



International Union of Radio Science U.S. Commission B

N. Engheta, Chair  
S. Rengarajan, Vice-Chair  
J. Simpson, Secretary

**MINUTES      Commission B Business meeting**  
2011 URSI Meeting  
Spokane, WA, USA  
July 4, 2011

1. Meeting called to order at 5:00 pm.
2. Chair Nader Engheta welcomed the members and guests.
3. The minutes of the business meeting held in Boulder, CO in Jan. 2011 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 2009-2011 were reviewed.  
USNC Commission B:  
Nader Engheta (chair)  
Sembiam Rengarajan (vice-chair)  
Jamesina Simpson (secretary)  
Sharad Laxpati (webmaster)  
Edward Rothwell (membership)  
John Volakis (technical activities)  
USNC/URSI:  
Chair: Yahya Rahmat-Samii

Past-Chair: George Uslenghi  
Secretary and Chair-Elect: Steven C. Reising  
Accounts Manager: Gary Brown  
URSI International Commission B  
Chair: Karl Langenberg (Germany)  
Vice-Chair: Giuliano Manara (Italy)  
Candidates for Vice-Chair URSI International Commission B  
Ayhan Altintas, Kazuya Kobayashi, Ari Sihvola, Donald Wilton  
URSI International:  
President: François Lefevre (France)  
Past-President: Gert Brussaard (the Netherlands)  
Vice Presidents:  
Yahia Antar (Canada)  
Martti Hallikainen (Finland)  
Umran Inan (USA)  
Phil Wilkinson (Australia)  
Secretary-General: Paul Lagasse (Belgium)  
Asst. Secretary-General (Publications): Ross Stone (USA)

6. Future meetings
  - 2011 URSI GASS (General Assembly), Turkey, August 13-20, 2011 (paper submission deadline of Feb. 11, 2011)
  - USNC-URSI National Radio Science Meeting, Boulder, CO., Jan. 3-7, 2012.
  - 2012 AP-S/URSI, Chicago, Illinois, 2012
  - Additional future meetings may be found on the AP-S and URSI websites. (<http://www.ieeeaps.org/> and <http://www.ursi.org/>)
7. Prof. Uslenghi mentioned that 1400 papers were submitted to URSI GASS Commission B. This number is only second to Commission G. The URSI Vice-Chair will be chosen in Istanbul.
8. September 23 is the Jan. 2012 URSI abstract deadline and the student paper contest deadline. In 2011, > 140 students applied for the student travel support. The number that can be supported each year is ~120 (according to the budget for that year). As a result, 7 students were denied student travel support in 2011. Only students having already attended 2 previous URSI conferences in Boulder were denied support. Student travel support does not cover the cost of registration.
9. Report of Technical Activities Committee  
Members
  - Shanker Balasubramanian - Michigan State
  - Hossein Mosallaei - Northeastern Univ.
  - Erdem Topsakal - Mississippi State Univ.
  - John Volakis (Chair) - Ohio State Univ.
  - Manos Tentzeris - Georgia Tech

John Volakis presented the Technical Activities Committee report. The report started by listing the special sessions (19) at this meeting. Historical data for URSI B sessions of previous years were provided, as well as a summary of the sessions and number of papers for this meeting. The slides are included at the end of these Minutes. Oct. 14 is the special session proposal deadline for IEEE AP-S 2012.

10. Report of the Membership Committee.

Members

Ed Rothwell (Chair) – Michigan State University  
Leo Kempel – Michigan State University  
Kathleen Melde – University of Arizona  
Don Wilton – University of Houston

Ed Rothwell presented the report for the committee. Full membership nominations of Ali Yilmaz (University of Texas, Austin) and Brian Edwards (University of Pennsylvania) were approved.

11. Old Business: None.

12. New Business: None.

13. Adjourned at 5:45 pm.

### **Guests in Attendance**

Prof. Polma Salazar, Adam Schreiber, Taeyoung Yang (HTC America), Chanler Mang (Boeing), Majid Manteghi, Reyhan Baktur, Yahia Antar, Anders Derneryd (Ericsson), Charker Manning, Lorenzo LoMonte

### **Members in Attendance**

Dr. Robert Burkholder, Dr. Peder Hansen, Dr. George Hason, Dr. Gregory Huff, Prof. Michael Jenson, Prof. Jianming Jin, Dr. Ozlem Kilic, Dr. Yasuo Kuga, Dr. Gianluca Lazzi, Dr. Vitaliy Lomakin, Dr. Ronald Marhefka, Prof. Kathleen Melde, Prof. Raj Mittra, Prof. Robert Nevels, Dr. Andrew Peterson, Dr. Tapan Sarkar, Dr. Allan Schell, Dr. Karl Warnick, Dr. Steven Weiss, Dr. Arthur Yaghjian, Prof. Alexander Yakovlev, Prof. Richard Ziolkowski, Dr. Andrea Alu, Dr. Ioannis Besieris, Dr. Gary Brown, Dr. Gerald Burke, Dr. William Davis, Dr. Atef Elsherbeni, Prof. Akira Ishimaru, Prof. Michael Jensen, Dr. William Johnson, Prof. Leo Kempel, Dr. Ahmed Kishk, Prof. Edward Kuester, Dr. Robert Lee, Dr. Jeffrey Nanzer, Dr. Raoul Ouedraogo, Prof. Yahya Rahmat-Samii, Dr. Edward Rothwell, Dr. Jamesina Simpson, Dr. John Schneider, Dr. Kubilay Sertel, Dr. Satish Sharma, Prof. Scott Tyo, Dr. Douglas Werner, Dr. Fan Yang, Dr. Nader Engheta, Dr. Sembiam Rengarajan, Dr. Don Wilton, Dr. David R. Jackson, Dr. Amir Zaghloul, Dr. R. C. Hansen, Dr. Shira Broschat, Dr. Tapan K. Sarkar, Dr. Yasuo Kuga, Dr. Richard W Ziolkowski, Dr. Arthur Yaghjian, Dr. Uslenghi, Dr. Raj Mittra, Dr. Allan Schell, Dr. Anders Derneryd, Dr. W. Ross Stone, Dr. Volakis,

Respectfully submitted by  
Jamesina Simpson  
Secretary



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## **USNC Commission-B Business Meeting**

Monday, July 4, 2011  
5:00 – 6:00 p.m.  
Theater, SCC

2011 IEEE AP-S International Symposium/URSI-USNC  
National Radio Science Meeting, Spokane, WA, July 3-8,  
2011



## AGENDA

USNC Commission-B  
Business Meeting

- Welcome to members and guests
- Approval of the minutes of the Boulder meeting, Jan 2011

### CHAIR REPORT

### COMMITTEE REPORTS

- Technical Activities Report (John Volakis)
- Membership Committee (Edward Rothwell)

- Old business
- New business
- Adjourn



## Chair Report

USNC Commission-B  
Business Meeting

USNC-B Officers Jan. 2009- Dec. 2011

Chair: Nader Engheta

Vice-Chair: Sembiam Rengarajan

Secretary: Jamesina Simpson

Chair, TAC: John Volakis

Chair, Membership Committee: Edward Rothwell

USNC-B Webmaster: Sharad Laxpati



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Past-Chair: George Uslenghi

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Vice-Chair: Giuliano Manara (Italy)



## Chair Report

USNC Commission-B  
Business Meeting

Candidates for Vice-Chair URSI International Commission B  
Jan 2012-Dec 2014

Ayhan Altintas

Kazuya Kobayashi

Ari Sihvola

Donald Wilton



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Business Meeting

International URSI Officers Jan. 2009-Dec. 2011

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## Chair Report

USNC Commission-B  
Business Meeting

### Upcoming URSI Meetings

(Current) IEEE AP-S/URSI, Spokane, WA, July 3- 9, 2011

2011 URSI General Assembly, Turkey, August 13-20, 2011

USNC-URSI National Radio Science Meeting, Boulder, CO,  
Jan. 3-7, 2012 (deadline, September 23, 2011)

IEEE AP-S/URSI, Chicago, IL, July 8-14, 2012

Additional future meetings may be found on the AP-S and URSI websites. (<http://www.ieeeaps.org/> and <http://www.ursi.org/> )



## Committee Report

USNC Commission-B  
Business Meeting

Technical Activities Report: John Volakis



## Committee Report

USNC Commission-B  
Business Meeting

Membership Committee: Ed Rothwell



## Chair Report

USNC Commission-B  
Business Meeting

- ❖ Old Business?
- ❖ New Business?
- ❖ Adjourn



# APS/URSI

**July 3-8, 2011  
Spokane, Washington**

**John L. Volakis  
ElectroScience Lab  
Electrical & Computer Engineering Dept.  
The Ohio State University  
Columbus, OH 43212**

# 2011 APS/URSI Spokane, WA Special Sessions (Advertised)

Session Title	Assigned Session Type (AP/URSI)	URSI Commission	Organizer(s)
Ten Open Problems in CEM	joint	B	Eric Michielssen
Advanced Antenna Systems for Satellite Communications	AP		Sudhakar Rao Nuria Lombart
Biomimetics and Biologically Inspired Systems in Electromagnetics	joint	B, K	Nader Behdad Gregory Huff
High Performance Wideband Phased Array Technologies for Military Applications	AP		Wajih A. Elsallal
AMTA Special Session - Advances in Antenna and RCS Measurement Technology	AP		Ivan LaHaie
Antenna Systems for Unleashing New Possibilities in Cognitive Radios	joint	B, D	Jennifer Bernhard Christos Christodoulou Kathleen Melde
Power Harvesting	joint	B	Rick Ziolkowski
Multiple-Input Multiple-Output (MIMO) Radar Antennas and Applications	joint	B	Hai Deng
Numerical weather prediction supporting electromagnetic wave propagation modeling	joint	B, F	Robert Marshall Tracy Haack
Compressive Sensing as applied to Electromagnetics	URSI	C	Andrea Massa Larry Carin Giacomo Oliveri
Recent developments in model-based inversion algorithms	joint	B, K	Maokun Li Aria Abubakar
Physics-oriented Modeling of Antenna Radiation Processes	joint	B	Diego Caratelli Massimiliano Simeoni
Experimental and Numerical Validations of Metamaterial Phenomena	joint	B, D	Ashwin Iyer Anthony Grbic
Evolutionary Strategies for Next Generation Electromagnetic Design Optimization	joint	B	Doug Werner
Reflectarray and Transmitarray Antennas: Theory, Designs, and Applications	joint	B	Fan Yang Atef Elsherbeni
Non-Foster Circuits for Metamaterials and Antennas	joint	B	Hossein Mosallaei Rick Ziolkowski
Advances in Commercial Electromagnetic Simulation Tools	joint	B	C. J. Reddy Jay Kralovec Peter de Maagt
In Memory of Dr. Carl Baum	joint	B	Dave Giri
In Memory of Prof. Robert Collin	joint	B	TBD

# Historical Data

Year	Location	URSI B only	All URSI	Notes
2006	Boulder			
	Albuquerque	330		
2007	Boulder	not held		
	Ottawa	239	(325 joint with other commissions)	
2008	Boulder	94 (315)	14	
		papers in special sessions: 64 (B-only: 40, Joint: 24)		
	San Diego	201	12% of total	All URSI: 21% of total
2009	Boulder	78 (291)	9	
		papers in special sessions: (B-only: 10, Joint: 16, Total:26)		
	Charleston	221	16% of total	All URSI: 340 (24.8%)
2010		papers in Special Sessions		
	Boulder	83 (344)	10	
		papers in special sessions: (B-only: 16, Joint: 12, Total:28)		
2010	Toronto			
		URSI B only	269	17% of total conference papers
		All URSI	405	26% of total conference papers
2011	Boulder	86 (356)	11	
		papers in special sessions: (B-only: 5, Joint: 31, Total:36)		
2011	Spokane			
		URSI B only	313	23% of APS+URSI (259 B only _ 54 in SS)
		All URSI	442	33% of APS+URSI (348 URSI only+94 in SS)

# 2011 APS/URSI Spokane Summary

## Sessions

	Regular Sessions	Special Sessions	<u>Interactive Forum</u>	<u>Total:</u>
<b>APS</b>	69	2	12	83
<b>URSI</b>	32	3	6	47
<b>All URSI in joint sessions</b>	22	12	4	40
<b><u>Total:</u></b>	123	17	22	162

## Papers

**Total APS/URSI-all Papers=1362**

	Regular Sessions	Special Sessions	<u>Interactive Forum</u>	<u>Total URSI</u>	<u>Total</u>
<b>APS</b>	561		137	0	714
<b>URSI</b>	182		46	256	256
<b>All URSI in joint session</b>	236	112	44	186	392
<b><u>Total:</u></b>	979	156	227	442	1362