MINUTES  Commission B Business meeting
2013 URSI Meeting
Orlando, FL, USA
July 10, 2013

1. Meeting called to order at 5:00 pm.

2. Chair Sembiam Rengarajan welcomed the members and guests.

3. The minutes of the business meeting held in Boulder, CO in Jan. 2013 was approved.

4. Website Information
   USNC-B: http://www.ece.uic.edu/~URSICommb/
   Minutes from the Business Meetings (back to 1997) are there.
   Other links:
   USNC: http://www.usnc-ursi.org/
   International URSI-B: http://www.ursi.org/B/index.htm
   International URSI: http://www.ursi.org/

5. Announcements:
   Officers of various URSI offices for the triennium 2012-2014 were reviewed.
   USNC Commission B:
      Sembiam Rengarajan (chair)
      John Volakis (vice-chair)
      Jamesina Simpson (secretary)
      Sharad Laxpati (webmaster)
      Edward Rothwell (membership)
      Christos Christodoulou (technical activities)
   USNC/URSI:
      Chair: Steven C. Reising
      Past-Chair: Yahya Rahmat-Samii
Secretary and Chair-Elect: David Jackson
Accounts Manager: Gary Brown

URSI International Commission B
Chair: Giuliano Manara (Italy)
Vice-Chair: Ari Sihvola (Finland)

URSI International:
President: Phil Wilkinson (Australia)
Past-President: François Lefeuvre (France)
Vice Presidents:
Subra Ananthakrishnan (India)
Makato Ando (Japan)
Paul Cannon (UK)
George Uslenghi (USA)
Secretary-General: Paul Lagasse (Belgium)
Asst. Secretary-General (Publications): Ross Stone (USA)

6. Future meetings
   • USNC-URSI National Radio Science Meeting, Boulder, CO, Jan. 8-11, 2014
     (abstract submission deadline Sep. 23, 2013).
   • IEEE AP-S/URSI, Memphis, TN, July 6-12, 2014 (paper submission deadline Jan. 15, 2014)
   • XXXI URSI General Assembly and Scientific Symposium, Beijing, China, August 16-23, 2014.
   • Additional future meetings may be found on the AP-S and URSI websites.
     (http://www.ieeeaps.org/ and http://www.ursi.org/)

7. Nomination for International URSI Commission B Vice-Chair: Deadline to nominate candidates is March 1, 2014. If we have multiple nominations, we will elect one.

8. Deadline for submitting a proposal to host the 2019 URSI EM Theory Symposium is Jan. 2014. A template and sample proposal are available from the International URSI B website. The US has not hosted this symposium in a long time (30 years)? Please consider hosting it.

9. More reviewers are needed to review URSI B abstracts for the IEEE AP-S International Symposium & USNC/URSI Meeting. So far the Commission B officers have completed all of the reviews, but now there are too many for us to handle. Two independent reviews are needed for each abstract. We would like 12 total reviewers (we need 5 or 6 more). The work load is ~50 abstracts per reviewer during the last week of Jan. and first week of Feb. Please contact Dr. Sembiam Rengarajan to volunteer. Dr. Ross Stone indicated that the ratio of URSI abstracts to AP-S conference papers was somewhat higher this year compared to previous years (possibly because the URSI abstracts will now appear in Xplore).

10. Report of Technical Activities Committee
    Members
Semibam Rengarajan presented the Technical Activities Committee report. There were 4 Commission B-related special sessions in Boulder this year (same as last year), and 13 total Commission B-related sessions (same as last year). No one has kept track of which commission to which any URSI-related special sessions belong that were held at the annual IEEE AP-S International Symposium & USNC/URSI Meeting. This will be done in future years. On a case-by-case basis, URSI authors have permitted their talks to be recorded at the IEEE AP-S International Symposium & USNC/URSI Meeting.

   Members
   Ed Rothwell (Chair) – Michigan State University
   George Hanson – University of Wisconsin – Milwaukee
   Kathleen Melde – University of Arizona
   Don Wilton – University of Houston

   Please nominate your colleagues and students. To become an associate member, 2-3 journal publications are required and at least one URSI presentation (in B). Note that according to the USNC-URSI, only U.S. citizens and permanent residents may be members of the USNC-URSI (citizens from other countries are encouraged to join their respective URSI chapters).

   We reviewed full member nominations for Reyhan Baktur (Utah State University) and Branislav M. Notaros (Colorado State University). Both were approved.

12. Old Business: None.


**Guests in Attendance**
Magda El-Shenawee (University of Arkansas)

**Members in Attendance**
Prof. Semibam Rengarajan, Prof. Edward Rothwell, Prof. Jamesina Simpson, Dr. Andrea Alu, Dr. Ioannis M. Besieris, Dr. Gary S. Brown, Dr. Robert J. Burkholder, Prof. Filippo Capolino, Prof. Weng Cho Chew, Dr. William A. Davis, Dr. Nader Engheta, Dr. Danilo Erricolo, Prof. Susan C. Hagness, Dr. Peder Hansen, Dr. George W. Hanson, Dr. Ishimaru Akira, Prof. Ramakrishna Janaswamy, Prof. Michael A. Jensen, Prof. Leo C. Kempel, Prof. Edward F. Kuester, Dr. Stuart A. Long, Dr. Robert J. Mailloux, Dr. Ronald J.
Respectfully submitted by
Jamesina Simpson
Secretary
USNC-URSI Commission B
Business Meeting

Wednesday, July 10, 2013
5:00 – 6:00 p.m.

2013 IEEE AP-S International Symposium/USNC-URSI
National Radio Science Meeting, Orlando, FL, July 7-13, 2013
• Welcome to members and guests
• Introduction of guests
• Approval of the minutes from Boulder, Jan 2013

CHAIR REPORT

COMMITTEE REPORTS
• Technical Activities Report (Christos Christodoulou)
• Membership Committee (Edward Rothwell)

• Old business
• New business
• Adjourn
USNC-URSI Commission B Officers 2012-2014

Chair: Sembiam Rengarajan
Vice-Chair: John Volakis
Secretary: Jamesina Simpson
Chair, TAC: Christos Christodoulou
Chair, Membership Committee: Edward Rothwell
USNC-B Webmaster: Sharad Laxpati
USNC-URSI Officers 2012-2014

Chair: Steven C. Reising
Past-Chair: Yahya Rahmat-Samii
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International URSI-B Officers 2012-2014

Chair: Giuliano Manara (Italy)
Vice-Chair: Ari Sihvola (Finland)
Chair Report

International URSI Officers 2012-2014

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Upcoming URSI Meetings


XXXI URSI General Assembly and Scientific Symposium, Beijing, China, Aug. 16-23, 2014.

Additional future meetings may be found on the AP-S and URSI websites. (http://www.ieeeaps.org/ and http://www.ursi.org/)
Nomination for International URSI Commission B Vice-Chair

- Deadline for nomination of candidates for the vice-chair of the international URSI Commission B is March 1, 2014.
- If we have multiple nominations from USNC-URSI B, we will elect one.
Hosting the 2019 URSI EM Theory Symposium in the U.S.

- Deadline for submitting the proposal is Jan. 2014.
- A template and a sample proposal are available from the International URSI B for preparing the proposal.
Review of USNC-URSI/APS summer meeting abstracts

- Commission B officers have been reviewing the abstracts during the last two years.
- IEEE Xplore requires two independent reviews for each abstract. We need 5 or 6 additional reviewers.
- The average workload is about 50 abstracts/reviewer during the last week of January and first week of February.
Technical Activities Report: Christos Christodoulou
Membership Committee: Edward Rothwell
- Old Business?
- New Business?
- Adjourn
URSI Commission-B
Special Sessions & Stats

July 2013
Orlando, Florida

Christos Christodoulou
University of New Mexico
<table>
<thead>
<tr>
<th>Session Title</th>
<th>Number of papers</th>
<th>URSI Commission</th>
<th>Chairs or Organizers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex Media</td>
<td>10</td>
<td>B</td>
<td>Kubilay Sertel Filippo Capolino</td>
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<tr>
<td>Antenna Arrays</td>
<td>5</td>
<td>B</td>
<td>Yahya Rahmat-Samii Karl Warnick</td>
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<tr>
<td>Antenna Theory, Design and Measurement</td>
<td>10</td>
<td>B</td>
<td>John Volakis Sembiam Rengarajan</td>
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<tr>
<td>Numerical Methods</td>
<td>10</td>
<td>B</td>
<td>Branislav Notaros Donald Wilton</td>
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<tr>
<td>Inverse Scattering</td>
<td>5</td>
<td>B</td>
<td>Kamal Sarabandi Danilo Erricolo</td>
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<tr>
<td>Wideband Antennas</td>
<td>5</td>
<td>B</td>
<td>Dejan Filipovic Gregory Huff</td>
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<tr>
<td>Electromagnetic Theory</td>
<td>10</td>
<td>B</td>
<td>David Jackson Piergiorgio Uslenghi</td>
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## 2013 URSI-B Joint Sessions at Boulder

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Number of papers</th>
<th>URSI Commission</th>
<th>Organizers</th>
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<tbody>
<tr>
<td>Sensors for Independent Living</td>
<td>5</td>
<td>B/K</td>
<td>Erdem Topsakal</td>
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<td>John Volakis</td>
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<tr>
<td>Cognitive Radio and Radar</td>
<td>6</td>
<td>B/C</td>
<td>Amir Zaghloul</td>
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<td>Christos Christodoulou</td>
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<tr>
<td>Biophotonics</td>
<td>10</td>
<td>B/K</td>
<td>Ilker Capoglu</td>
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<td>Jamesina Simpson</td>
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<tr>
<td>Developments in Array Technology for Radio Astronomy</td>
<td>11</td>
<td>B/J</td>
<td>Karl Warnick</td>
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<td>John Volakis</td>
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## 2013 URSI Boulder Summary

<table>
<thead>
<tr>
<th>URSI Commission-B Total</th>
<th>Number of Sessions</th>
<th>Number of Papers</th>
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<tbody>
<tr>
<td></td>
<td>7 (B)</td>
<td>55</td>
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<td></td>
<td>1 (C/B joint)</td>
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<td></td>
<td>1 (J/B joint)</td>
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<td></td>
<td>2 (K/B joint)</td>
<td>15</td>
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<td>13 (Total)</td>
<td>87</td>
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| URSI Total (All Commissions) | 47 | 368 |

### 2013 URSI B Papers (Boulder, Colorado), attendance:
- Total Papers (including joint) in all Sessions: 368  
  (87 URSI B, including Joint)
- URSI B only papers: 55
- Papers in joint sessions: 32
<table>
<thead>
<tr>
<th>Special Sessions since 2010</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tr>
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<td>3</td>
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<tr>
<td>Session Title</td>
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<tr>
<td><em>Theoretical, Algorithmic, and Technological Advances in EM inverse scattering</em></td>
<td>Andrea Massa, Aria Abubakar and Magda El-Shenawee</td>
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<tr>
<td>Advances in Commercial EM Simulation Tools</td>
<td>C.J. Reddy, Jay Kralovec and Aldo Petosa</td>
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<tr>
<td>Cognitive Radio: Improvements through the integration of electromagnetic and communication theory</td>
<td>Daniela Tuninetti, Natasha Devroye and Agostino Monochio</td>
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<tr>
<td>Electrodynamics and applications of carbon nanotube and graphene systems</td>
<td>George Hanson and Christophe Caloz</td>
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<tr>
<td>Terahertz technology</td>
<td>Hao Xin and Goutaum Chattopadhyay</td>
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<tr>
<td>AMTA Special Session – Advances in antenna and RCS measurement technology</td>
<td>Ivan J. Lahaie and Chris Coleman</td>
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<tr>
<td>Future trends in Radar</td>
<td>Lorenzo Lo Monte and Gary Scalzi</td>
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<tr>
<td>Challenging canonical scattering problems and new EM Problems involving Special Materials</td>
<td>Guido Lombardi and Andrea Alu</td>
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<tr>
<td>Flexible 2D and 3D printed Antennas</td>
<td>Reyhan Bakur and Cynthia Furse</td>
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<tr>
<td>Antenna Feed systems for space and terrestrial applications</td>
<td>Sudhakar Rao, Nuria Llombart Juan and Isamu Chiba</td>
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<tr>
<td>The legacy of Harold Wheeler</td>
<td>Ted Simpson and Walter Kahn</td>
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<tr>
<td>Prof. Robert Kouyoumijian Memorial session: Asymptotic HF and Hybrid Methods</td>
<td>Prabhakar Pathak and Giuliano Manara</td>
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<tr>
<td>Evaluation Techniques for compact Multi Element Antennas For MIMO</td>
<td>Rodney Vaughan and Jane Yun</td>
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<tr>
<td>Advances in Antenna Impedance Matching</td>
<td>Richard Ziolkowski</td>
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<td>Advances in Commercial EM Simulation Tools</td>
<td>C.J. Reddy</td>
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<tr>
<td>Advances in RFID Sensing: An Emerging Wireless Identification and Sensing Technology</td>
<td>Leena Ukkone</td>
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<tr>
<td>Traveling Wave Antennas - in honor of Prof. Carlton H. Walter</td>
<td>Johnson Wang</td>
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<tr>
<td>AMTA Special Session - Advances in RF Measurement Technology</td>
<td>Ivan LaHai, Com A</td>
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<tr>
<td>Terahertz Antennas and Other Technologies</td>
<td>Hao Xin</td>
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<tr>
<td>Metasurfaces for Guidance and Radiation</td>
<td>Anthony Grbic</td>
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<td>Numerical Weather Prediction Supporting Electromagnetic Wave Propagation Modeling</td>
<td>Robert Marshal, Com F</td>
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<td>Passive Intermodulation (PIM) and High Power Effects in Antennas and Wireless Interfaces</td>
<td>Alexander G. Schuchinsk</td>
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<td>Printed MIMO Antenna Implementations and Challenges</td>
<td>Mohammad S. Sharawi</td>
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<tr>
<td>Antenna Challenges Solved by Complex Modeling I</td>
<td>Matthias Geissler, IMST</td>
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