

Commission B: Fields and Waves

Chair: Dr. Makoto Ando

Vice Chair: Dr. Lot Shafai

Report from the New Delhi General Assembly

Commission B Business meetings were held by Dr. Makoto Ando (Chair) on the following three days:

Meeting 1: Monday, October 24th, 18:00-19:30□@

Meeting 2: Wednesday, October 26th, 18:00-19:00□@

Meeting 3: Friday, October 28th, 18:00-19:10□@

The following issues were discussed and decided upon.

Dr. Ando reported on:

Triennial Activity for 2002 – 2005. The report will be posted on the URSI website.

2004 International Symposium on Electromagnetic Theory (EMTS 2004)

Special Section in Radio Science, published in Fall 2005

Preparations made for GA 2005

Sponsorship of conferences related to Commission B.

Voting was held for the incoming Commission B Vice-Chair 2005 – 2008. The successful candidate was **K. Langenberg.**

The Terms of Reference were reviewed and discussed. Two minor changes were accepted and approved by the Board (attached). It was agreed other recommendations for changes, suggested at the GA Business meeting, be refined and drafted by the Adhoc Group, (Staffan, Ando and Shafai) into a proposal for discussion at the next EMT symposium, and be proposed to the Board at the next GA.

Next General Assembly 2008GA:

Paper submission was discussed and agreed upon, that a centralized electronic submission and review system be used. It was also agreed on that a one time submission of a paper (up to four pages), plus an abstract in the specified format, be used in the program.

Three proposals were placed by Commission B colleagues for holding GA 2008:

1. Gothenberg, Sweden
2. Chicago, USA
3. Istanbul, Turkey

It was agreed to support all three. The submission from Chicago, was selected by the Board, to hold XXIX GA on August 7–16, 2008.

Preparation for the 2007 EMTS in Alexandria.

A brief presentation was made by Dr. El-Khamy chair of the Alexandria local organizing committee. The suggested dates were May 7–12, 2007. It was pointed out that, the timing may not

be convenient for some countries, because of the university term. It was suggested to consider moving it one week later to May 14–17.

The conference will be chaired by Dr. L. Shafai, and assisted by the Commission B-Technical Advisory Board (B-TAB) and the International Advisory Group (IAG) consisting of Dr. El-Khamy LOC Chair, Dr. Y. Antar, Dr. M. Iskander, Dr. A. Kishk, Dr. A. Zaghoul, Dr. Abdel Razik Sebak, Dr. Atafll Sherbeni, Dr. Ozlem Kilic, Prof. E. Heyman, Prof. R. Ziolkowski, Prof. Y. Rahmat-Samii, Dr. R. Stone, and Dr. P. Uslenghi.

Two suggestions were made by the IAG to Dr. El-Khamy:

1. Security, that the local organizers consider some limited, special security arrangements to make visitors feel more comfortable.
2. Number of attendees be carefully re-estimated, by checking the statistics of previous conferences in Alexandria.

Dr. Ando reported on the schedule for EMTS, using the following time table from EMTS 2004 in Pisa.

- 1st Circular of EMTS 2004, July 2001
- 1st Call For Papers, July 2002
- URSI-GA, Maastricht, August 2002
- TPC formation, October 15, 2002
- Call For Papers draft, November 17, 2002
- Special Sessions & Convener, May 12, 2003
- Deadline for YSA application, November 1, 2003
- Deadline for 3-page summaries, November 15, 2003
- TPC meeting 2-days, January 9-10, 2004
- Notification to authors, January 15, 2004
- Pre-registration, March 15, 2004
- Plenary Session Speaker, February 20, 2004
- Final Program on website, April 20, 2004

Discussion of future EMTS

Procedure for selecting the venue for 2010 EMT-S was decided, allowing for the voting after GA.

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|---|-------------------------------------|---------------|
| 1) Preliminary Proposal for 2010 EMT-S Venue | 2005.06.05 | GA-3 months |
| 2) Review by Adhoc Committee to select 2 or 3 proposals | 2005.06.30 | GA-2 months |
| 3) Final Proposals (2 or 3) and ballot forms sent out | 2005.07.10 | GA-1 month |
| 4) Vote by Letter Ballot (Final Prop. Only) | 2005.07.20 – 2005.09.10 | |
| 5) Short Presentation at 2005 URSI GA | 2005.10.23-29 | GA |
| 6) Minor revisions as per feed back from discussion at GA | GA + 2weeks | |
| 7) Final Vote at GA Commission B Business meeting | 2005.10.23-29 | GA + 1 month |
| | 1 st (5 Nov. - 25 Nov.) | |
| | 2 nd (27 Nov. - 17 Dec.) | |
| 8) Announcement to official members etc. | | GA + 2 months |

Advantages of the new procedure, is that the official members receive the following, useful information before voting.

- 1) The 2008 GA Venue.
- 2) The name of the Commission B Vice-Chair, who will serve as the Chair for 2010 EMTS.
- 3) Proposals would be improved by reflecting the comments made at the GA meeting.

Presentation of the proposals to host the 2010 EMTS

Three presentations were made.

Toulouse, FRANCE

Hiroshima, JAPAN

Berlin, GERMANY

Commission B will continue with Technical Advisory Board (B-TAB)

Paper statistics are as follows:

2005 GA Com B papers 244 (Oral 90 + Poster 129 + 25)

2002 GA Com B papers 252 (Oral 77 + Poster 175) / Total 1523(O782, P741)

1999 GA Com B papers 355 (Oral 111 + Poster 244) / Total 1704(O934, P770)

2004 EMTS papers 421/464

2001 EMTS papers 215/275

1998 EMTS papers 290/470

Inter-Commission Working Group (IWG) for Solar Power Satellites (SPS)

Guidelines for the production of the URSI Position Statement and White Papers were discussed.

Prof. Y. Rahmat-Samii will represent COM B in Solar Power Satellite Systems. Next White Paper possibly on “biological effects of electromagnetic fields ??”. SCT had an open meeting during the GA, and will continue as the ITU Liaison.

URSI Publication

Commission B Editor for RRB and RSB 2005-2008 will be, Prof. K. Langenberg (incoming Vice-Chair)

Publication Committee Membership

Should include one young scientist, someone who will enhance the URSI visibility.

Commemoration of scientific achievements

Prof. Uslenghi said a few words about Prof. Tiberio and his achievements.

Prof. Heyman said a few words about Prof. Felsen and his achievements.

Other business

EM-Prize committees:

2002-2005

C.E. Baum, C.M. Butler (Chair), K.J. Langenberg, T.B.A. Senior, and S. Ström

2005-2008

M. Ando, C.M. Butler, K.J. Langenberg, T.B.A. Senior, L. Shafai and S. Ström (Chair)

2003 Prize

Announced 15 Sept 2001

Entries were due 15 Jan 2003

Only 2 received, neither in accordance with the objective.

No prize was awarded (see June 2003 RSB)

2004 Prize

Announced 15 Sept 2002

Entries were due 15 Jan 2004

6 received. Paper by L. Klinkenbusch (Germany) selected.

Prize presented at a meeting in Germany.

2005 Prize

Announced 15 Feb 2004 (see March 2004 RSB)

Entries were due 15 Jan 2005

Only 1 entry received

URSI Board of Officers

Election results for the URSI Board of Officers, Triennium 2005-2008

President

Prof. F. Lefeuvre (France)

Vice-Presidents:

Prof. G. Brussaard (Netherlands)

Prof. C. Butler (USA)

Prof. M.T. Hallikainen (Finland)

Prof. P.J. Wilkinson (Australia)

Past President:

Prof. K. Schlegel (Germany)

Secretary General:

Prof. P. Lagasse (Belgium)

New Terms of Reference

The interest of Commission B is fields and waves, encompassing theory, analysis, computation, experiments, validation and applications. Areas of emphasis are:

- (a) Time-domain and frequency-domain phenomena;
- (b) Scattering and diffraction;
- (c) General propagation including waves in specialized media;
- (d) Guided waves;
- (e) Antennas and radiation;
- (f) Inverse scattering and imaging.

The Commission fosters the creation, development, and refinement of analytical, numerical, and measurement techniques to understand these phenomena. It encourages innovation and seeks to apply interdisciplinary concepts and methods.

