



International Union of Radio Science U.S. Commission B

B. Notaros, Chair
K. Warnick, Secretary
S. Sharma, Technical Activities Chair

R. Baktur, Vice-Chair
S. Weiss, Membership Chair

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MINUTES USNC-URSI Commission B Business Meeting 2021 National Radio Science Meeting (Virtual) Boulder, CO January 5th, 2021

1. The meeting was conducted virtually using Zoom.
2. Chair Branislav Notaros called the meeting to order at 1:00 p.m. MST.
3. Welcome to members and guests.
4. The Chair invited members to sign in using the Zoom chat box.
5. Guests were introduced.
6. Approval of the 2020 IEEE APS/URSI Commission B meeting minutes. Moved, seconded, approved.
7. **Chair Report**
 - Introduction of URSI, USNC, and USNC Commission B officers.
 - The chair announced the open position of the USNC-URSI Commission B secretary. Interested members are encouraged to apply.
 - The Chair thanked Jamesina Simpson's past term as the Commission B Chair and congratulated her on her new role as the Secretary/Chair-Elect of USNC-URSI.
 - The Chair went through the announcements from the USNC Business Meeting. Discussed and clarified the dates and submission deadlines for the 2021 AP-S/URSI Meeting and URSI GASS. Ross Stone agreed to verify them and inform commission members.
 - Discussion items presented (details are included in the chair report that is attached to the minutes).
8. **Chair Report— Discussion Items**

(1) Is Commission B planning to attend the joint 2022 Denver AP-S/USNC-URSI conference?

- Branislav Notaros introduced the conference and venue.
- Gary Brown asked the dates and Branislav answered.
- Moved, seconded, approved to participate.

(2) Is Commission B planning to attend the joint 2023 AP-S/USNC-URSI conference?

- Jamesina Simpson introduced the conference and venue.
- Moved, seconded, approved to participate.

(3) Is Commission B planning to attend the joint 2021 ICEAA conference?

- Moved, seconded, approved to participate.

(4) Discussion about the tutorial.

- David Jackson introduced the tutorial and all agreed that the job has been wonderfully done.
- Suggestions for the next year?
- Can be done virtually or as part of the in-person conference.
- Branislav Notaros reemphasized his interest on Electromagnetics education during post COVID time. He solicited ideas.
- Members could post ideas during this meeting or email the chair.

(5) Online components for 2022 NRSB Boulder meeting.

- Yahya Rahmat-Samii brought up the issue of finance. He said we need to be careful and be clear in phrasing it.
- David Jackson commented that besides costs, some components being online such as the tutorial can be of advantage.
- Gary Brown commented that there is an advantage of going to Boulder in person because the Boulder meeting does not require a hotel contract.
- Ahmed Kishk suggested to make the registration the same for in-person or online attendees. This way, it will encourage people with a paper to come. The hybrid format will encourage people without a paper, or those who could not travel, to attend the meeting.
- Ross Stone commented that making it hybrid actually costs more by adding the virtual platform. Therefore, Ahmet's comment in not reducing the registration for remote attendees is a good suggestion.
- Majid Mentaghi commented that we should keep it hybrid and leave the decision for participants.
- Yahya commented on the difficulty in going live-online hybrid. It can be costly.

- William Kefauver commented that industry involvement is easier with virtual. But is that a good goal?
- Sima Noghianian commented that keeping the meeting hybrid is a good option for those in industry to attend the conference.

(6) Volunteers are requested to serve on the committee to solicit exhibitors/sponsors in 2022.

- Please email Branislav Notaros.

(7) Plenary topic.

- Suggestions can from the floor here today or through email.
- Gary Brown suggested the detection of the gravity wave.
- Karl Warnick suggested *cosmic background radiation explorer missions, like WMAP or the Wilkinson anisotropy probe*, and volunteered to reach out for speakers.
- Yahya Rahmat-Samii said he was in fact involved with the project. He suggested that commission J would be a group to talk to.
- Potential speakers for gravity wave, gauging invariance, and quantum electrodynamics were suggested by Goutam Chattopadhyay, David V. Giri, Yahya Rahmat-Samii, and Sima Noghianian.
- Branislav Notaros invited attendees to send names of suggested speakers on these topics.
- Chaoxian Qi recommended that we could have a talk about future applications in EM and interdisciplinary applications that involve EM.

(8) Virtual booth.

- Sembiam Rengarajan commented that it is an excellent idea for recruiting students.

(9) Commission B Logo

- Jamesina Simpson initiated a logo contest during the last business meeting.
- Two designs were received, and presented at this meeting.
- Many members requested an extension of deadlines so that there would be more designs to choose from.
- It is agreed that there would be an extension for submission, and then a voting.

9. Membership Committee Report

- Steve Weiss presented applications for nominees. Please see Steve Weiss' slides attached at the end of the minutes for details.
- Motion to accept the committee recommendation. It was seconded and approved.

10. Technical Activities Report

- presented by Satish Sharma (slides from Satish Sharma are attached at the end of the minutes).
- Branislav Notaros commented on the importance of special sessions.
- Yahya Rahmat-Samii suggested to encourage younger members such as assistant professors to engage in the special session organizations.

11. Old business

- None.

12. New business (no).

- None.

13. Meeting adjourned at 2:14 EDT.

Minutes taken and prepared by Reyhan Baktur, Vice Chair; respectfully submitted by Karl Warnick, Secretary.

Guests in Attendance

Elahehsadat Torabi, Neill Kefauver, Ryan B. Green, Michael Newkirk

Members in Attendance

Ross Stone, Branislav Notaros, Jamesina Simpson, Reyhan Baktur, Akira Ishimaru, Abdulaziz Haddab, SimaNoghianian, Steven Weiss, Yahya Rahmat-Samii, Satish Sharma, Ahmed Kishk, Goutam Chattopadhyay, Stuart Long, John Young, Danilo Erricolo, Commission B Member, Atef Elsherbeni, Steven Weiss, Dave Giri, Nader Engheta, Gary Brown, Niru K Nahar, Jeffrey Nanzer, Majid Manteghi, George Trichopoulos, Maria Pour, Payam Nayeri, Karl Warnick, Dimitrios Tzarouchis, William A Johnson, Kubilay Sertel, Bob Burkholder, Susan Hagness, Michael Jensen, Jeffrey Nanzer, Joel Johnson, Andrea Alù, Don Wilton, Ronald J. Pogorzelski (POGO), Sudhakar Rao, Seckin Sahin, Eric Mokole, John Volakis, Filippo Capolino, William Kefauver, David Jackson, Sembiam Rengarajan, Chaoxian Qi