



International Union of Radio Science U.S. Commission B

J. Simpson, Chair
R. Baktur, Secretary
S. Sharma, Technical Activities Chair

B. Notaros, Vice-Chair
S. Weiss, Membership Chair

Please reply to: Reyhan Baktur, reyhan.baktur@usu.edu, phone: (435) 797-2955, fax: (435) 797-3054

MINUTES USNC-URSI Commission B Business Meeting 2019 USNC-URSI Radio Science Meeting Atlanta, GA, USA July 8, 2019

1. Chair Jamesina Simpson called the meeting to order at 5:02 p.m.
2. Welcome to members and guests.
3. Guests introduced themselves.
4. Approval of minutes of the Boulder, CO meeting, Jan 2019.
 - Ross Stone moved to approve. It was seconded and approved.
5. **Chair Report**
 - Jamesina Simpson introduced the USNC-URSI and International URSI officers.
 - Slides from Ross Stone: URSI Radio Science Letters (rapid, open access journal, 4pp max, electronic only, publication charge, George Uslenghi is the founding editor in chief)
 - One may apply for an International URSI individual membership for URSI at www.ursi.org.
 - Ross Stone noted that if you become an individual member of URSI International, you get a discount for URSI-GASS meeting
 - USNC-URSI Website is <http://sites.nationalacademies.org/PGA/biso/URSI/index.htm>
 - Upcoming conferences listed (please see Chair Report slides attached at the end of the minutes for details).
6. Technical Activities Report presented by Satish Sharma (see slides from Satish Sharma attached at the end of the minutes for details).
 - The group thanked the USNC-URSI paper review committee.

- As part of discussion of reduced attendance at Boulder 2019 winter meeting, a possibility of utilizing venues other than Boulder for future winter meetings was mentioned. Several attendees spoke positively about our Boulder venue tradition, and the consensus during the discussion was to stay in Boulder.
 - Additional volunteers are needed for future review committees. It was recommended that we submit an advertisement to the IEEE AP Magazine to broaden the pool of potential reviewers.
7. Membership Committee Report by Steve Weiss (please see Steve Weiss slides attached at the end of the minutes for details).
 - Four new members were nominated, with unanimous support from the membership committee.
 - Full Membership: Dimitrios Sounas, Associate Membership: Abdulaziz Haddab, Marco Poort. Student Membership: Seckin Sahin.
 - Ross Stone moved to accept the committee recommendation. It was seconded and approved.
 8. There was additional discussion about meeting attendance: Reasons attendance at Boulder may have decreased (government shut down during that time). It was also discussed that finances for the commission come primarily from the summer and winter meetings, and that this money is used to support student travel to Boulder. The importance of attending the Boulder meeting was emphasized.
 9. Meeting adjourned. Ross Stone moved to adjourn. It was seconded and approved.

Minutes taken by Cynthia Furse and respectfully submitted by Reyhan Baktur, Secretary.

Guests in Attendance

Deb Chatierjee (UMKC), Seckin Sahin (OSU), William Langston (Sandia Nat. Lab.), F. K. Dagefu (Army Research Lab.), Yahia Antar (Royal Military College, CA), Alaa Abujail, [redacted] du.

Members in Attendance

Loannis Besieris, Goutam Chattopadhyay, Gary Brown, Weng Cho Chew, Atef Elsherbeni, Danilo Erricolo, Cynthia Furse, Susan Hagness, Ramakrishna Janaswamy, Ahmed Kishk, Joshua Kovitz, Robert Mailloux, Robert Nevels, Maria Pour, Sembiam Rengarajan, Kamal Sarabandi, Satish Sharma, Giorgio Uslenghi, Karl Warnick, Daniel Weile, Robert Burkholder, Salvatore Campione, David Jackson, Roger Lang, Sharad Laxpati, Ronald Marhefka, Raj Mittra, Mahta Moghaddam, Niru Nahar, Gohkan Mumcu, Branislav Notaros, Andrew Peterson, Kubilay Sertel, Ross Stone, Cagatay Tokgoz, Erdem Topsakal, Leung Tsang, Steven Weiss, Don Wilton, John Young, Arthur Yaghjian, Richard Ziolkowski, Ali Yilmaz, Jamesina Simpson

USNC-URSI Commission-B Business Meeting

Monday, 8 July 2019
5:00 – 6:00 p.m.

2019 IEEE AP-S International Symposium and
USNC-URSI National Radio Science Meeting
Atlanta, GA
July 7-12, 2019



- Welcome to members and guests
- Approval of the minutes of the Boulder, CO meeting, Jan. 2019
- CHAIR REPORT
- COMMITTEE REPORTS
 - Technical Activities Report (Satish Sharma)
 - Membership Committee (Steven Weiss)
- Old business
- New business
- Adjourn



USNC-URSI Commission B Officers 2018-2021

Chair: Jamesina Simpson (University of Utah)

Vice-Chair: Branislav Notaros (Colorado State University)

Secretary: Reyhan Baktur (Utah State University)

Chair, TAC: Satish Sharma (San Diego State University)

Chair, Membership Committee: Steven Weiss (ARL)

Webmaster: Chelsea Bock at National Academies (cbock@nas.edu)

http://sites.nationalacademies.org/pga/biso/URSI/PGA_080674



USNC-URSI Officers 2018-2021

Chair: Sembiam Rengarajan (California State University – Northridge)

Past-Chair: David Jackson (University of Houston)

Secretary and Chair-Elect: Michael Newkirk (Johns Hopkins APL)

Accounts Manager: Gary Brown (Virginia Polytechnic Institute and State University)

Commission-B
Business Meeting

Chair Report



Board on International Scientific Organizations

U.S. National Committee for the
International Union of Radio Science

National Academy of Sciences

Slides from Ross Stone

URSI *Radio Science Letters*

- URSI is launching a new open-access publication
- Rapid-publication letters journal, covering the scope of the 10 Commissions of URSI
- Four-page maximum paper length
- Electronic only publication

URSI *Radio Science Letters*

- Accept, accept with minor revision, reject with encouragement to resubmit, reject
- \$150/page (URSI member; \$175/page non-member) article processing fee
- Fully edited
- George Uslenghi is the founding Editor-in-Chief

Individual Membership in URSI

- Individual Members and Associate Members by application through www.ursi.org
 - Requirements similar to USNC membership
 - Benefits: recognition, registration discounts at URSI meetings starting with AT-RASC 2018, and at some URSI cosponsored conferences (e.g., some IEEE conferences)
 - Notification of *RSB*
 - Reduced page charges in *RSL*
- USNC-URSI Commission members will be automatically endorsed by USNC
- Urge your Commission members to join!

XXXIIIrd URSI GASS

URSI GASS
2020

- August 29-September 5, 2020, La Sapienza University, Rome, Italy
- Venue chosen because of central location in Rome, lower cost for use of venue
- Rooms are air conditioned
- Spread over three floors, substantial distances between some rooms

Future GASS

- 2023: Sapporo Convention Center, Sapporo, Japan, most probably in August 2023

Upcoming Meetings: Joint Symposia

- July 19-24, 2020, Montreal, Canada, Ahmed Kishk

Note: no NRSM in 2020; NARSM in Montreal

- July 10-16, 2021, Singapore
Zhi Ning Chen, General Chair
Zhongxiang Shen and Xianming Qing, Co-Chairs
- July 10-15, 2022, Denver, Colorado, Branislav Notaros

Other Future URSI Meetings

- URSI AT-RASC 2021: May 23-28, 2021, Gran Canaria, Spain

Other Meetings of Interest

- July 28-August 2, 2019: IEEE Geoscience and Remote Sensing Symposium (IGARSS), Yokohama, Japan
- September 9-13, 2019: International Conference on EM in Advanced Applications (ICEAA)/ IEEE-AP-S Conference on Antennas and Propagation in Wireless Communications, Granada, Spain (March 8, 2019)

Other Meetings of Interest

- November 4-7, 2019: 8th IEEE International Symposium on Microwave, Antenna, Propagation, and EMC Technologies (MAPE 2019)
(July 31, 2019)
- November 4-8, 2019: 4th Symposium of the Committee on Space Research (COSPAR), Herzliya, Israel (April 30, 2019)

Commission-B
Business Meeting

Committee Report



Board on International Scientific Organizations

U.S. National Committee for the
International Union of Radio Science

National Academy of Sciences

Technical Activities Report: Satish Sharma

Commission-B
Business Meeting

Committee Report



Board on International Scientific Organizations

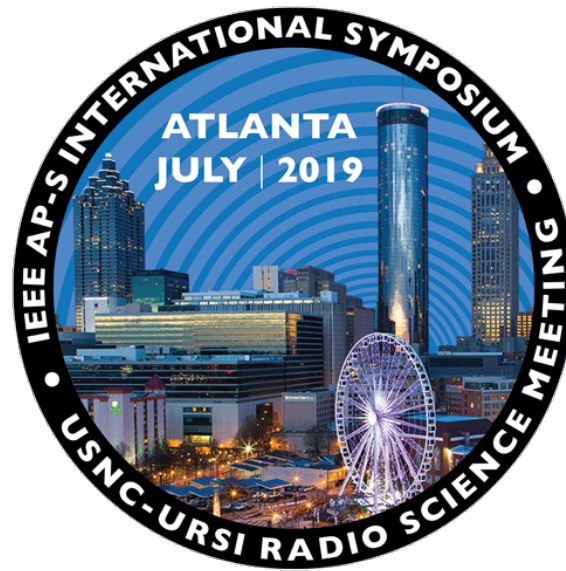
U.S. National Committee for the
International Union of Radio Science

National Academy of Sciences

Membership Committee: Steven Weiss



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



URSI Commission-B Special Sessions & Stats

**8 July 2019
Atlanta**

**Satish K. Sharma
San Diego State University**



2019 IEEE International Symposium on Antennas and Propagation/USNC-URSI National
Radio Science meeting, July 7–12, 2019, **Atlanta**, Georgia

Papers submitted, accepted, rejected, and withdrawn

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

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1590	Total Accepted: 1516	Total Rejected: 74	Total Withdrawn: 47
- AP Submitted: 1245	- AP Accepted: 1179	- AP Rejected: 66	- AP Withdrawn: 32
- URSI Submitted: 345	- URSI Accepted: 337	- URSI Rejected: 8	- URSI Withdrawn: 15
- URSI from US: 203	- URSI from US: 202	- URSI From US: 1	- URSI from US: 10
- URSI from non-US: 142	- URSI from non-US: 135	- URSI From non-US: 7	- URSI from non-US: 5

2018 IEEE International Symposium on Antennas and Propagation/USNC-URSI National
Radio Science meeting, July 8–13, 2018, **Boston**, MA

Papers submitted, accepted, rejected, and withdrawn

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

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1830	Total Accepted: 1708	Total Rejected: 74	Total Withdrawn: 60
- AP Submitted: 1422	- AP Accepted: 1312	- AP Rejected: 72	- AP Withdrawn: 38
- URSI Submitted: 408	- URSI Accepted: 396	- URSI Rejected: 1	- URSI Withdrawn: 11
- URSI from US: 214	- URSI from US: 210	- URSI From US: 1	- URSI from US: 03
- URSI from non-US: 194	- URSI from non-US: 186	- URSI From non-US: 0	- URSI from non-US: 08

2019 IEEE International Symposium on Antennas and Propagation/USNC-URSI National
Radio Science meeting, July 7–12, 2019, **Atlanta**, Georgia

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- URSI from non-US: 142	- URSI from non-US: 135	- URSI From non-US: 7	- URSI from non-US: 5

2017 IEEE International Symposium on Antennas and Propagation/USNC-URSI National
Radio Science meeting, July 9–14, 2017, **San Diego**, California

Papers submitted, accepted, rejected, and withdrawn

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

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1946	Total Accepted: 1792	Total Rejected: 67	Total Withdrawn: 87
- AP Submitted: 1507	- AP Accepted: 1380	- AP Rejected: 67	- AP Withdrawn: 60
- URSI Submitted: 438	- URSI Accepted: 412	- URSI Rejected: 0	- URSI Withdrawn: 27
- URSI from US: 254	- URSI from US: 240	- URSI From US: 0	- URSI from US: 14
- URSI from non-US: 184	- URSI from non-US: 172	- URSI From non-US: 0	- URSI from non-US: 13

2019 IEEE International Symposium on Antennas and Propagation/USNC-URSI National
Radio Science meeting, July 7–12, 2019, **Atlanta**, Georgia

Papers submitted, accepted, rejected, and withdrawn

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

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1590	Total Accepted: 1516	Total Rejected: 74	Total Withdrawn: 47
- AP Submitted: 1245	- AP Accepted: 1179	- AP Rejected: 66	- AP Withdrawn: 32
- URSI Submitted: 345	- URSI Accepted: 337	- URSI Rejected: 8	- URSI Withdrawn: 15
- URSI from US: 203	- URSI from US: 202	- URSI From US: 1	- URSI from US: 10
- URSI from non-US: 142	- URSI from non-US: 135	- URSI From non-US: 7	- URSI from non-US: 5

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
Total Submitted: 1620	Total Accepted: 1458	Total Rejected: 77	Total Withdrawn: 76
- 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

2019 IEEE International Symposium on Antennas and Propagation/USNC-URSI National
Radio Science meeting, July 7–12, 2019, **Atlanta**, Georgia

Papers submitted, accepted, rejected, and withdrawn

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

Submitted	Accepted	Rejected	Withdrawn
Total Submitted: 1590	Total Accepted: 1516	Total Rejected: 74	Total Withdrawn: 47
- AP Submitted: 1245	- AP Accepted: 1179	- AP Rejected: 66	- AP Withdrawn: 32
- URSI Submitted: 345	- URSI Accepted: 337	- URSI Rejected: 8	- URSI Withdrawn: 15
- URSI from US: 203	- URSI from US: 202	- URSI From US: 1	- URSI from US: 10
- URSI from non-US: 142	- URSI from non-US: 135	- URSI From non-US: 7	- URSI from non-US: 5

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
Total Submitted: 1974	Total Accepted: 1867	Total Rejected: 105	Total Withdrawn: 31
- 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

2019 IEEE AP-S International Symposium & USNC-URSI Meeting, **Atlanta**, Georgia

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	36	34	2	5
B	183	173	6	24
C	18	14	2	2
D	-	-	-	-
E	6	6	1	1
F	34	32	2	3
G	-	-	-	-
J	-	-	-	-
K	12	12	0	3
URSI Special	56	56	2	0
Total	345	327	15	38

2018 IEEE AP-S International Symposium & USNC-URSI Meeting, **Boston**, MA

URSI	Submitted Papers	Accepted Papers	Withdrawn Papers	Sessions
A	27	27	0	4
B	226	216	6	29
C	25	25	0	3
D	0	0	0	0
E	13	13	0	2
F	41	39	2	4
G	4	4	0	1
J	0	0	0	0
K	22	20	2	3
URSI Special	53	52	1	0
Total	411	396	11	46

2019 IEEE AP-S/URSI Atlanta

URSI B Sessions – UB (24 sessions, 173 papers)

MO-UB.1A: Metamaterials

MO-UB.2A: Frequency Selective Surfaces and Filters

MO-UB.3A: Antenna Theory and Design I

MO-UB.1P: THz, Millimeter-Wave and Nanoscale EM

MO-UB.2P: Antenna Array I

MO-UB.3P: Time-Domain Methods

MO-UB.4P: Frequency Domain Methods

MO-UB.5P: Antenna Theory and Design II

MO-UB.6P: Antenna Theory and Arrays

TU-UB.1A: Cognitive Radio I

TU-UB.2A: Antenna Array II

TU-UB.3A: Hybrid Methods II

TU-UB.1P: Wireless Communications

TU-UB.2P: Antenna Array III

WE-UB.1A: MIMO Antennas and Systems

WE-UB.3A: Microstrip Antennas and Printed Devices

WE-UB.2A: EBG, UWB and RFID based Antennas

WE-UB.1P: Fast Methods

WE-UB.2P: Integral Equation Methods I

TH-UB.1A: Theoretical Electromagnetics III

TH-UB.2A: Guided Wave and Waveguiding Structures

TH-UB.1P: EM Interaction and Coupling

TH-UB.2P: Propagation Phenomenon and Effects

FR-UB.1A: Imaging, Scattering and Remote Sensing

2019 IEEE AP-S/URSI Atlanta
AP-S/URSI Joint Special Sessions – (19 sessions)

Low-Cost Phased Array Technology

Application of Machine/Deep Learning and Uncertainty Quantification Techniques in
Computational Electromagnetics

Emerging Technologies for Biomedical Applications

Space-Time Modulated Metamaterials

Memorial Session for Dr. R. C. Hansen

Cybersecurity and Electromagnetic Systems: From DC to Daylight and from Wireless to Wired

International Collaborations on Next-Generation Radio Astronomical Instruments

Metasurfaces in Antenna Applications

Time-Domain Computational Methods for Complex Electromagnetic and Multiphysics Problems

Optically Transparent Antennas

Design and Integration Aspects of Beyond 5G Communications for Mobile Devices

Advanced DGTD and FDTD Methods

Innovative

Driving For

Antennas

Recent Advances

UWB Antennas

Antenna Arrays

Topological

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

2017 APS/URSI San Diego: 18 APS/URSI Joint Special Sessions

2018 APS/URSI Boston: 16 APS/URSI Joint Special Sessions (+2 are APS only)

2019 APS/URSI Atlanta: 19 APS/URSI Joint Special Sessions

2019 National Radio Science Meeting

Conference Statistics

Total number of pre-registrants: 321

Total abstracts and summaries submitted: 342

Total abstracts and summaries accepted: 341

Abstracts: 283 and Summaries: 58

Number of sessions: 46

Total number of Student Travel Grant Award applications: 109

	2019	2018	2017	2016	2014	2013	2012
Total No. of papers	342	414	421	375	399	364	369
Total No. of sessions	46	59	56	49	54	47	47
Total No. of travel grants	109	128	137	122	115	100	104

National Radio Science Meeting

Conference Statistics

Year	# Papers	# Sessions	# Travel Grants
2011	358	49	113
2012	369	47	104
2013	364	47	100
2014	399	54	115
2015	NARSM	NARSM	NARSM
2016	375	49	122
2017	425	56	137
2018	414	59	128
2019	341	46	109

- In 2019, one page abstracts: 283 and two page summaries: 58
- In 2018, one page abstracts: 356 and two page summaries: 61

2017, 2018 and 2019 National Radio Science Meeting Conference Statistics

2017		2018		2019	
Country	Papers		Papers		Papers
United States	404	United States	390	United States	321
Canada	6	Canada	9	Canada	16
South Africa	4	Taiwan	3	South Africa	2
Kuwait	3	Russian Federation	2	Spain	1
?	2	Czech Republic	2	Australia	1
Japan	1	Japan	2		
France	1	France	2		
China	1	Turkey, South Korea, Nigeria, India, China (1 each)	5		
Brazil	1				
Australia	1				
Total	424	Total	416	Total	341

2017: About 5% of the papers (20 papers) have come from outside the U.S.

2018: About 6% of the papers (25 papers) have come from outside the U.S.

2019: About 6% of the papers (20 papers) have come from outside the U.S.

Commission B Special Sessions, 2019 USNC-URSI NRSM, Boulder, Colorado

4 B special sessions: 35 papers, 7 B regular sessions: 55 papers (total URSI: **46** sessions, **341** papers)

Special Session Title	No. of Papers	Organizers
1. 5G and Massive MIMO Antennas and Systems (CANCELLED)	0	Shubhendu Bhardwaj, Florida Int. Univ., and Ghanshyam Mishra, San Diego State University
2. Astronomical Phased Arrays: From Theory to Practice (Commission B/J) (CANCELLED)	0	Karl Warnick, BYU and Juming Diao, UCLA
3. Metamaterials and Metasurfaces: Theory & Applications	10	Filippo Capolino, UC Irvine & Ashwin Iyer, Univ. of Alberta
4. Wearable, Implants, and Body-Area Networks (B/K)	10	Bashir Morshed, Univ. of Memphis & Ryan Green, Virginia Commonwealth University
5. Antennas for Specialized Platforms: SmallSats, UAVs, and UUVs	5	Reyhan Baktur, Utah State, & David Jackson, Univ. of Houston
6. Techniques for Modeling of Waves in Plasmas (BGH) (CANCELLED)	0	Robert Marshall, Robert Lysak, Mark Golkowski, Vijay Harid
7. Low-Profile Antennas from Gigahertz to Terahertz	10	Goutam Chattopadhyay, JPL-NASA and Satish K. Sharma, San Diego State University

Commission B Special Sessions, 2018 USNC-URSI NRSM, Boulder, Colorado

10 B special sessions, **70** papers, **8** B regular sessions, **51** papers (total URSI: **59** sessions, **414** papers)

Special Session Title	No. of Papers	Organizers
1. Millimeter-Wave and 5G Antennas and Systems	6	Shubhendu Bhardwaj, Florida Int. Univ., & Joshua Kovitz, Georgia Tech
2. Nonmagnetic and Nonreciprocal Devices	7	Ethan Wang, UCLA, & Andrea Alu, Univ. of Texas
3. Advances in Computational Electromagnetics on Modern Computers	5	Ali Yilmaz, Univ. of Texas, & Zhen Peng, Univ. of New Mexico
4. Emerging Applications of Phased Arrays	7	Karl Warnick, BYU, & Elias Alwan, Florida Int. Univ.
5. Adv. Theory & Applications of Metamaterials	9	Filippo Capolino, UC Irvine, & Ashwin Iyer, Univ. of Alberta
6. Adv. Analysis, Design, & Appl. of WG Structures	10	Michael Havrilla, Air Force Ins of Tech, & Edward Rothwell, Michigan State
7. Wearable Antennas and Electronics	7	Asimina Kiourti, Ohio State, & Bashir Morshed, Univ. of Memphis
8. Antennas for Specialized Platforms: SmallSats, UAVs, and UUVs	5	Reyhan Baktur, Utah State, & David Jackson, Univ. of Houston
9. 3D Printed Antennas	9	Hao Xin, Univ. of Arizona, & Jacob Adams, North Carolina State
10. Techniques for Modeling of Waves in Plasmas (BGH)	5	Robert Marshall, Robert Lysak, Mark Golkowski

Commission B Regular Sessions, 2017 USNC-URSI NRSM, Boulder, Colorado

10 regular sessions, 75 papers (total URSI: **56** sessions, **421** papers)

Regular Session Title	No. of Papers	Chairs
1. B3: Antennas	10	Dejan Filipovic, University of Colorado Boulder; Karl Warnick, Brigham Young University
2. B4: Scattering	5	Alex Yuffa, National Institute of Standards and Technology; Piergiorgio Uslenghi, University of Illinois at Chicago
3. B5: Liquid Metal Antennas	5	Jacob Adams, North Carolina State University; William Davis, Virginia Tech
4. B6: Complex Media and Nanoelectromagnetics	10	Edward Kuester, University of Colorado Boulder; Christos Argyropoulos, University of Nebraska-Lincoln
5. B8: Inverse Scattering and Remote Sensing	5	Piergiorgio Uslenghi, University of Illinois at Chicago; Pai-Yen Chen, University of Texas at Austin
6. B9: Antenna Arrays I	9	Randy Haupt, Colorado School of Mines; Dejan Filipovic, University of Colorado Boulder
7. B13: Antenna Measurements and Simulations	8	Steven Weiss, US Army Research Lab; Jeanne Quimby, NIST
8. B14: Antenna Arrays II	8	Dejan Filipovic, University of Colorado Boulder; Gokhan Mumcu, University of South Florida
9. B16: Microstrip Antennas and Printed Devices	9	Erdem Topsakal, Virginia Commonwealth University; Ozlem Kilic, The Catholic University of America
10. B17: Numerical Methods	6	Atef Elsherbeni, Colorado School of Mines; Melinda Piket-May, University of Colorado

A Big Thank You to the USNC- URSI Commission B TAC Reviewers

1. Joseph Costantine
2. Payal Majumdar
3. Youssef Tawk
4. Kurt Oughstun
5. John C. Young
6. Ahmed M. Hassan

- We are always seeking **Volunteers for USNC-URSI Commission B as TAC Reviewers**. Please contact me with your willingness.
- Email: ssharma@sdsu.edu

Announcements

Commission B Special Sessions, 2020 USNC-URSI NRSM, Boulder, Colorado

Will Not be Organized

**These Special Sessions will be part of the IEEE AP-S/URSI 2020 in Montreal
(? And should be part of the Special Sessions Organization Committee)**

Please submit your Special Sessions requests as per the Call for papers to

**2020 IEEE International Symposium on Antennas and Propagation/USNC-URSI
National Radio Science meeting, July 4–11, 2020, **Montreal, Canada****

Please submit your Special Sessions requests as per the Call for papers to

**XXXIII General Assembly and Scientific Symposium (GASS) of the
International Union of Radio Science (Union Radio Scientifique Internationale-
URSI) 29 August – 5 September, 2020 – Sapienza University Campus, Rome, Italy**

Special Sessions for National Radio Science Meeting 2021

- Please contact Satish K. Sharma by April 2020 at the latest if you are interested in organizing special session for the next NRSM 2021.
- We do need more special sessions on topics of interest.
- Email: ssharma@sdsu.edu

USNC/URSI Commission B Membership Committee

Steven Weiss (chair) – The Army Research Lab

Ed Rothwell – Michigan State University

George Hanson – University of Wisconsin-Milwaukee

Commission B Business Meeting

Atlanta, GA

July 2019

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:
 - Early Career Member
 - Co-author of one URSI presentation in Commission B and attendance at one USNC-URSI symposium
 - Associate Member
 - minimum of 2-3 publications
 - two URSI presentations (at least one in Commission B)
 - Full Member
 - U.S. citizen or permanent resident
 - minimum of 5-6 publications
 - three URSI presentations (at least two in Commission B)

Commission B Nominees

- For Full Membership:
 - Dimitrios Sounas
 - Wayne State University
 - dsounas@wayne.edu 313 577 0485
 - sponsor: John Volakis
- For Associate Membership:
 - Abdulaziz Haddab
 - University of Colorado at Boulder
 - haddab@Colorado.edu 720 980 2230
 - sponsor: Edward Kuester
 - Marco Poort
 - University of Illinois at Chicago
 - mpoort2@uic.edu 530 220 3872
 - sponsor: Uslenghi Piergiorgio
- For Early Career Membership:
 - Seckin Sahin
 - The Ohio State University
 - Sahin.29@osu.edu
 - sponsor: Kubilay Sertal

Dimitrios Sounas

- Permanent Resident of the U.S.
- Ph.D. in Electrical and Computer Engineering, Aristotle University of Thessaloniki, Greece
- Professional experience
 - Aug. 2018 – present Assistant Professor, ECE, Wayne State University, USA
 - Sept. 2015 – Aug. 2018 Research Scientist, ECE, The University of Texas at Austin, USA
 - Nov. 2012 – Aug. 2015 Postdoctoral Fellow, ECE, The University of Texas at Austin, USA
 - Feb. 2015 – July 2015 Visiting Researcher, FOM Institute AMOLF, Netherlands
 - Sept. 2010 – Oct. 2012 Postdoctoral Fellow, EE, Ecole Polytechnique de Montreal, Canada
- Research areas
 - Electromagnetics
- Qualifications summary (Full Member)
 - Journal pubs: 76 (IEEE, JOSA, APL, Phys. Rev. B, etc.)
 - URSI-B presentations: numerous
 - Participation in URSI: USNC URSI, AP/URSI

Abdulaziz Haddab

- Not given
- University of Colorado, Boulder, CO Ph.D., Electrical Engineering, Expected: Fall 2019
- Professional experience
 - Foreign Research Associate at the National Institute of Standards and Technology (NIST), Boulder, CO, USA, Feb 2018-present.
- Research areas
 - Electromagnetics
- Qualifications summary (Associate Member)
 - Journal pubs: 7
 - URSI-B presentations: > 3
 - Participation in URSI: USNC URSI, AP/URSI

Marco Poort

- U.S. Citizen
- PhD Electrical Engineering, University of Illinois at Chicago 2015-2019 (Expected)
- Professional experience
 - Teaching/Research Assistant, University of Illinois at Chicago 2015-2019 - Study canonical scattering, heuristic algorithms, tunable metasurfaces, and reconfigurable antenna design as well as teach labs in electronics and RF guided propagation.
 - Hardware Intern, Google Inc. (Jan-Jun 2018)
 - Defense Validation Engineer, Google Inc. (Jan 2019-Present) - Test cellular/GPS/WLAN receiver sensitivity under various test cases and mitigate desensitization impacts.
- Research areas
 - Electromagnetics
- Qualifications summary (Associate Member)
 - Journal pubs: 2
 - URSI-B presentations: > 3
 - Participation in URSI: USNC URSI, AP/URSI, URSSI GASS

Seckin Sahin

- Not Given
- M.S. degree in Electrical and Computer Engineering from The Ohio State University
- Professional experience
 - After receiving my undergraduate degree, I started working as a Graduate Research Assistant at the Ohio State University where I am pursuing my PhD degree. In the past 5 years, I have been conducting research on chip-integrated millimeter-wave antennas and phased arrays for 5th-generation (5G) wireless communications systems, including developing new micro-/nano-fabrication methods for wafer-scale integration of antennas with electronic transceiver ICs. I have designed ultrawideband low-profile phased arrays for mobile applications, developed new mmW on-chip antenna/array measurement methods, and conducted material characterization using THz spectroscopy and waveguide-based systems.
- Research areas
 - Electromagnetics
- Qualifications summary (Early Career Member)
 - Journal pubs: 3
 - URSI-B presentations: >3
 - Participation in URSI: USNC URSI, AP/URSI

Membership Committee Recommendations

- The Committee unanimously recommends
 - Election to full member for
 - Dimitrios Sounas
 - Election to associate member for
 - Abdulaziz Haddab
 - Marco Poort
 - Election to Early Career member for
 - Seckin Sahin