEEE AP-S Women in Engineering Chair. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_3210.jpg  Figure . Prof. Alkim Akyurtlu (left) and Prof. Ozlem Aydin Civi (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_2954.jpg  Figure . From left to right: Tiffany Iskander, Susan Hagness,2012 IEEE AP-S TPC Chair, Cynthia Furse, and Parveen Wahid. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_2889.jpg  Figure |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_2789.jpg  Figure . Dr. Oksana Shramkova (left), Prof. Elena Semouchkina (center) and Dr. Randy Haupt (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_3084.jpg  Figure . Dimitra Psychogiou (left) and Asimina Kiourti (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_3243.jpg  Figure . View of Chicago from Riva's restaurant. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_3124.jpg  Figure . Prof. Levent Gurel (left) and Prof. Weng Cho Chew (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_2801.jpg  Figure | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_3019.jpg  Figure |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_3169.jpg  Figure . Prof. Eva Rajo-Iglesias (left), 2012 IEEE AP-S Short-Courses and Workshops Chair, and Prof. Matteo Albani (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_3055.jpg  Figure . Dr. Marta Martinez-Vazquez (left) and Dr. Norma Riley (right). | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\7. Tuesday Reception\_MG_3074.jpg  Figure . Dr. Mike Shields (left) and Prof. Prabhakar H. Pathak (right). |

## AP-S Reviewers’ Luncheon

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| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\6. Tuesday Luncheons\IMG_8897.jpg  Figure . Dr. Trevor Bird, 2012 IEEE AP-S President Elect. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\6. Tuesday Luncheons\IMG_8931.jpg  Figure . Prof. Michael A. Jensen, Editor in Chief of the IEEE Transactions on Antennas and Propagation. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\6. Tuesday Luncheons\IMG_8947.jpg  Figure . Prof. Gianluca Lazzi, Editor in Chief of the IEEE Antennas and Wireless Propagation Letters. |
| C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\6. Tuesday Luncheons\IMG_8987.jpg  Figure . Dr. W. Ross Stone, Editor in Chief of the IEEE Antennas and Propagatio Magazine and 2012 IEEE AP-S/USNC-URSI International Liaison. | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\6. Tuesday Luncheons\IMG_9029.jpg  Figure | C:\Danilo\conferences\2012_APS_Chicago\Photographer\IEEE Event Photos\6. Tuesday Luncheons\IMG_9043.jpg  Figure |

## References

[1] Y. P. Zhang*,* M. Sun*,* D. Liu*,* and Y. Lu*,* “Dual Grid Array Antennas in a Thin-Profile Package for Flip-Chip Interconnection to Highly Integrated 60-GHz Radios,” *IEEE Transactions on Antennas and Propagation*, vol. 59, no. 4, pp. 1191-1199, April 2011.

**[2]** C. E. Patterson*,* T. K. Thrivikraman*,* A. M. Yepes*,* S. M. Begley, S. K. Bhattacharya, J. D. Cressler and J. Papapolymerou*,*“A Lightweight Organic X-Band Active Receiving Phased Array With Integrated SiGe Amplifiers and Phase Shifters,” *IEEE Transactions on Antennas and Propagation,* vol. 59, no. 1, January 2011*.*

**[3]** A. M. H. Wong and G. V. Eleftheriades*,* “Sub-Wavelength Focusing at the Multi-Wavelength Range Using Superoscillations: An Experimental Demonstration,” *IEEE Transactions on Antennas and Propagation,* vol. 59, no. 12, December 2011.

[4] N. Behdad, M. A. Al-Joumayly and M. Li, "Biologically Inspired Electrically Small Antenna Arrays With Enhanced Directional Sensitivity," *IEEE Antennas and Wireless Propagation Letters*, vol. 10, pp.36-364, 2011.

**[5]** A. Rashidian, D. M. Klymyshyn, M. T. Aligodarz, M. Boerner and J. Mohr, “Photoresist-Based Polymer Resonator Antennas: Lithography Fabrication, Strip-Fed Excitation, and Multimode Operation,” *IEEE Antennas and Propagation Magazine*, vol. 53, no. 4, pp.16-27, Aug. 2011