



## 3rd IEEE AP-S Region 10 Chapter Chairs' Meeting

20 August 2004, at Sendai International Center (ISAP'04), Sendai Japan

#### **Meeting Minutes**

#### **Attendees**(Alphabetical order of Chapters):

Dr. Makino (Japan Chapter)

Prof. Eom (Korea Chapter)

Prof. Zhang (Nanjing Chapter)

Ms. Uthansakul (Queensland Chapter, on behalf of Dr. Robinson)

Ms. Ying (Singapore Chapter, on behalf of Prof. Ooi)

#### **Observer:**

Dr. Stone (AP-S Representative )

Prof. Nakano (AP-S Asian Representative)

Prof. Ando (AP-S AdCom Member)

Prof. Ito (Chair of the 1<sup>st</sup> Meeting)

Prof. Li (Former Chair of Singapore Chapter)

Prof. Uno (Vice Chair, Japan Chapter)

Prof. Takahashi (Treasurer, Japan Chapter)

Dr. Miyashita (Secretary, Japan Chapter)

#### **AGENDA**

1	Welcome message	Dr. Makino
2	Self introduction	Everyone
3	Greeting from AP-S	Dr. Stone
4	Japan Chapter activities	Prof. Uno
5	Korea Chapter activities	Prof. Eom
6	Nanjing Chapter activities	Prof. Zhang
7	Queensland Chapter activities	Ms. Uthansakul
8	Singapore Chapter activities	Ms. Ying
9	Discussion on Region 10 activities	
10	Closing remarks	Prof. Nakano



## **EEE** Japan Chapter Antennas and Propagation Society



#### 12:15

#### Dr. Makino gave welcome message from AP-S Japan Chapter.

I am happy to chair the 3<sup>rd</sup> meeting. I hope we can exchange information regarding Region 10 activities for future collaboration.

#### 12:20

#### Every attendee introduced herself/ himself.

#### 12:30

#### Dr. Stone gave greetings from AP-S

Prof. Jeffrey Young has been serving as new Chapter Coordinator after Dr. T. S. Bird. He sent his greeting and best wishes.

AP-S Chapter activity financial support is available especially for special project opened for all the Chapters including those in Region 10.

Prof. Uslenghi and myself have been serving as Representatives of AP-S for Region 10 meetings. AP-S considers that those meetings are quite important and technical co-sponsorships have been also provided.

#### 12:35

#### **Summary of Chapter Activities**

- 1. Prof. Uno presented activities of Japan Chapter
- 2. Prof. Eom presented activities of Korea Chapter
- 3. Prof. Zhang presented activities of Nanjing Chapter
- 4. Ms. Uthansakul presented activities of Queensland Chapter on behalf of Dr. Robinson
- 5. Ms. Ying presented activities of Singapore Chapter on behalf of Prof. Ooi
- A report of Taipei Chapter from Prof. Chang was distributed and reviewed.

Distributed documents are attached in Appendix.

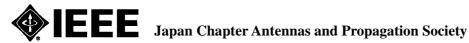
Many questions and comments were interchanged.

#### 12:50

#### **Discussions**

A joint invitation to prof. Tiberio for giving AP-S Distinguished Lectures in Beijing-Nanjing-Hong Kong-Singapore has been approved and in scheduling. This is one of the outcomes of Region 10 meetings and such collaboration should be continued.

Prof. Ito announced Special Issue of Trans. AP on Antennas & Propagation Applications and requested active submittal of manuscripts from Region 10 Chapters.



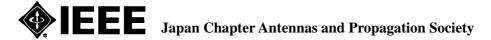


Next meeting (4th) has been agreed to be held during ISAP'05 in Korea.

13:05

Prof. Nakano gave closing remarks.

ISAP'05 will be held in Korea and this is the first ISAP outside Japan. AP-S would like to support it as one of Region 10 collaborations.





## Attachment

Distributed documents from each chapter





#### IEEE ANTENNAS AND PROPAGATION SOCIETY

Dr. W. Ross Stone
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#### Comments for the Region 10 Chapter Chairs Meeting

It is a particular honor and a pleasure to represent the IEEE Antennas and Propagation Society at this Region 10 Chapter Chairs meeting.

#### **Region 10 Chapter Support**

I bring you greetings from Prof. John Volakis, the current AP-S President; from Prof. Rick Ziolkowski, the AP-S Vice President, who will be President in 2005; and from Prof. Jeff Young, the new AP-S Chair of the Chapter Activities Committee. Prof. Young sends his greetings and best wishes. He also asked me to convey some specific items that may be of interest to the Chapter Chairs:

- 1. There is money available from AP-S for Chapter support and special projects. Jeff would particularly like to support
  - a) joint Chapters that would like to bolster their AP-S-related activities:
  - b) younger, solely AP-S Chapters; or
  - c) older, stagnant AP-S Chapters.

However, all Chapters may apply for funding, and can get that funding with a short, reasonable statement of the budget and justification for the support. The system works on a first-come, first-served basis until funds are depleted. Send requests to Jeff, whose contact information is given below.

- 2. There is a move within IEEE RAB (Regional Activities Board) to rejuvenate stagnant Chapters. Chairs of such Chapters should contact Vicki Waldmen for more information. She can be reached as follows: Vicki Waldman, IEEE Section/Chapter Support Supervisor, Tel: +1 (732) 562-5564; Fax: +1 (732) 463-9359; e-mail: v.waldman@ieee.org; http://www.ieee.org/ra/scs.
- 3. Jeff's contact information is Prof. Jeffrey L. Young, Department of Electrical and Computer Engineering, MRC Institute, BEL 318, University of Idaho, Moscow, ID 83844-1023 USA; Tel: +1 (208) 885-6829; Fax: +1 (208) 885-7579 or +1 (208) 885-6840; e-mail: jyoung@mrc.uidaho.edu. I have known Jeff for over a dozen years: he worked with me as Editor of the AP *Magazine*. He is intelligent, sensitive, and very, very helpful. If you have any questions or problems, I urge you to get in contact with him.

#### **Support for Region 10 Meetings**

The AP-S AdCom asked Dr. John Young, Prof. George Uslenghi, and me to serve as representatives to the Asia-Pacific Region in connection with any and all Asia-Pacific Region meetings planned in the area of antennas and propagation. The IEEE Antennas and Propagation Society (AP-S) strongly supports such meetings and encourages their development. AP-S is prepared to offer whatever support is desired: certainly, support in the form of technical co-sponsorship; and financial support if it is wanted, with the approval of the AdCom for each meeting. Technical co-sponsorship does not involve any financial commitment or liability on the part of AP-S. However, it does provide free publicity in the AP *Magazine* (of which I am Editor-in-Chief); access to the AP-S mailing list (the IEEE charges a small fee for mailing labels); and the involvement of an AP-S representative on the technical program committee of the meeting. Several Region 10 meetings have already received approval for continuing technical co-sponsorship (meaning that it isn't necessary for the meeting organizers to apply each time the meeting is held): the ISAP meetings and the ISAPE meetings are examples. Other meetings can apply for technical co-sponsorship by contacting the current AP-S President: he or she has been authorized by the AdCom to grant such co-sponsorship in appropriate cases without the need to wait for an AdCom meeting.

I also want to emphasize that while the AP-S AdCom is strongly supportive of Region 10 meetings, it also recognizes the need for Regions to be able to exercise their own initiative in organizing meetings and in making decisions regarding them. My role and that of my colleagues is therefore to support the decisions made by the local representatives, rather than to try to unduly influence those decisions.

In short, I'm here to help and to offer my support. Please let me know how I can be of help, either to our Region 10 Chapters or to the entities planning meetings in our field in the Asia-Pacific Region. Thank you.

Ross

## Report on 2003 Japan Chapter Activities (1)

## Organized Technical Meeting

9 meetings including lectures by 5 new IEEE fellows were held.

## Workshop

Two full day workshops on the method of moments were held in response to the requests of many AP-S members. One is an elementary course given by Prof. H. Nakano, and another is an intermediate course given by Prof. K. Sawaya.

## Joint Technical Meeting

This meeting was co-organized once a month except October (IEEE AP-S Topical Conference on Wireless Communication Technology in Hawaii) with the IEICE Technical Group of Antennas and Propagation





## Report on 2003 Japan Chapter Activities (2)

## • IEEE AP-S Japan Chapter Young Engineer Award

This award was given for young AP-S members who wrote excellent papers published in IEEE Transactions or other qualified refereed journals. Purpose is to increase AP members and to encourage young members.

## Support of IEEE Senior Member Program

Japan Chapter supports this program continuously, and nominated more than ten new senior members in 2003.

## • 2<sup>nd</sup> Region 10 Chapter Chairs' Meeting

Chair and vice-chair attended this meeting held at Nanjing.





# IEEE AP-S Region 10 Chapter Chairs' Meeting AP-S Korea Chapter Activities

The following conferences, workshop, and technical meetings were cosponsored by the IEEE AP-S Korea Chapter.

- 1. The 2004 Workshop on Antenna Technology was held in the Seoul KyoYuk MunHwa HoeKwan, Seoul Korea on April 29, 2004. Total nine talks were presented in the area of recent antenna technologies. The number of attendants was approximately 200.
- 2. The 2004 Spring Microwave and Wave Propagation Conference was held in the Hanyang University, Seoul on May 22, 2004. Total 140 papers were presented in the oral and poster sessions.
- 3. The 2004 Fall Microwave and Wave Propagation Conference will be held in Soonchunhyang University on September 19, 2004.
- 4. Two technical meetings were held at the Korea Advanced Institute of Science and Technology in 2003.
- 5. At least two technical meetings are scheduled this year. Technical experts on antennas will be invited.

#### 2005 INTERNATIONAL SYMPOSIUM ON ANTENNAS AND PROPAGATION

# **ISAP2005**

August 3 - 5, 2005 / Seoul KyoYuk MunHwa HoeKwan, Seoul, KOREA

The 2005 International Symposium on Antennas and Propagation (ISAP2005) will be held at the Seoul KyoYuk MunHwa HoeKwan, Korea, during August 3-5, 2005. This symposium, the tenth ISAP, is sponsored and organized by the Korea Electromagnetic Engineering Society (KEES). This symposium is cosponsored by the Communications Society of the Institute of Electronics, Information and Communication Engineers (IEICE). This symposium is held under the technical co-sponsorship of the Antennas and Propagation Society of the Institute of Electrical and Electronics Engineers (IEEE/AP-S) and in cooperation with the Chinese Institute of Electronics (CIE) and the International Union of Radio Science (URSI).

#### **OBJECTIVE**

SAP2005 is intended to provide an international forum for exchanging information on the progress of research and development in antennas, propagation, electromagnetic wave theory, and related fields, as shown in the Scope. An important objective of this meeting is to promote mutual interaction among participants.

#### SCOPE

This symposium will cover a wide range of topics on antennas, propagation, electromagnetic wave theory, and wireless application systems, as suggested below. Papers concerned with other related topics will also be considered.

#### A. Antennas and Related Topics

- (A1) Microstrip and Printed Antennas (A2) Active and Integrated Antennas
- (A3) Array Antennas, Phased Arrays and Feeding Circuits (A4) Small Antennas
- (A5) Adaptive and Smart Antennas (A6) Multiband/wideband Antennas (A7) Slot Antennas
- (A8) Millimeter Wave and Sub-Millimeter Wave Antennas (A9) Reflector/Lens Antennas and Feeds (A10) Optical Technology in Antennas (A11) Mobile and Base Station Antennas (A12) Antenna Measurements (A13) Others

#### B. Propagation and Related Topics

- (B1) Mobile and Indoor Propagation (B2) Mobile Channel Characterization and Modeling
- (B3) Millimeter and Optical Wave Propagation (B4) Earth-Space and Terrestrial Propagation
- (B5) Radio Astronomy (B6) Remote Sensing (B7) SAR Polarimetry and Interferometry
- (B8) Ionospheric Propagation (B9) Others

#### C. Electromagnetic Wave Theory

- (C1) Complex Media and Artificial Media (C2) Computational Electromagnetics
- (C3) Theoretical Electromagnetics and Analytical Methods (C4) High-Frequency Techniques
- (C5) Inverse Problems (C6) Random Media and Rough Surfaces
- (C7) Scattering and Diffraction (C8) Waveguiding Structures
- (C9) Periodic and Band-Gap Structures (C10) Time Domain Techniques (C11) Others

#### D. Systems and Related Topics

- (D1) Biological Effects and Medical Applications (D2) High Power Microwave Applications
- (D3) Advanced Materials for EM Applications (D4) UWB and Impulse Radio
- (D5) Ubiquitous Network Systems (D6) Satellite Communication Systems
- (D7) Radio Technologies for Intelligent Transport Systems (D8) Subsurface Sensing
- (D9) EMC/EMI Simulations and Measurements (D10) Others

#### PAPER SUBMISSION

Authors are requested to send their papers in PDF by electronic method. At the same time, a signed Copyright Transfer Form should be sent by post along with one original paper. The detailed instructions of the on-line paper submission will be provided on the ISAP2005 web site. The deadline for the on-line paper submission is **February 28, 2005**.

#### **VENUE**

The Seoul KyoYuk MunHwa HoeKwan is on the outskirts of Seoul, and now represents one of the foremost centers in Seoul for symposium venue. Seoul KyoYuk MunHwa HoeKwan means Seoul education and culture center in English. The international symposium room at the Seoul KyoYuk MunHwa HoeKwan is adequate as an excellent and convenient venue.



http://www.isap05.org

#### **ORGANIZATION OF ISAP2005**

#### **Advisory Committee**

Dong Chul Park (Chungnam Nat'l Univ.)
Dong It Kim (Korea Maritime Univ.)
Seung In Yang (Soongsil Univ.)

#### Organizing Committee

- Chair
- Hyo Joon Eom (KAIST)
- Finance Committee

Dong Chul Park (Chungnam Nat'l Univ.) Jong-Suk Chae (ETRI)

- Publication / Publicity Committee Ki-Chai Kim (Yeungnam Univ.)
   Kyeong-Sik Min (Korea Maritime Univ.)
   Jong-Won Yu (KAIST)
- Local Arrangement Committee
   Young Joong Yoon (Yonsei Univ.)
   Jae Wook Lee (Hankuk Aviation Univ.)
   Hosung Choo (Hongik Univ.)
- Exhibition Committee
   Hai-Young Lee (Ajou Univ.)
   Hyeongdong Kim (Hanyang Univ.)
   Sungtek Kahng (Incheon Univ.)
- Secretariat
  Yong Heui Cho (Mokwon Univ.)

#### **Technical Program Committee**

Chair

Young Ki Cho (Kyungpook Nat'l Univ.)

- Secretariat
  - Sangwook Nam (Seoul Nat'l Univ.)
- Members

Ikmo Park (Ajou Univ.)
Kang Wook Kim (Kyungpook Nat'l Univ.)
Seong-Ook Park (ICU)
Jong Kweon Park (Hanbat Nat'l Univ.)

#### **IMPORTANT DATES**

- Deadline for Papers Submission February 28, 2005
- Deadline for Notification of Acceptance April 28, 2005
- Deadline for Early Registration July 1, 2005

#### **ISAP2005 SECRETARIAT**

GENICOM Convention Service Co., Ltd. 5F, Daehan Bldg., #1018 Dunsan-dong, Seo-gu, Daejeon 302-120, Korea

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E-mail: isap05@ee.kaist.ac.kr Web Site: http://www.isap05.org

#### IEEE/AP-S NANJING CHAPTER (Joint with MTT-S, EMC-S)

Regional system: IEEE Region 10----Beijing Section----Join Nanjing Chapter

Geometric coverage: Jiangsu (Nanjing) + Shanghai + Anhei (Hefei) + Zhejiang (Hangzhou)

Time of life: Established in Jan. 1995, ~10 years old

<u>Scale in membership:</u>  $44 + 20 + 3 + 3 = \underline{70 \text{ AP}} / 43 + 35 + 3 + 3 = \underline{84 \text{ MTT}} / 17 + 3 + 0 + 3 = \underline{23 \text{ EMC}}$ 

Activities in plan: 30 items + (in 2004)

<u>Chairperson:</u> Prof. Wen Xun Zhang (Southeast University) <u>wxzhang@ieee.org</u>

### Summary of 2004 Nanjing Chapter Activities (Jan.~Aug.)

01	R & D around the ANSYS electromagnetics codes Dr. Li Zhou (Jan.06) 12/52/64				
02	Design synthesis of patch antennas with direct feed Prof. Y.L. Chow (Feb. 20) 14/59/73				
03	Broadband L-probe and bandwidth controlled T-square feeds Prof. Y.L. Chow (Feb.20) 14/59/73				
04	Electromagnetics Conspectus Prof. J.A. Kong (Feb. 26) 24/88/112				
05	Modeling and Design of Passive Photonic Integrated Circuits Dr. Lin-Ping Shen (Apr.01) 11/81/92				
06	Workshop on Microwave Energy Application Technology (1.5 days/22 speaker) (Apr.15~16) 09/76/85				
07	Microwave near-field microscopy and its application Prof. Yi-Jun Feng (Apr.28) 09/33/42				
08	Microwave near-field microscopy and its application Prof. Rui-Xin Wu (Apr.28) 09/33/42				
09	Fast algorithm in computational electromagnetics Dr. Ji-Ming Song (May 19) 10/44/54				
10	Antenna technology for modern phased array Principal Engineer Ming-Chun Wu (May 20) 14/48/62				
11	Higher order technique for method of moments Dr. Ji-Ming Song (May 21) 12/45/57				
12	Technical Visit for Antenna of Sea Soul L/S/C/A Radar No.724 Res. Inst. of CSIC (Jun. 11) 06/08/14				
13	al Networks for RF/Microwave Design: Theory and Practice Prof. Q.J. Zhang (Aug.05) 09/14/23				
14	Innovative Antennas and Their Applications Dr. Yang Hao (Aug. 25)				
15	Regular and Miniature Wideband Microstrip Antennas for Wireless Communications				
16	Dr. Yong-Xin Guo (Aug. 26) Short course: Electromagnetic Band Gap (EBG) Structures and Meta-Materials in Antenna Engineering				
17	Prof. Yahya Rahmat-Samii (Aug. 28) Short course: Introduction to fast multipole method for electrodynamics				
18	Prof. Weng Cho Chew (Aug. 28) Short course: Integration design and technology in millimeter waves				
19	Prof. Ke Wu (Aug. 28) International Conference (Co-organizer): PIERS 2004 (Nanjing) (Aug. 29-31)				







## IEEE Joint Chapter Microwave Theory & Techniques, and Antennas and Propagation Queensland Section

### **Activities Report**

http://www.itee.uq.edu.au/~zagr/

Chair: AW Robinson, ashley.robinson@micreo.com

Vice-Chair: T Tang, t.tang@qut.edu.au

Secretary: R Hodgson, richard.hodgson@ieee.org

The MTT/AP Chapter was formed in the Queensland Section of the IEEE in 2002 and had a year of consolidation in 2003. The chapter has continued to receive good support from local universities, who have hosted most of the technical presentations. The chapter activities were well attended by students, academic staff as well as by interested engineers from the local microwave engineering industry.

The following is a summary of the technical activities of the chapter so far this year.

#### Monday 28<sup>th</sup> June 2004:

"Self Steering Antenna Research at Queens University Belfast",

Abstract: The Seminar will begin with an introduction describing the High Frequency Electronics Group at Queens University Belfast, some of the research we carry out and our facilities. Then, some of the Self Steering Antenna Research will be described in more detail. This will include some of our mm-wave retro directive antennas operating at 65 GHz and our new novel PLL phase conjugating retro directive arrays.

presented at the University of Queensland by Dr. Neil Buchanan, Queens University Belfast.

#### Tuesday 10<sup>th</sup> August 2004:

"Improving Australia's commercialisation performance"

Abstract: Innovation and industry-related R&D can be a significant contributor to a country's economic growth. While Australia is generally acknowledged as being productive at 'turning dollars into R&D', it is less efficient at 'turning R&D back into dollars'. This presentation compares Australia's commercialisation performance over the past three years against international benchmarks, and investigates local variations in commercialisation performance. The presentation will discuss the difficulties of commercialisation in Australia, and suggest possible solutions that are being facilitated by the Australian Institute for Commercialisation, founded in 2002 as a Smart-State initiative of the Queensland Government. In particular, while Australia has in place many of the assets and building blocks that are necessary for commercialisation, it generally lacks the 'soft infrastructure' that allows these elements to interact smoothly and efficiently. The presentation will also talk about other State and Commonwealth initiatives intended to foster the growth of small start up companies and assist the formation of clusters and economic growth.

presented at the University of Queensland by **Dr. Rowan Gilmore,** Chief Executive Officer, Australian Institute for Commercialization.

#### ACTIVITY REPORT FOR YEAR 2004 Chapter Name: Singapore IEEE MTT/AP Chapter

To boost the image of the local chapter and to increase the interest within the members and non-members, the approach adopted by the Singapore IEEE MTT/AP Chapter is rather multi-facet. Instead of the usual seminar type of approach, the Singapore IEEE MTT/AP Chapter has taken a bold step to conduct 27 technical meetings, 1 workshop, 1 short course and 3 administrative meetings within our eight months as office bearers of the IEEE Singapore MTT/AP Chapter. We have also installed some fruitful future plans. These details are included below:

#### 1. Technical Meeting Information for 2004

Total Number of Technical Meeting = 27

- 1. Advanced Domain Decomposition Methods for Solving Large Electromagnetic Problems, Professor Jin-Fa Lee, ElectroScience Laboratory, Ohio State University, USA
- 2. Analysis and Design of Three Transmission Zeros Bandpass Filter Utilizing Triple-mode Dielectric Loaded Cubical Cavity, Dr Chua Lye Heng, Nanyang Technological University, Singapore
- 3. Recent Advances in Fully Polarimetric POL-DIFF-IN-SAR Sensing and Imaging with Applications to Geodynamic Stress-change Monitoring, Prof. Wolfgang-Martin Boerner, Department of Electrical and Computer Engineering, University of Illinois at Chicago; and Director, UIC-ECE Communications, Sensing & Navigation Laboratory. (coorganized by TDSI, ECE Department, and Singapore IEEE MTT/AP Chapter)
- 4. High Performance Technical, Engineering and Scientific Computing, Dr. Kenneth Tan, CEO of OptimaNumerics. (co-organized by Institute of High Performance Computing and IEEE Singapore MTT/AP Chapter)
- 5. Magnetic Nano-Composites, Dr. Konstantin N. Rozanov, Institute for Theoretical and Applied Electromagnetics, Russian Academy of Science, Russia. (co-organized by Temasek Laboratories and IEEE Singapore MTT/AP Chapter)
- 6. Smart Microwave Material, Dr. Konstantin N. Rozanov, Institute for Theoretical and Applied Electromagnetics, Russian Academy of Science, Russia. (co-organized by Temasek Laboratories and IEEE Singapore MTT/AP Chapter)
- 7. Fast Algorithms Resulted from Integral Equations and Fast Fourier Transform: Past, Present and Future, Professor Le-Wei Li, Department of Electrical & Computer Engineering, National University of Singapore.
- 8. Electromagnetic Properties of Double-Mesh Structures, Professor Akimov V, St. Petersburg State Polytechnic University, Russia, 14 May 2004 (Friday)
- 9. High Resolution Imaging from Space CRISP Research and Applications, Dr. Kwoh Leong Keong, Centre for Remote Imaging, Sensing and Processing (CRISP), National University of Singapore
- 10. Foliage Penetration, Passive, and Surface Wave Radar Studies, Professor Lu Yilong, School of Electrical and Electronic Engineering, Nanyang Technological University
- 11. Photonics True-Time Delay Unit for Phased-Array Antenna Beamforming, Professor Tjin Swee Chuan, School of Electrical & Electronic Engineering, Nanyang Technological University
- 12. Development of Gallium Arsenide (GaAs)-based Power Monolithic Microwave Integrated Circuits (MMICs), Dr. Tan Chee Leong, DSO National Laboratories
- 13. LTCC: A high performance and high reliability ceramic substarte technology for industry and military applications, Dr. Stephen Wong Chee Khuen, Singapore Institute for Manufacturing Technology (SIMTech), A\*STAR
- 14. Cryogenic Wide-Band LNA Design and Characterization, Dr. R. Hu, Academia Sinica, Taipei, Taiwan.
- 15. Worldwide Embedded Passives R & D Status, Mr Dennis Fritz, Instructor of Design and Process implementation for Embedded Passives Technology Workshop in IPC.
- 16. Embedded Passives Technology Development-Performance Validation of Embedded Passives, Dr Albert Lu, Research Scientist, SIMTech.
- 17. Ultra-thin Laminates for Switching Noise Suppression, Mr Ho Voon Yee, Advanced Applications Engineer, 3M Asia Pacific.
- 18. Embedded Resistors Using Plating Technology, Mr Dennis Fritz, MacDermid Technology Consultant.
- 19. Scattering of Spherical Waves from Wire Grids and Meshes, Professor Akimov V, St. Petersburg State Polytechnic University, Russia, May 27, 2004
- 20. Frequency Selective and Polarization Properties of Multi-Layered Wire Meshes, Professor Akimov V, St. Petersburg State Polytechnic University, Russia. June 3, 2004
- 21. A general approach to derive a class of RF/microwave baluns and its applications, Dr Y C Leong, DSO National Laboratories, Singapore

- 22. Nonlinear Active Device Modeling, Dr Fujiang Lin, Institute of Microelectronics, 11 Science Park Road, Singapore Science Park 2, Singapore 117685, 18 June 04 (Friday).
- 23. Subharmonic Mixers, Tony Donisi, Senior Applications Engineer for Ansoft Circuit and System level tools
- 24. Optimization of Patch Antennas, Tony Donisi, Senior Applications Engineer for Ansoft Circuit and System level tools
- 25. Global Modeling of RFIC's and AIA's based on FDTD method, Prof. Q. X Chu, College of Electronic & Information Engineering, South China University of Technology, P. R. China
- Vector Finite Element Time Domain Method for Electromagnetic Modeling, Professor Robert Lee, The ElectroScience Laboratory, Ohio State University, USA, 17th Aug 2004, Tuesday.
- 27. Recent Advances in the Vector Finite Element Time Domain Method, Professor Robert Lee, The ElectroScience Laboratory, Ohio State University, USA, 18th Aug 2004, Wednesday

#### 2. Summary of Workshops, Short Courses, and Conferences for 2004

#### Workshop 1: Ansoft Electromechanical (EM) Technical Roadshow 2004

Date:		19th March, 2004 (Friday)					
Venue:		Hilton Hotel, Vista 1, Singapore					
Participant	s:	100					
IEEE Members		25	Non-Members	75			
		intly organized by IEEE Singapore MTT/AP Chapter, and Ansoft orporation Singapore Branch, Singapore.					
TIME		TOPIC					
0900-0910	Opening	Opening Announcements					
0910-0940	Ansoft E	Ansoft EM - Bridging the Gaps of Electromechanical System Design					
0940-1025		Design of Electrical Distribution System in Automotive Applications - Koichi Shigematsu					
1025-1045	Break	Break					
1045-1115	Compreh	Comprehensive Analysis of a Claw Pole Alternator System - Q M Chen					
1115-1200		Behavioral and Physics Based Modeling of a Solenoid System Design of A Hybrid Elecric Drive Train - Lei Xia					
1200-1330	Lunch						
1330-1410	A Trial P	A Trial Production of Small Size Ultra High Speed Drive System - Koichi Shigematsu					
1410-1450		High Accuracy Examples of Motor Design 3D, RZ2D Loss Calculation in Transformers - Q M Chen					
1450-1530	Maxwell	Maxwell 3D Ephysics - Q M Chen					
1530-1550	Break						
1550-1620	Advanced	Advanced Control Strategies for Electrical Drives-Space Vector Modulation - Lei Xia					
1620-1650		Servo Drive System Control Design Combining Simplorer and Simulink Switch model Power Supply System Design Solution - Lei Xia					
1650-1710	Open Dis	Open Discussion					

#### Speakers

Dr. Lei Xia - Senior Application Engineer, Ansoft Corporation

Mr. Koichi Shigematsu - Senior Application Engineer, Ansoft Corporation Japan, K.K.

Dr. Qing-Ming Chen - Senior Application Engineer, Ansoft Corporation Japan, K.K.

#### **Short Course:**

Title:

RF MEMS course

Lecturer:

Professor Rebeiz, University of Michigan, USA

Dates:

18-19 May 2004

Time:

9am-5.30pm

Venue:

DSO Auditorium, 20 Science Park Drive, S(118230)

#### **Course Outline**

#### DAY ONE:

- 1. Wireless/ Defense Applications of RF MEMS
- 2. RF MEMS Switches and Varactors
- 3. Analysis of the best switches in the world
- 4. Latest Fabrication Techniques
- 5. Reliability and Power Handling
- 6. DC- 120 GHz Packaging Techniques

#### DAY TWO:

- 7. Review of RF MEMS Switches
- 8. Review Applications of RF MEMS
- 9. Electromagnetic/ Mechanical Modeling
- 10. Switch Networks and Phase Shifters
- 11. Reconfigurable Networks and Antennas
- 12. Tunable Filters at 0.1-50 GHz

#### **Administrative Meetings:**

- [1] 2 Jan., 2004 (Friday), IEEE Singapore MTT/AP Chapter Committees' Meeting, Present: Dr B L Ooi, Prof. L W Li, Mr. Y B Gan, and Dr C F Wang, MMIC Lab, NUS.
- [2] 30 April, 2004 (Friday), IEEE Singapore MTT/AP Chapter Committees' Meeting, Present: Dr B L Ooi, Mr. Y B Gan, Dr F. Lin, and Dr C F Wang, Faculty Club, NUS.
- [3] 22 July, 2004 (Friday), IEEE Singapore MTT/AP Chapter Committees' Meeting, Present: Dr B L Ooi, Mr. Y B Gan, Dr F. Lin, and Dr C F Wang, Faculty Club, NUS.

#### **Future Plans:**

- 1. To co-sponsor a DLP, Prof. Tiberio, from Italy under a combined effort from Shanghai, Beijing and Hong Kong Chapters in Dec 2004.
- 2. To co-sponsor the 2005 International Workshop on Antenna Theory, Mar 7-9 2005.
- 3. To co-sponsor the IEEE Student Science Symposium, 12th August, 2004.

# IEEE AP-S Region 10 Chapter Chairs' Meeting AP-S Taipei Chapter Future Activity

The national EMC conferences in Taiwan have been hold for seven years. The conferences are hold at world trade center, Taipei. The schedule of conference is the same of Electronic Exhibition Show at world trade center. The booths of electronic show are over than 500 in the world trade center. There are about 400 attendants to join the conference. Most attendants are not only to join the conference, but also have chance to review the new electronic products during the electronic show. The topics for the conference are not only for the related EMC, but also for the related topics of antenna. The committee of 2003 conference had decided to promote the conference as the international conference as "ICEMAC (International Conference on Electromagnetic Applications and Compatibility)". For the ICEMAC2004 will be held at the Exhibition Hall, World Trade Center, Taipei, on October 14-16, 2004. The web site is as <a href="https://icemac2004.cc.ntu.edu.tw">https://icemac2004.cc.ntu.edu.tw</a>.

The conference is sponsored by
IEEE AP / EMC /MTT Societies, Taipei Section
Microwave Association of ROC

## IEEE Transactions on Antennas and Propagation Announces a *Special Issue* on

## **Antennas & Propagation Applications**

In recent years, there has been an explosion in the number of applications and systems involving antenna and propagation aspects. These applications range from communications systems, such as wireless, mobile and satellite, to radar, radio astronomy and imaging systems at millimeter and submillimeter-wave frequencies. The objective of this Special Issue is to highlight the progress being made in such applications by emphasizing the results of recent research and development on the antenna and propagation aspects.

Topics of interest should strongly emphasize the antennas and/or propagation contributions to an application or a system. The topic may be a particular antenna or propagation attribute, or on antenna and propagation theory or design that made the application or system possible. The application may be in actual operation or in prototype form. Some possible examples include adaptive antennas for indoor wireless communications, antenna systems for a major radio astronomy or deepspace probe project, or results of studies of millimeter-wave propagation on local-multipoint links.

Manuscripts should conform to the requirements for regular papers as specified in the information for Authors in the inside back cover of IEEE Transactions on Antennas and Propagation or given on the web site (http://www.ict.csiro.au/aps). Potential contributors may contact the Editor-in-Chief of the AP Transactions, Dr Trevor Bird, by email (tap.editor@csiro.au) to determine the suitability of their contribution to the special issue. Some manuscripts already accepted for publication in the Transactions may be selected for the special issue. All invited and contributed papers must be submitted on line through the AP Transactions Manuscript Central web site (http://tap-ieee.manuscriptcentral.com), with a statement to the Editor that they are intended for this special issue, by the deadline of December 17, 2004.

Deadline for Submissions: December 17, 2004

Publication Date: August 2005





## **Attendees**



Dr. Makino, Japan Chapter



Prof. Eom, Korea Chapter



Prof. Zhang, **Nanjing Chapter** 



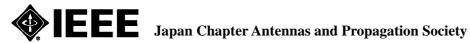
Ms. Uthansakul, Queensland Chapter



Singapore Chapter Ms. Ying,



Dr. Stone, AP-S AdCom







Prof. Nakano, AP-S Asian Representative



Prof. Ando, AP-S AdCom



**Prof. Ito,** Chair of the 1<sup>st</sup> Meeting



Prof. Li, Former Chair of Singapore Chapter



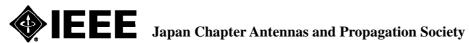
Prof. Uno, Vice Chair Japan Chapter



Prof. Takahashi, Treasurer Japan Chapter



Dr. Miyashita, Secretary **Japan Chapter** 





## We had good discussions and enjoyed luncheon.



