



## International Union of Radio Science    U.S. Commission B

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J. Volakis, Chair	<i>Please reply to:</i>	
J. Simpson, Vice-Chair	Reyhan Baktur	phone: (435) 797-2955
R. Baktur, Secretary	Dept. of ECE, Utah State Univ.	fax: (435) 797-3054
	EL 150, 4120 Old Main Hill	e-mail: reyhan.baktur@usu.edu
	Logan UT 84322	

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### **MINUTES    Commission B Business meeting**

2016 USNC-URSI

Puerto Rico

June 27, 2016

1. Meeting got delayed as the secretary forgot some forms.
2. Jamesina Simpson stepped in as secretary.
3. Chair called the meeting to order at 5:10.
4. Guests were introduced.
5. **Chair's report.**  
(Presentation slides are attached at the end of the meeting minutes.)
6. Sign up sheet passed out by Jamesina
7. 5:22 Reyhan came back with the forms and took over the minutes.
8. Reyhan passed out the Boulder minutes and members' list.
9. **URSI Awards:** By David Jackson  
(Presentation slides are attached at the end of the meeting minutes.)
  - David talked about the triennial URSI award nomination details and mentioned that Reyhan had already sent those out through email, and talked about the brief guidelines for it.
  - David talked about award selection process
10. **Approval of Boulder 2016 minutes.** John requested approval. Ross moved, Sembiam seconded. Voted, all Yes. Approved.
11. **Technical Report:** By Bane Notaros  
(Presentation slides are attached at the end of the meeting minutes.)
  - Technical report – Statistics

- Compared statistics between 2016 and 2015

Giorgio Uslenghi asked question about consistency of data; question was answered and clarified.

- Statistics for 2016 APS, URSI to Boulder URSI.
- It was noted that Comm B papers prevail in the summer meeting. Bane provided an explanation for that.
- 2016 Special sessions: For joint special sessions, Bane commented that it is mainly APS rather than URSI special sessions for summer meeting; Xin Hao explained how URSI was involved.
- Boulder conference statistics were presented, including special sessions.
- Proposal for 2017 B-URSI Boulder Special sessions.
- Bane discussed URSI special sessions for Boulder meetings (one may refer to the Boulder meeting minutes).

Pure URSI special sessions equivalent to Boulder special sessions. Detailed description is attached as in the technical report.

David thinks it is a great idea.

John asked if to make it suggestion or just do it.

Some members commented that we should just do it.

Garry Brown mentioned that there was a concern of having too many special sessions.

Bane clarified that those were for APS/URSI special sessions; our discussion is just for URSI. Some members commented that it is just for Boulder.

Mahta suggested calling it “invited sessions”. John said in URSI General Assemblies we already have “invited session”.

Giorgio suggested bringing it to the business meeting to Boulder.

## **12. Membership Committee Report**

(Presentation slides are attached at the end of the meeting minutes.)

- Kathie Melde presented the committee report on behalf of Ed Rothwell
- Kathie read the membership guidelines
- Three candidates: Gokhan Mumcu, Niru Nahar, Deb Chatterjee

Ross Stone moved, Gary Brown seconded, Voted, all in favor.

All three were approved.

- David Jackson: (1) Commented that all nominations came from and were submitted through USNC website. (2) Suggested John to talk about the early career membership.

- John clarified about the early career membership, and David added more info. Ross Stone mentioned that it should be on the web too.

13. Old Business: None

14. New Business: None

15. Meeting was adjourned at 5: 57

Respectfully submitted by Reyhan Baktur, Secretary

### **Guests attended**

<b>First Name</b>	<b>Last Name</b>	<b>Affiliation</b>
Francesco	Monticone	UT Austin/Cornell
Dimitrios	Sounas	UT Austin
Christos	Argyropoulos	University of Nebraska- Lincoln
Gregory	Makar	Washington State University- Vancouver
Kezhong	Zhao	Anysis- Inc.
Deb	Chatterjee	University of Missouri
Roberto	Graglia	Politecnico di Torino Italy
Pai-Yen	Chen	Wayne State University
Maria	Pour	University of Alabama in Huntsville
Brandon	Good	NSWCCD
Robert	Stark	NSWCCD
Yariv	Brice	UT Austin
Lin	Sun	Youngstown State University
George	Trichopoulos	Arizona State University



# USNC-URSI Commission-B Business Meeting

Monday, June 27, 2016

5:00 – 6:00 p.m.

Location: Grand Caribbean Salon III

## AP-S/URSI 2016

June 26 - July 1, 2016  
Fajardo, Puerto Rico



# IEEE





# AGENDA

## USNC Commission-B Business Meeting

- Welcome to members and guests
- Approval of Boulder minutes from 2016 Boulder Meeting

[http://sites.nationalacademies.org/cs/groups/pgasite/documents/webpage/pga\\_169826.pdf](http://sites.nationalacademies.org/cs/groups/pgasite/documents/webpage/pga_169826.pdf)

### CHAIR REPORT

- Upcoming Meetings
- URSI Triennial Awards

### COMMITTEE REPORTS

- Technical Activities Report (Branislav Notaros)
- Membership Comt. (Ed Rothwell)
- Old business
- New business
- Adjourn



## Chair Report

USNC Commission-B  
Business Meeting

### USNC-B Officers 2015-2017

Chair: **John L. Volakis**

Vice-Chair: **Jamesina Simpson**

Secretary: **Reyhan Baktur**

Chair, TAC: **Branislav Notaros**

Chair, Membership Committee: **Edward Rothwell**

Webmaster:

**Chelsea Bock**, [CBock@nas.edu](mailto:CBock@nas.edu) at National Academies

Web Site

[http://sites.nationalacademies.org/PGA/biso/URSI/PGA\\_080674](http://sites.nationalacademies.org/PGA/biso/URSI/PGA_080674)



## Chair Report

USNC Commission-B  
Business Meeting

### Website Information

National Academies web site is our official site:

[http://sites.nationalacademies.org/PGA/biso/URSI/PGA\\_067360](http://sites.nationalacademies.org/PGA/biso/URSI/PGA_067360)

Minutes from the Business Meetings (back to 1997) are there.

#### Other links:

USNC <http://sites.nationalacademies.org/pga/biso/URSI/index.htm>

International URSI-B: <http://www.ursi.org/en/commission.asp?com=B>

International URSI: <http://www.ursi.org/en/home.asp>



## Chair Report

USNC Commission-B  
Business Meeting

### USNC Officers 2015-2017

Chair: **David Jackson**

Past-Chair: **Steven C. Reising**

Secretary and Chair-Elect: **Sembiam Rengarajan**

Accounts Manager: **Gary Brown**

National Acad. BISO Director: **Kathie Bailey**

National Acad. Senior Program Officer: **Ana M. Ferreras**

Consult Web Site Below for updates:

[http://sites.nationalacademies.org/PGA/biso/URSI/PGA\\_067360](http://sites.nationalacademies.org/PGA/biso/URSI/PGA_067360)



# USNC-URSI Members (2015-2017)

## MEMBERS at LARGE

Reyhan Baktur  
Danilo Erricolo  
Albin J. Gasiewski  
W. Devereux (Dev) Palmer  
Wayne Scales  
Jamesina J. Simpson

*A Member-at-Large is someone who does not represent one particular Commission, but rather represents the USNC-URSI as a whole.*

These are voting positions.

### *Society Representatives*

Randy Haupt (IEEE AP-S)  
David Kunkee (IEEE GRS-S)  
T. Joseph W. Lazio (American Astronomical Society)  
Robert E. Marshall (American Meteorological Society)  
Steven C. Reising (IEEE MTT-S)  
Fabiano S. Rodrigues (American Geophysical Union)

# Other USNC-URSI Representatives

## *Student Travel Program & Paper Competition:*

**Erdem Topsakal**

Virginia Commonwealth University



## Chair Report

USNC Commission-B  
Business Meeting

### International URSI-B Officers 2015-2017

Chair: Ari Sihvola (Finland)

Vice-Chair: Kazuya Kobayashi (Japan)



## Chair Report

USNC Commission-B  
Business Meeting

### International URSI Officers 2015-2017

President: Paul Cannon (UK)

Past-President: Phil Wilkinson (Australia)

#### Vice Presidents:

Subra Ananthakrishnan (India)

Makato Ando (Japan)

Yahia Antar (Canada)

Umran Inan (USA)

Secretary-General: Paul Lagasse (Belgium)

Asst. Secretary-General (Publications): Ross Stone (USA)

Asst. Secretary-General (AT-RASC): George Uslenghi (USA)

Asst. Secretary-General (AP-RASC): Kazuya Kobayashi (Japan)

# Upcoming and Future Conferences

## 2017 USNC-URSI, January 4--7 in Boulder, Colorado

The next annual National Radio Science Meeting (NRSN) will be held from Wednesday, January 4 through Saturday, January 7 in Boulder, Colorado.

The meeting will offer Student Travel Grant awards to both graduate and undergraduate students, and will feature the 120 Ernest K. Smith Student Paper Competition. The first place winner will receive \$1000, the second place winner will receive \$750, and the third place winner will receive \$500. The meeting website (<http://www.nrsmboulder.org/>) will be updated soon with more information.



## Upcoming Meetings

USNC Commission-B  
Business Meeting

See Site <http://www.ursi.org/en/events.asp>

- ❑ **2016 URSI EM Theory Symposium**, Aug. 14-18, 2016 Espoo (Helsinki), Finland.  
(<http://emts2016.org>)
- ❑ **ICEAA-IEEE APWC, September 12-23, 2016 Cairns, Australia**
- ❑ **Int. Conference on Antenna Measurements & Applications (2016 IEEE CAMA), October 23-27, 2016, Syracuse, New York**
- ❑ **2016 ISAP, Okinawa, Japan, Oct. 24-28, 2016**
- ❑ **2016 Metamaterials Conference, Greece** 17-22 Sept 2016,.
- ❑ **2016 URSI AP-RASC Conference, Seoul, S. Korea**, August 21-25, all 10 commissions participate  
, [www.aprasc2016.org](http://www.aprasc2016.org)
- **2016 IEEE Phased Array Systems and Technology**, Boston, MA, 18-21 Oct
- ❑ **2016 AMTA, Austin, TX**, Oct 30-Nov 4, <http://www.amta2016.org/>
- ❑ **2017 iWAT, Athens, Greece, March 1-3, 2017, Paper Submission deadline, Oct 10th**
- ❑ **2017 ICEAA-IEEE APWC**, Verona, Italy, Sept 11-15, paper deadline March 10, 2017
- ❑ **2017 EuCAP, Paris, France, 19-24 March 2017**
- ❑ **2017 URSI General Assembly**, August 19-26, 2017
- ❑ **2019 URSI Commission B EMTS**, May 27 (short courses), May 28-31  
(Technical sessions), San Diego, CA. **Contact Sembiam Rengarajan**

# Two New URSI Triennial Meetings

- Since 2015, URSI is holding a scientific conference every year
- GASS: 2014, 2017, 2020
- AT-RASC: 2015, 2018, 2021
- AP-RASC: 2016, 2019, 2022
- These two new conferences will be “URSI flagship” conferences
- URSI Board and Coordinating Committee meetings will be held at these meetings
- It is hoped that some Commissions who have their own triennial meetings will merge them into one or both of these two meetings

# Upcoming Meetings: Joint Symposia

- 2017, July 9-15, San Diego, CA, Chair: Daniel Sievenpiper
- 2018, July 14-21, Boston, MA,
- 2019, July 7-12, Atlanta, GA
- 2020 July 4-10, Montreal, Fairmont Queen Elizabeth Hotel
- **2021 Singapore**





## USNC Commission-B Business Meeting

URSI Triennial Awards: David Jackson



## **Committee Report**

USNC Commission-B  
Business Meeting

Technical Activities Report: Branislav Notaros



## **Committee Report**

USNC Commission-B  
Business Meeting

URSI B Membership Nominations: Ed Rothwell



## Chair Report

USNC Commission-B  
Business Meeting

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

# GASS: 2017 General Assembly and Scientific Symposium

- 2017 August 19-26, 2017,  
Palais des Congres, Montreal,  
Canada
  - Outstanding venue and hotels
- Also, Special Celebration  
Events Planned due to
- 375<sup>th</sup> anniversary of Montreal,
- 150<sup>th</sup> anniversary of Canada



[www.gass2017.org](http://www.gass2017.org)

# 2019 URSI Commission B International Symposium on Electromagnetic Theory

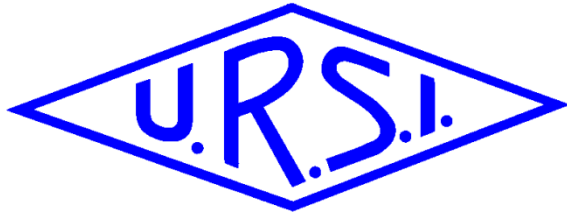
**Venue: San Diego, CA (Westin San Diego Hotel)**

**Dates: May 27-31, 2019**

**Sponsors: IEEE Antennas and Propagation Society**

**USNC-URSI (50-50 financial co-sponsors)**

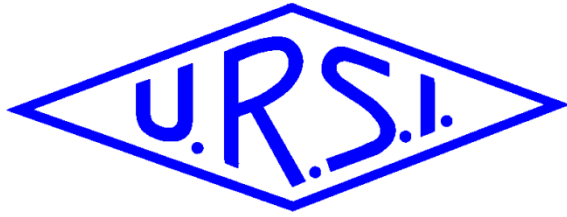
- Triennial symposium previously held in the US in 1977 at Stanford along with the IEEE AP Symposium
- Technical program will be managed by the International URSI Commission B
- Local Organizing Committee will manage all other aspects of the symposium
- MOU signed by Roberto Graglia (IEEE APS) and David Jackson (USNC-URSI)
- Hotel (Westin) and PCO contracts have been signed by George Uslenghi and going through the final IEEE approval process.



# Call for Nominations

## 2017 URSI Awards

**These awards will be presented at the 2017 GASS in Montreal.**



## URSI Awards

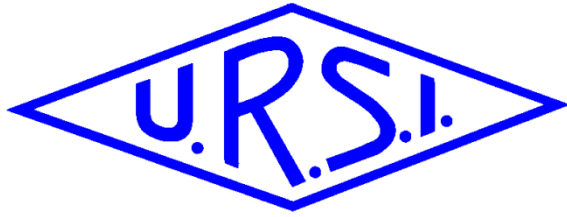
This is an important opportunity for the USNC, and especially for our distinguished U.S. colleagues who are active in URSI activities.

We one do this once every three years.

**Please take the time to make nominations!**

Note: Previous nominators from 2014 are welcome to submit nominations again, if the nominations were not successful last time.



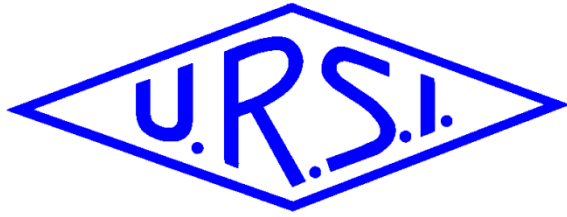


## URSI Senior Awards:

- ❖ Van der Pol Medal
- ❖ Dellinger Medal
- ❖ Appleton Prize
- ❖ Booker Gold Medal

## URSI Junior Awards:

- ❖ Koga Gold Medal
- ❖ Santimay Basu Prize



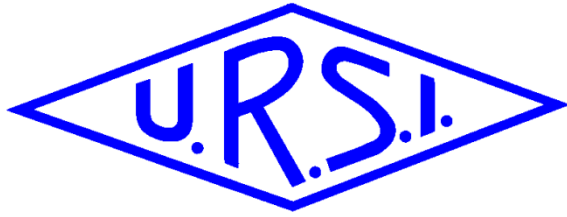
## Nomination Instructions

Your Commission Chair has distributed to you the following:

- The nomination form
- Guidelines for each of the awards
- A list of previous winners for each award

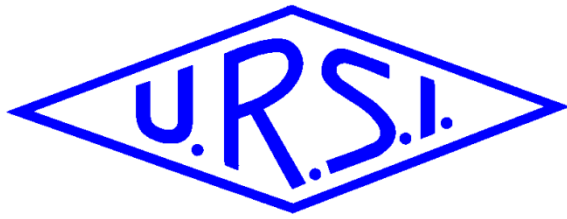
Send nomination forms (Word document) by email to both:

- David R. Jackson  
Chair, USNC-URSI  
Email: [djackson@uh.edu](mailto:djackson@uh.edu)
- Your USNC Commission Chair



## Award Selection Process

- The nomination forms are collected and sent to the chair of the appropriate USNC-URSI awards committee (Senior Awards Committee or Junior Awards Committee).
- Each awards committee selects one nominee for each of the awards on behalf of USNC-URSI.
- The award nominations are sent to international URSI by the deadline of Aug. 15, 2016.
- The international URSI Awards Board makes the final selection based on all nominations received from URSI Member (national) Committees.
- International URSI will present the awards at the opening ceremony of the 2017 GASS in Montreal.



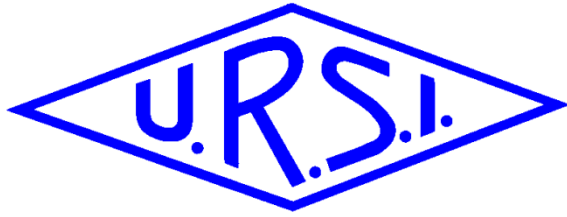
## USNC-URSI Awards Committees

### **Senior Awards Committee**

Chair: Umran Inan

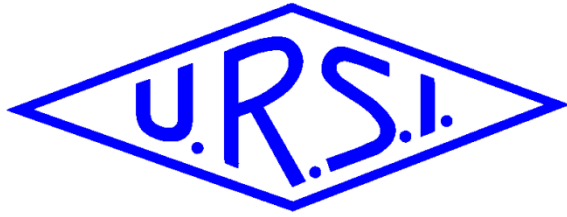
### **Junior Awards Committee**

Chair: Susan Hagness



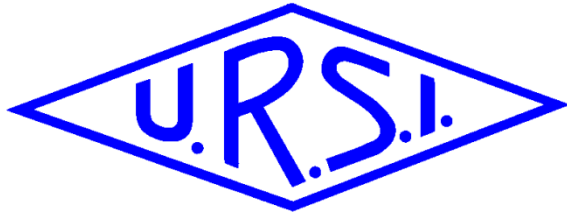
# Deadline for Nominations:

Wednesday, July 13, 2016



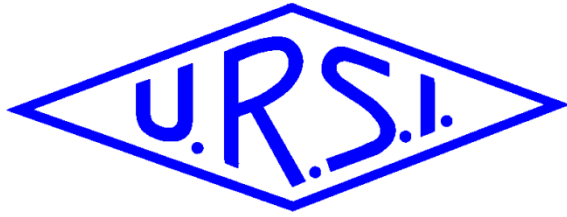
# Appendix

**A Brief Description is Given for Each Award**



## **Balthasar van der Pol and John Howard Dellinger Gold Medals**

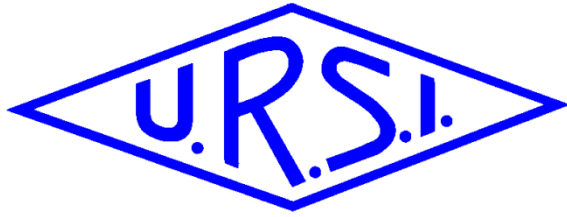
The Balthasar van der Pol and the John Howard Dellinger Gold Medals honour the memory of two scientists who were closely associated with URSI for many years. The Medals are awarded to outstanding scientists whose achievements in any of the branches of science covered by the Commissions of URSI have been particularly valuable. The award is for career achievements of the candidate with evidence of significant contributions within the most recent six-year period.



## Appleton Prize

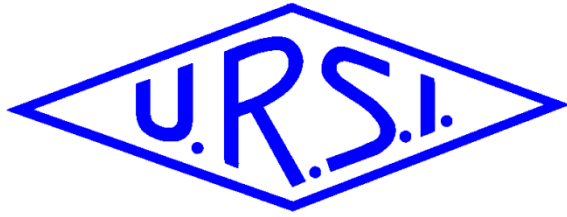
The Appleton Prize is awarded for outstanding contributions to studies in ionospheric physics. The award is for career achievements of the candidate with evidence of significant contributions within the most recent six-year period.





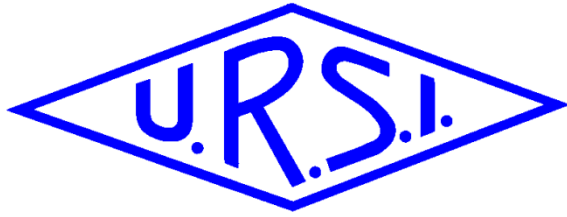
## Booker Gold Medal

The Booker Gold Medal honours the memory of Professor Henry G. Booker who served as URSI Vice President, 1969-1975, and Honorary President until his death in 1988. The Medal is awarded for outstanding contributions to telecommunications or a related discipline of direct interest to URSI. The award is for career achievements of the candidate with evidence of significant contributions within the most recent six-year period.



## Issac Koga Gold Medal

The Issac Koga Gold Medal honours the memory of a scientist who was closely associated with URSI for many years. The Medal is awarded to a Young Scientist, of age not more than 35 on 30 September of the year preceding the General Assembly and Scientific Symposium of URSI, who has made an outstanding contribution to any of the branches of science covered by the Commissions of URSI. The award is for career achievements of the candidate with evidence of significant contributions within the most recent six-year period.



## Sanitmay Basu Prize

The Santimay Basu Prize honours the memory of a scientist who was closely associated with URSI for many years. The Prize is awarded to a young scientist, not more than 35 years old on 30 September of the year preceding the General Assembly and Scientific Symposium of URSI, who has made an outstanding contribution to research that furthers the understanding of radio-wave propagation in random media and its application for the benefit of society. The award will take into account the excellence of the research, the merit of the candidate in achieving his or her results, and the efforts required to accomplish the research.

# AP-S/URSI 2016



June 26 - July 1, 2016  
Fajardo, Puerto Rico



## URSI Commission-B Special Sessions & Stats

**27 June 2016**  
**Fajardo, Puerto Rico**

**Branislav M. Notaros**  
**Colorado State University**



2016 IEEE International Symposium on Antennas and Propagation/USNC-URSI National  
Radio Science meeting, June 26 - July 1, 2016, Fajardo, Puerto Rico

**Papers submitted, accepted, rejected, and withdrawn**

**(Breakdown: AP, URSI, URSI from US authors, URSI from non-US authors)**

Submitted	Accepted	Rejected	Withdrawn
<b>Total Submitted: 1620</b>	<b>Total Accepted: 1458</b>	<b>Total Rejected: 77</b>	<b>Total Withdrawn: 76</b>
- AP Submitted: 1218	- AP Accepted: 1100	- AP Rejected: 67	- AP Withdrawn: 45
- URSI Submitted: 402	- URSI Accepted: 358	- URSI Rejected: 10	- URSI Withdrawn: 31
- URSI from US: 233	- URSI from US: 217	- URSI From US: 1	- URSI from US: 8
- URSI from non-US: 169	- URSI from non-US: 141	- URSI From non-US: 9	- URSI from non-US: 23

2015 IEEE AP-S Int. Symposium & North American URSI Mtg., Vancouver, BC, Canada

**Papers submitted, accepted, rejected, and withdrawn**

**(Breakdown: AP, URSI, URSI from US authors, URSI from Canadian authors)**

Submitted	Accepted	Rejected	Withdrawn
<b>Total Submitted: 1974</b>	<b>Total Accepted: 1867</b>	<b>Total Rejected: 105</b>	<b>Total Withdrawn: 31</b>
- AP Submitted: 1392	- AP Accepted: 1301	- AP Rejected: 89	- AP Withdrawn: 24
- URSI Submitted: 572	- URSI Accepted: 549	- URSI Rejected: 16	- URSI Withdrawn: 7
- URSI From US: 328	- URSI from US: 322	- URSI From US: 6	- URSI from US: 6
- URSI From Canada: 56	- URSI from Canada: 56	- URSI From Canada: 0	- URSI from Canada: 0

## 2016 IEEE AP-S International Symposium & USNC-URSI Meeting, Fajardo, Puerto Rico

URSI	Submitted Papers	Accepted Papers	Sessions
<b>A</b>	29	23	3
<b>B</b>	217	195	27
<b>C</b>	19	17	3
<b>D</b>	7	7	1
<b>E</b>	7	7	1
<b>F</b>	48	38	6
<b>G</b>	0	0	0
<b>J</b>	2	2	1
<b>K</b>	15	14	3
<b>URSI Special</b>	58	55	0
<b>Total</b>	402	358	64

## 2015 IEEE AP-S Int. Symposium & North American URSI Mtg., Vancouver, BC, Canada

URSI	Submitted Papers	Accepted Papers	Sessions
<b>A</b>	28	27	3
<b>B</b>	292	279	35
<b>C</b>	13	13	2
<b>D</b>	10	9	2
<b>E</b>	12	10	1
<b>F</b>	80	78	10
<b>G</b>	6	4	1
<b>J</b>	10	10	1
<b>K</b>	47	46	7
<b>URSI Special</b>	74	73	1
<b>Total</b>	572	549	64

# 2016 IEEE AP-S/URSI Puerto Rico

## URSI B Sessions – UB (27 sessions, 195 papers)

MO-UB.1A: Metamaterials: Theoretical Studies and Novel Designs  
MO-UB.2A: Antenna Arrays I  
MO-UB.1P: Antenna Arrays II  
MO-UB.2P: Wideband and Multiband Antennas  
TU-UB.1A: Integral-Equation Basis Functions and Singularity Treatments  
TU-UB.2A: Imaging and Inverse Scattering: From Extremely Low Frequencies to Near Infrared  
TU-UB.1P: Wireless Communications, Sensors and RFIDs  
TU-UB.2P: Frequency Selective Surfaces II  
TU-UB.3P: Nanoscale Electromagnetics  
TU-UB.4P: Multiphysics and Multiscale Methods and Computations  
TUP-UB.1P: Propagation Phenomena and Effects  
TUP-UB.2P: Active and Passive Antenna Matching  
TUP-UB.3P: Antenna Theory and Design  
WE-UB.2A: Fast Direct and Iterative Integral-Equation Solvers  
WE-UB.3A: Millimeter and THz Antennas  
WE-UB.4A: Preconditioners and Acceleration Techniques  
WE-UB.5A: Reconfigurable Antennas and STAR Systems  
WE-UB.1A: Theory, Applications and Phenomena of Complex Media  
WE-UB.5A: Time-Domain IE and PDE Methods  
WE-UB.1P: Scattering and Diffraction  
TH-UB.1A: Emerging Metasurfaces  
TH-UB.2A: Novel Integral-Equation and MoM Formulations  
TH-UB.1P: Metasurfaces: Analysis and Design  
TH-UB.3P: Domain-Decomposition and Discontinuous-Galerkin Methods  
TH-UB.5P: Advances in FDTD Modeling and Applications  
TH-UB.2P: Analysis and Design of Novel Metamaterial-Based Circuits  
TH-UB.4P: Numerical Modeling of Reflector Antennas and Reflectarrays

**2016 IEEE AP-S/URSI Puerto Rico**  
**AP-S/URSI Joint Special Sessions – SP (16 sessions)**  
Hao Xin, University of Arizona

MO-SP.1A: Antenna Design/Analysis based on Stored Energy and Characteristic Modes

MO-SP.2A: Directive Antennas at THz and Optical Frequencies

MO-SP.1P: Multiscale Multiphysics Computational Techniques and Applications

MO-SP.2P: Terahertz Antennas, Interconnects and Systems

TU-SP.1A: More than Wearables – Progress on Skin Antennas and Sensors

TU-SP.2A:

**For Reference:**

**2012 APS/URSI Chicago, IL: 13 APS/URSI Joint Special Sessions**

**2013 APS/URSI Orlando, FL: 10 APS/URSI Joint Special Sessions**

**2014 APS/URSI Memphis, TN: 16 APS/URSI Joint Special Sessions**

**2015 APS/URSI Vancouver, Canada: 19 APS/URSI Joint Special Sessions**

**2016 APS/URSI Puerto Rico: 16 APS/URSI Joint Special Sessions**

WE-SP.2P: Memorial Session for Prof. Paul E. Mayes

WE-SP.1P: Computational Imaging at Microwave, MMW and THz Frequencies

TH-SP.1A: Grand Challenges in Computational Electromagnetics for the Next Decade

TH-SP.2A: Industrial Applications of Metamaterials

TH-SP.1P: Novel Paradigms, Challenges and Perspectives in Wave Scattering and Propagation

TH-SP.2P: CubeSat and Small Satellite Antennas

& Education



# 2016 National Radio Science Meeting – Boulder Conference Statistics

Total number of pre-registrants: 339. Final total number of registrants: 396;  
(early 162/late 63, students early 148/late student 19, complimentary 4)

Total abstracts and summaries submitted: 389  
(342 abstracts, 47 summaries)

Total abstracts and summaries accepted: 375

Number of sessions: 49

Total number of Student Travel Grant Award applications: 122

## Technical Sessions:

	2016	2014	2013	2012	2011
Total No. of papers	375	399	364	369	358
Total No. of sessions	49	54	47	47	49
Total No. of travel grants	122	115	100	104	113

# Commission B Regular Sessions, 2016 USNC-URSI NRSM, Boulder, Colorado

9 regular sessions, 73 papers (total URSI: 49 sessions, 375 papers)

Regular Session Title	No. of Papers	Organizers
1. B1: Numerical Methods	10	Branislav Notaros, Colorado State University; Melinda Piket-May, University of Colorado
2. B3: Complex Media, Propagation and Metasurfaces	8	Filipo Capolino, University of California Irvine; Robert Burkholder, The Ohio State University
3. B4: Guided Waves and Waveguiding Structures	10	Christos Christodoulou, University of New Mexico; Edward Rothwell, Michigan State University
4. B6: Finite Arrays and Antenna Measurements	4	Jennifer Bernhard, University of Illinois at Urbana-Champaign; Atef Elsherbeni, Colorado School of Mines
5. B7: Printed Antennas and Arrays	5	Edward Kuester, University of Colorado Boulder; Ozlem Kilic, The Catholic University of America
6. B8: Scattering	12	Piergiorgio Uslenghi, University of Illinois at Chicago; Danilo Erricolo, University of Illinois at Chicago
7. B14: Antenna Techniques and Measurements	6	Steven Weiss, U.S. Army Research Lab; Gregory Mitchell, U.S. Army Research Lab
8. B15: Antenna Design and Measurements	10	Dejan Filipovic, University of Colorado Boulder; Sembiam Rengarajan, California State University Northridge
9. B17: Antenna Arrays	8	Nader Behdad, University of Wisconsin; Amir Zaghloul, U.S. Army Research Lab

## Commission B Special Sessions, 2016 USNC-URSI NRSN, Boulder, Colorado

9 special sessions, 54 papers (total URSI: **49** sessions, **375** papers)

Special Session Title	No. of Papers	Organizers
1. Terahertz Antennas and Applications	7	Kubilay Sertel, Ohio State, & Hao Xin, Univ. of Arizona
2. Wearable Antennas and Electronics	5	Manos Tentzeris, Georgia Tech, & Asimina Kiourti, Ohio State
3. Uncertainty Quantification in CEM and EDA	3	Jamesina Simpson, Univ. of Utah, & Sourajeet Roy, Colorado State
4. Reconfigurable Antennas and Circuits	5	Christos Christodoulou, U. of New Mexico, & Xun Gong, U. of C. Florida
5. 3D Printed Antennas	8	Jacob Adams, North Carolina State, & Hao Xin, Univ. of Arizona
6. Advances in CEM and Emerging Applications	10	Branislav Notaros, Colorado State, & Yahya Rahmat-Samii, UCLA
7. Emerging Applications of Phased Arrays	5	Karl Warnick & Brian Jeffs, BYU
8. Antennas for Small Satellites	5	Reyhan Baktur, Utah State, & David Jackson, Univ. of Houston
9. Energy Harvesting Rectennas and Back-Ends B/D	6	Zoya Popovic, Univ. of Colorado, & John Volakis, Ohio State

# **Commission B Special Sessions for the 2017 USNC-URSI National Radio Science Meeting, Boulder, Colorado – 9 Special Sessions**

Advanced Theory & Applications of Metamaterials	Filippo Capolino, UC Irvine, & Ashwin Iyer, Univ. of Alberta
Antennas/RF for Medical Imaging and Sensing	Majid Manteghi, Virginia Tech, & Erdem Topsakal, Virginia Commonwealth Univ.
Advances in CEM and Emerging Applications	Branislav Notaros, Colorado State, & Yahya Rahmat-Samii, UCLA
Adv. Analysis, Design, & Appl. of WG Structures	Michael Havrilla, Air Force Ins of Technology, & Edward Rothwell, Michigan State University
Advanced Modeling of EM Propagation	Jamesina Simpson, Univ. of Utah & Robert Marshall, Univ. of Colorado Boulder
Terahertz Antennas and Applications	Kubilay Sertel, Ohio State, & Georgios Trichopoulos, Arizona State
Wearable Antennas and Electronics	Asimina Kiourti, Ohio State, & Stavros Georgakopoulos, Florida International Univ.
Antennas for Small Satellites	Reyhan Baktur, Utah State, & David Jackson, Univ. of Houston
Reconfigurable Antennas and Circuits	Christos Christodoulou, U. of New Mexico, & Xun Gong, U. of Central Florida

suggestion for listing URSI special sessions as “special sessions” on the book

only for pure USNC-URSI NRSM Special Sessions at Boulder meetings and equivalent North American meetings (replacing Boulder) (and not for APS Special Sessions, usually referred to as "APS/URSI Special Sessions")

Or "Convened Sessions" as EuCAP does.

Also, suggestion: specifying "Session Organizers: Names" below the title of the session.



# USNC/URSI Commission B Membership Committee

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

Commission B Business Meeting  
Fajardo, Puerto Rico  
June 2016

# Membership Guidelines

## ■ Required qualifications:

- technical competence
  - evidence: nominee's publications
- interest in the activities of URSI
  - evidence: nominee's participation in URSI symposia

## ■ Minimum publication/presentation numbers:

- Associate Member
  - minimum of 2-3 publications
  - two URSI presentations (at least one in Commission B)
- Full Member
  - minimum of 5-6 publications
  - three URSI presentations (at least two in Commission B)

# Commission B Nominees

- For Full Membership:

- Gokhan Mumcu

- 4202 E. Fowler Ave ENB 118, University of South Florida, Tampa, FL 33620
    - mumcu@usf.edu (813) 974-8178
    - sponsor: John Volakis

- Niru Nahar

- 1330 Kinnear Road, The Ohio State University, Columbus Ohio 43212
    - Nahar.2@osu.edu (614) 292-1588
    - sponsor: John Volakis

- Deb Chatterjee

- 5110 Rockhill Road, UMKC, Kansas City, MO 64110
    - chatd@umkc.edu (816)235-1276
    - sponsor: Sembiam Rengarajan



# Gokhan Mumcu

- Ph.D., 2008, The Ohio State University
- Professional experience
  - 2015-present: Associate Professor, University of South Florida
  - 2009-2015: Assistant Professor, University of South Florida
  - 2008-2009: Post-Doc, ElectroScience Laboratory, OSU
- Research areas
  - Microfluidics for beam-scanning mm-wave antenna arrays and frequency-agile RF filters
  - Conformal, miniature, and multi-function antennas
  - Compact antenna arrays for anti-jamming
- Qualifications summary (Full Member)
  - Journal pubs: 27 (IEEE AP, MTT, AWPL, etc)
  - URSI presentations: 12 Commission B
  - Participation in URSI:
    - AP/URSI 2004-2013 (9 times) , Boulder URSI 2008, 2016, URSI EMT 2013

# Niru Nahar

- Ph.D., 2008, The Ohio State University
- Professional experience
  - 2010-present: Research Scientist, Operations Manager, ElectroScience Laboratory, OSU
  - 2009-2011 : Post-Doc, ElectroScience Laboratory, OSU
  - 2008: Research Consultant, Vision Research Lab, Pacific University
- Research areas
  - THz sensing, imaging, filters and spectroscopy, metamaterial
  - Reconfigurable phased antenna arrays
  - free-space optics, fiber optics, optical true time-delay and wideband beam steering
- Qualifications summary (Full Member)
  - Journal pubs: 19 (IEEE, IET, MOTL, APL, Applied Optics, etc.)
  - URSI presentations: 19 URSI or joint AP/URSI (5+ Commission B)
  - Participation in URSI:
    - AP/URSI 2005, 2009-2014

# Deb Chatterjee

- Ph.D., 1998, University of Kansas
- Professional experience
  - 2005-present: Associate Professor, University of Missouri Kansas City
  - 1999-2005: Assistant Professor, University of Missouri Kansas City
  - 1998-1999: Post Doctoral Research Engineer, University of Kansas
- Research areas
  - High-frequency asymptotic techniques, microwave imaging
  - multilayer Green's functions
  - ultrawideband microstrip patch antennas and arrays
- Qualifications summary (Full Member)
  - Journal pubs: 9 (IEEE, ACES)
  - URSI presentations: 9 URSI B (EMTS and General Assembly)
  - Participation in URSI:
    - AP/URSI 2008, EMTS 2004, 2007, 2010, 2013, 2016

# Membership Committee Recommendations

- The Committee unanimously recommends
  - Election to full member for Gokhan Mumcu
  - Election to full member for Niru Nahar
  - Election to full member for Deb Chatterjee