



Tainan Section

Annual Report 2013

Prepared by Mi-Ching Tsai

Mi-Ching Tsai
Chair, IEEE Tainan Section
Tainan, Taiwan
2014/02/27

PART A - SECTION SUMMARY

A.1 Executive Summary

A.1.2 2013 Section Executive Committee Member List

Chair: Prof. Ce-Kuen Shieh/ National Cheng Kung University

Email: shieh@ee.ncku.edu.tw

Vice Chair (Deputy): Prof. Chung-Hsien Wu/ National Cheng Kung University

Email: chwu@csie.ncku.edu.tw

Vice Chair (Technical Activities): Prof. Mi-Ching Tsai/ National Cheng Kung University

Email: mctsai@mail.ncku.edu.tw

Vice Chair (Conferences): Prof. Chua-Chin Wang/ National Sun Yat-sen University

Email: cwang@ee.nsysu.edu.tw

Vice Chair (Industry): Prof. Jeng-Shyang Pan/ National Kaohsiung University of Applied Sciences

Email: jspan@cc.kuas.edu.tw

Secretary: Prof. Vincent Shin-Mu Tseng/ National Cheng Kung University

Email: tsengsm@mail.ncku.edu.tw

Treasurer: Prof. Tsorng-Juu Liang/ National Cheng Kung University

Email: tjliang@mail.ncku.edu.tw

Membership Development: Prof. Tzung-Pei Hong/ National University of Kaohsiung

Email: tphong@nuk.edu.tw

Membership Development: Prof. Ren-Hung Hwang/ National Chung Cheng University

Email: rhhwang@cs.ccu.edu.tw

Membership Development: Prof. Chung-Ho Chen/ National Cheng Kung University

Email: chchen@mail.ncku.edu.tw

Professional Activities: Prof. Chung-Ming Huang/ National Cheng Kung University

Email: huangcm@locust.csie.ncku.edu.tw

Professional Activities: Prof. Kuo-Sheng Cheng/ National Cheng Kung University

Email: kscheng@mail.ncku.edu.tw

Student Activities: Prof. Szu-Lin Su/ National Cheng Kung University

Email: ssl@ee.ncku.edu.tw

Student Activities: Prof. Shen-Fu Hsiao/ National Sun Yat-Sen University

Email: sfhsiao@cse.nsysu.edu.tw

Educational Activities: Prof. Yueh-Min Huang/ National Cheng Kung University

Email: huang@mail.ncku.edu.tw

Educational Activities: Prof. Sheng-Tzong Cheng/ National Cheng Kung University

Email: stevecheng168@gmail.com

Newsletter Editor: Prof. Hui-Tang Lin/ National Cheng Kung University

Email: htlin@mail.ncku.edu.tw

Awards & Recognition Committee Co-Chair: Prof. Jar-Ferr Yang/ National Cheng Kung University

Email: jfyang@ee.ncku.edu.tw

Awards & Recognition Committee Co-Chair: Prof. Kuen-Jong Lee/ National Cheng Kung University

Email: kjlee@ee.ncku.edu.tw

Nominations & Appointments Chair: Prof. Pau-Choo Chung/ National Cheng Kung University

Email: pcchung@ee.ncku.edu.tw

A.1.2 2014 Section Executive Committee Member List

Chair: Mi-Ching Tsai / mctsai@mail.ncku.edu.tw

Department of Mechanical Engineering, National Cheng Kung University

Vice Chair (Deputy): Tsornng-Juu Liang / tjliang@mail.ncku.edu.tw

Department of Electrical Engineering, National Cheng Kung University

Vice Chair (Technical Activities): Chua-Chin Wang / ccwang@ee.nsysu.edu.tw

Department of Electrical Engineering, National SunYat-Sen University

Vice Chair (Conferences): Chung-Hsien Wu / chwu@mail.ncku.edu.tw

Department of Computer Science and Information Engineering, National Cheng Kung University

Vice Chair (Industry): Tzung-Pei Hong / tphong@nuk.edu.tw

Department of Computer Science and Information Engineering, National University of Kaohsiung

Secretary: Chris Gwo-Giun Lee / clee@mail.ncku.edu.tw

Department of Electrical Engineering, National Cheng Kung University

Treasurer: Le-Ren Chang-Chien / leren@eembox.ncku.edu.tw

Department of Electrical Engineering, National Cheng Kung University

Co-Treasurer: Kuo-Sheng Cheng / kscheng@mail.ncku.edu.tw

Department of BioMedical Engineering, National Cheng Kung University

Professional Activities: Chung-Ho Chen / chchen@mail.ncku.edu.tw

Department of Electrical Engineering, National Cheng Kung University

Professional Activities: Vincent Shin-Mu Tseng / tsengsm@mail.ncku.edu.tw

Department of Computer Science and Information Engineering, National Cheng Kung University

Membership Development: Shu-Mei Guo / guosm@mail.ncku.edu.tw

Department of Computer Science and Information Engineering, National Cheng Kung University

Membership Development: Ren-Hung Hwang / rhhwang@cs.ccu.edu.tw

Department of Computer Science, National Chung Cheng University

Membership Development: Wen-Shyang Hwang / wshwang@mail.ee.kuas.edu.tw

Department of Electrical Engineering, National Kaohsiung University of Applied Sciences

Student Activities: Chia-Ling Wei / clwei@ee.ncku.edu.tw

Department of Electrical Engineering, National Cheng Kung University

Educational Activities: Tsung-Yi Ho / tyho@csie.ncku.edu.tw

Department of Computer Science and Information Engineering, National Cheng Kung University

Educational Activities: Yueh-Min Huang / huang@mail.ncku.edu.tw

Department of Engineering Science, National Cheng Kung University

Industrial Activities (PR): Yu-Cheng Lin / yuclin@mail.ncku.edu.tw

Department of Engineering Science, National Cheng Kung University

Newsletter Editor: Lih-Yih Chiou / lihyih@mail.ncku.edu.tw

Department of Electrical Engineering, National Cheng Kung University

Awards & Recognition Committee Chair: Chan-Nan Lu / cnl@ee.nsysu.edu.tw

Department of Electrical Engineering, National SunYat-Sen University

Awards & Recognition Committee Chair: Ce-Kuen Shieh / shieh@ee.ncku.edu.tw
Department of Electrical Engineering, National Cheng Kung University

Nominations and Appointments Chair: Jar-Ferr Yang / jfyang@ee.ncku.edu.tw
Department of Electrical Engineering, National Cheng Kung University

Webmaster: Hui-Tang Lin / htlin@mail.ncku.edu.tw
Department of Electrical Engineering, National Cheng Kung University

A.1.3 Section Highlights

In the year of 2013, there were 2 administrative meetings, 1 professional activity, 2 technical activities, and 1 nontechnical activities being held during the year. In 2013, IEEE ICOT (International Conference on Orange Technologies) was held in Tainan. To make the activity go smoothly, Tainan Section actively participated in conference promotion and financial work. During the year, we have made efforts on modifying the regulations of "Award Applications" which is designed to recognize both young members and experienced professionals with outstanding performances. The award is divided into 6 different categories, and we are also initiating a new category with regards to industry in the future. This year, the "Best Service Award" and "Best Thesis Award" were discontinued. In 2013 annual meeting, all award recipients were awarded a certificate in front of section members. For student membership, we continued the reimbursement to new IEEE student members. Financial support was continued to be provided to students participating in IEEE conferences abroad. Two student members were qualified for the reimbursement in 2013.

A.1.4 Major Events

In January, Tainan Section organized an "Electrical Engineering and Information Technology Workshop" which invited Professors of Cheng Kung Univ., Xiamen Univ., and Zhejiang Univ. to share their research in two sessions. Topics included physics, electrical engineering, electronic engineering, biomedicine, and etc. Many professionals and undergraduate / graduate students also joined us. The workshop was not only educational but also innovative in addition to providing creative thoughts for attendees. Tainan Section continuously assists in the operation of all meetings and activities and organization of workshops held by chapters, which include promotions, financial report editing, and financial support to chapters if possible.

A.1.5 Major Chapter Activities

The CASS Tainan Chapter held the "UW EE Research and UW Life" on March 29. Prof. Tsorng-Juu Liang, the 2013 Treasurer and also the Chair of CASS Tainan Chapter, worked hard to apply for support from IEEE CASS Society (IEEE CASS Outreach Activity) resulting in a very successful activity. Prof. Vikram Jandhyala is not only very enthusiastic at his technical expertise but also revealed good sense of humor when he talking to students.

The SSCS Tainan Section Chapter held the "A Surgeon's Experience with Entrepreneurship" on February 2. Prof. Shuenn-Yuh Lee, the 2013 Chair of SSCS Tainan Chapter, worked hard to apply for support in making this activity very successful.

A.1.6 Awards

2013 was the fourth year for the execution of "Award Applications" policies consisting of 6 different categories in the Tainan Section. We received many applications from our members and many of them are very outstanding. It was really hard for committee members to review and choose the limited number of award recipients. Finally, the name lists of award recipients came out as follows:

- Best GOLD Member Award
 1. Prof. Hung-Wei Wu, "*in recognition of outstanding contributions in microwave circuits, optoelectronic films, and biosensors in his first 10-year career.*"
 2. Prof. Wei-Ta Chu, "*in recognition of outstanding contributions in multimedia indexing, management, presentation and social multimedia analyses in his first 10-year career.*"

- Best Ph.D. Thesis Award
 1. Prof. Hung-yi Lo, *“in recognition of excellent researches in multimedia and data mining in his Ph.D. studies”*
- Best Master Thesis Award
 1. Miss Yi-Hua Li, *“in recognition of excellent researches in proposing the modified capture power-safe measurement to solve IR-drop problems for in her MS studies”*
- Outstanding Technical Achievement Award
 1. Prof. Tzuu-Hseng Li, *“in recognition of excellent technical achievements and outstanding contributions in intelligent robots and intelligent controls.”*
- Best Service Award
 1. (No Award Given)
- IEEE Tainan Section Macronix Award
 1. Prof. Mark Po-Hung Lin, *“in recognition of excellent technical achievements and outstanding contributions in advances of design automation and promotion of IC industries.”*

A.2 Financial Report

Tainan Section supported all programs and activities at both the section and chapter levels in 2013. To encourage and promote student activities, Tainan Section provided budget for supporting student travel grants and membership. In 2013, the income was TWD 1,675,884 and the expense was TWD 1,417,139. Thus the final balance is TWD 2,734,532 as of December 31, 2012.

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

B.1.1 Total number of active members in the past 3 years:

Grade	2011	% Change	2012	% Change	2013
Fellow	16	-	16	-	16
Life	3	-	3	↑ 33.3%	4
Senior Member	86	↑ 1.2%	87	↑ 8.0%	94
Member	538	↑ 4.1%	560	↑ 5.7%	592
Associate Member	34	↑ 14.7%	39	↓ 23.0%	30
Graduate/Student	198	↑ 19.2%	236	↑ 0.8%	238
TOTAL	875	↑ 7.5%	941	↑ 3.5%	974

B.1.2 Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members

To increase the value of membership and recruit new members, the Tainan Section has provided several services. First, we have clearly defined the progress of joining IEEE for students and provided newly joined student members reimbursements for their membership dues. Second, the award applications constituted by the Tainan Section, were designed to encourage member participation and recognize members' hard work in IEEE-designated fields. In 2013, section officers discussed how to promote IEEE membership and section supports to our student members. Chapter chairs were very supportive on this matter. We also encourage our members to apply for becoming senior members, thus the numbers of senior member increased. In the end of 2013, we have 8.0% growth in senior member, 5.7% growth in member, 23.0% decrease in associate member, 0.8% growth in graduate/student, and

resultant 3.5% growth in total membership. Compared with last year, the growth rate is much inspiring and promising.

B.2 Chapter Activities

B.2.1 Total number of Chapters and Affinity Groups in the Section

Currently there are 15 Chapters, 2 Joint Chapters, and 2 Affinity Groups in the Tainan Section. The details of 2013 chapters and affinity groups are in the following:

1. Chapter Name: Antennas and Propagation Society Tainan Chapter
Chapter Chair: Prof. Jui-Han Lu
2. Chapter Name: Broadcast Technology Society Tainan Chapter
Chapter Chair: Prof. Chih-Peng Li
3. Chapter Name: Circuits and Systems Society Tainan Chapter
Chapter Chair: Prof. Tsorng-Juu Liang
4. Chapter Name: Communication Society Tainan Chapter
Chapter Chair: Prof. Chih-Peng Li
5. Chapter Name: Computational Intelligence Society Tainan Chapter
Chapter Chair: Prof. Vincent S. Tseng
6. Chapter Name: Computer Society Tainan Chapter
Chapter Chair: Prof. Tsung-Yi Ho
7. Chapter Name: Electron Devices Society Tainan Chapter
Chapter Chair: Prof. Wen-Kuan Yeh
8. Chapter Name: Engineering in Medicine and Biology Society Tainan Chapter
Chapter Chair: Prof. Kuo-Sheng Cheng
9. Chapter Name: Information Theory Society Tainan Chapter
Chapter Chair: Prof. Trieu-Kien Truong
10. Chapter Name: Magnetics Society Taipei & Tainan Joint Chapter
Chapter Chair: Prof. Mi-Ching Tsai
11. Chapter Name: Microwave Theory and Techniques Society Tainan Chapter
Chapter Chair: Prof. Hao-Hui Chen
12. Chapter Name: Nanotechnology Council Tainan Chapter
Chapter Chair: Prof. Yu-Cheng Lin
13. Chapter Name: Reliability Society Taipei & Tainan Joint Chapter
Chapter Chair: Prof. Shiuh-Pyng Shieh
14. Chapter Name: Signal Processing Society Tainan Chapter
Chapter Chair: Prof. Chuan-Yu Chang
15. Chapter Name: Solid State Circuits Society Tainan Chapter
Chapter Chair: Prof. Shuenn-Yuh Lee
16. Chapter Name: Systems, Man & Cybernetics Society Tainan Chapter
Chapter Chair: Prof. Jyh-Horng Chou
17. Chapter Name: Vehicular Technology Society Tainan Chapter
Chapter Chair: Prof. Yueh-Min Huang

18. Affinity Group Name: Women in Engineering (WIE)
Affinity Group Chair: Prof. Shu-Mei Guo
19. Affinity Group Name: Graduates of the Last Decade (GOLD)
Affinity Group Chair: Prof. Ing-Chao Lin

B.2.2 Chapter Activities

1. Antennas and Propagation Society Tainan Chapter - 23 meetings

- Date: Mar. 15, 2013
Title: The Development of Radio
Speaker Name: Prof. Ken-Huang Lin
Affiliation: National Sun Yat-Sen University, Kaohsiung City, Taiwan
Attendance: IEEE Members 3, Guests 40
- Date: Apr. 20, 2013
Title: Smartphone Antenna Evolution
Speaker Name: Dr. Yen-Liang Kuo
Affiliation: HTC
Attendance: IEEE Members 26, Guests 99
- Date: Apr. 20, 2013
Title: Mobile Communication Antenna Development for Post-Smartphone Era
Speaker Name: Dr. Chih-Hua Chang
Affiliation: Acer
Attendance: IEEE Members 26, Guests 99
- Date: Apr. 20, 2013
Title: 4G/Multiband Ground Antennas for Handheld Devices
Speaker Name: Prof. Kin-Lu Wong
Affiliation: National Sun Yat-sen University, Kaohsiung City, Taiwan
Attendance: IEEE Members 6, Guests 114
- Date: May 8, 2013
Title: Workshop on Electromagnetic Education and Application
Speaker Name: Prof. Kai-Long Hsiao
Affiliation: National University of Tainan, Tainan City, Taiwan
Attendance: IEEE Members 6, Guests 114
- Date: May 8, 2013
Title: Workshop on Electromagnetic Education and Application
Speaker Name: Dr. Zua-Ming Tsai
Affiliation: CCU
Attendance: IEEE Members 6, Guests 114
- Date: May 8, 2013
Title: Workshop on Electromagnetic Education and Application
Speaker Name: Prof. Heng-Tung Hsu
Affiliation: Yuan Ze University
Attendance: IEEE Members 6, Guests 114
- Date: May 8, 2013
Title: Workshop on Electromagnetic Education and Application
Speaker Name: Prof. Ruey-Bing Hwang
Affiliation: National Chiao Tung University
Attendance: IEEE Members 6, Guests 114
- Date: May 8, 2013
Title: Workshop on Electromagnetic Education and Application
Speaker Name: Dr. Wan-Ti Wang
Affiliation: National University of Tainan, Tainan City, Taiwan

- Attendance: IEEE Members 6, Guests 114

 - Date: May 10, 2013
 Title: The Off-campus teaching on Satellite station of Chunghwa Telecom Co., Ltd
 Speaker Name: Dr. Hsin-Lung Su
 Affiliation: NPICT
 Attendance: IEEE Members 1, Guests 63
 - Date: May 20, 2013
 Title: The trend and development of mobile communication system
 Speaker Name: Dr. Jane Lin
 Affiliation: National Kaohsiung Marine University, Kaohsiung City, Taiwan
 Attendance: IEEE Members 1, Guests 25
 - Date: May 25, 2013
 Title: Workshop on Antenna Application
 Speaker Name: Prof. Tzyh-Ghuang Ma
 Affiliation: NTUST
 Attendance: IEEE Members 16, Guests 62
 - Date: May 25, 2013
 Title: Workshop on Antenna Application
 Speaker Name: Prof. Shau-Gang Mao
 Affiliation: NTU
 Attendance: IEEE Members 16, Guests 62
 - Date: Sep. 03, 2013
 Title: Wireless Power Transfer via Wheels to Running Electric Vehicles
 Speaker Name: Dr. Takashi Ohira
 Affiliation: National Sun Yat-sen University, Kaohsiung City, Taiwan
 Attendance: IEEE Members 20, Guests 71
 - Date: Sep. 11, 2013
 Title: EM concepts and applications
 Speaker Name: Prof. Yuan-Chih Lin
 Affiliation: MIDRC
 Attendance: IEEE Members 1, Guests 40
 - Date: Sep. 14, 2013
 Title: EM concepts and applications
 Speaker Name: Dr. Yen-Liang Kuo
 Affiliation: HTC
 Attendance: IEEE Members 1, Guests 9
 - Date: Sep. 25, 2013
 Title: EM applications for device design: 1. traditional RLC
 Speaker Name: Dr. Yuan-Chih Lin
 Affiliation: MIDRC
 Attendance: IEEE Members 1, Guests 40
 - Date: Sep. 28, 2013
 Title: 2G/3G/4G antenna design and measurement
 Speaker Name: Dr. Yen-Liang Kuo
 Affiliation: HTC
 Attendance: IEEE Members 1, Guests 9
 - Date: Oct. 02, 2013
 Title: EM applications for device design: 2. Antenna Design
 Speaker Name: Dr. Yuan-Chih Lin
 Affiliation: MIDRC
 Attendance: IEEE Members 1, Guests 23
 - Date: Oct. 05, 2013
 Title: BT/Wifi GPS antenna design and Application

Speaker Name: Dr. Yen-Liang Kuo
Affiliation: HTC
Attendance: IEEE Members 1, Guests 8

- Date: Oct. 16, 2013
Title: EM applications for device design: 2. Antenna Design
Speaker Name: Dr. Yuan-Chih Lin
Affiliation: MIDRC
Attendance: IEEE Members 4, Guests 24
- Date: Oct. 19, 2013
Title: Antenna system integration analysis and design
Speaker Name: Dr. Yen-Liang Kuo
Affiliation: HTC
Attendance: IEEE Members 1, Guests 7
- Date: Nov. 22, 2013
Title: Recent trend and development for mobile communication antennas
Speaker Name: Dr. Chih-Hua Chang
Affiliation: Acer
Attendance: IEEE Members 3, Guests 20

2. Broadcast Technology Society Tainan Chapter – 9 meetings

- Date: Feb. 22, 2013
Title: How and Why Did I create the ADSL Research Initiative in 1987? and What lessons I have learned during the Process?
Speaker Name: Dr. T. Russell Hsing
- Date: Apr. 30, 2013
Title: From Small Cells to Smart Cells
Speaker Name: Prof. Li-chun, Wang
- Date: May 3, 2013
Title: Radio Resource Management Issues in Future Wireless Systems
Speaker Name: Prof. Chung-Ju, Chang
- Date: Sep. 16, 2013
Title: ICT-Based Emerging Services
Speaker Name: Dr. T. Russell Hsing
- Date: Oct. 15, 2013
Title: Cognitive Wireless Networks: Enabling 5G Mobile Communications
Speaker Name: Dr. Ying-Chang Liang
- Date: Dec. 11, 2013
Title: Massive MIMO and its Applications
Speaker Name: Prof. Chau Yuen
- Date: Dec. 12, 2013
Title: Rethinking Small Cell Networks for 5G
Speaker Name: Prof. Tony Q.S. Quek
- Date: Dec. 18, 2013
Title: Security of Big Data
Speaker Name: Prof. Zygmunt Haas
- Date: Dec. 20, 2013
Title: Cashed-Induced Opportunistic Cooperative MIMO: A new Paradigm for Content Access Wireless Networks
Speaker Name: Prof. Vincent Lau

3. Circuits and Systems Society Tainan Chapter – 4 meetings

- Date: Mar. 29 , 2013
Title: UW EE Research and UW Life
Speaker Name: Dr. Vikram Jandhyala
Affiliation: U. of Washington, USA
Attendance: IEEE Members 12, Guests 80
 - Date: Aug. 22, 2013
Title: Machine Learning Models for Feature Selection and Classification of Traffic Anomalies
Speaker Name: Prof. Ljiljana Trajkvić
Affiliation: Simon Fraser University, Vancouver, British Columbia,Canada
Attendance: IEEE Members 10, Guests 50
 - Date: Oct 25, 2013
Title: The Road to Integrated Power Conversion via the Switched Capacitor Approach
Speaker Name: Prof. Seth Sanders
Affiliation: University of California, Berkeley, USA
Attendance: IEEE Members 15, Guests 50
 - Date: Dec.17-18, 2013
Title: 1. Design of High-Performance Low-Dropout Regulator ICs.
2. Designing Tiny DC-Sourced Single-Inductor Charger–Supply ICs
Speaker Name: Prof. Gabriel Rincon Mora
Affiliation: Georgia Tech , USA
Attendance: IEEE Members 10, Guests 48
4. Communication Society Tainan Chapter – 3 meetings
- Date: Apr. 26, 2013
Title: Implantable Wireless Medical Devices and Systems
Speaker Name: Prof. J. C. Chiao
Affiliation: University of Texas
Attendance: IEEE Members 10, Guests 120
 - Date: Nov. 1, 2013
Title: Interference Management for Small Cells and Heterogeneous Networks
Speaker Name: Prof. Li-Chun Wang
Affiliation: National Chiao Tung University
Attendance: IEEE Members 5, Guests 120
 - Date: Dec. 5, 2013
Title: Fuzzy Multi-Attribute Decision Making Algorithm for Vehicle Routing in Personalized Intelligent Vehicle Assistance Environment
Speaker Name: Prof. C. L. Philip Chen
Affiliation: University of Macau
Attendance: IEEE Members 6, Guests 110
5. Computational Intelligence Society Tainan Chapter – 5 meetings
- Date: Jan. 5, 2013
Title: Big Data, Emergent Web Intelligence, and Self-Organized Computing
Speaker Name: Dr. Jiming Liu
Affiliation: Hong Kong Baptist University
Attendance: IEEE Members 10, Guests 60
 - Date: Apr. 9, 2013
Title: Detecting and Correcting Spurious Transcriptome Inference due to RNAseq Reads Misalignment
Speaker Name: Dr. Wei Wang
Affiliation: University of California at Los Angeles
Attendance: IEEE Members 10, Guests 60
 - Date: Jun. 25, 2013

Title: Multiobjective Evolutionary Computation, Decomposition and Regularity
Speaker Name: Dr. Qingfu Zhang
Affiliation : University of Essex, UK
Attendance: IEEE Members 10, Guests 40

- Date: Jun. 27, 2013
Title: Hybrid Evolutionary Algorithms
Speaker Name: Dr. Qingfu Zhang
Affiliation: University of Essex, UK
Attendance: IEEE Members 15, Guests 50
- Date: Sep. 30, 2013
Title: Self-Learning Control of Nonlinear Systems Based on Iterative Adaptive Dynamic Programming Approach
Speaker Name: Dr. Derong Liu
Affiliation: University of Illinois at Chicago
Attendance: IEEE Members 10, Guests 80

6. Computer Society Tainan Chapter – 5 meetings

- Date: Nov. 25.2013
Title: Through-Silicon-Via Inductor based DC-DC Converters: The Marriage of the Princess and the Dragon
Speaker Name: Dr. Yiyu Shi
Affiliation: Missouri University of Science and Technology
Attendance: IEEE Members 20, Guests 20
- Date: Nov. 28.2013
Title: Von Neumann and Neuromorphic Systems atop Emerging Devices, Next-generation Nonvolatile Memory Technologies
Speaker Name: Dr. Yiran Chen and Hai Li
Affiliation: University of Pittsburgh
Attendance: IEEE Members 30, Guests 50
- Date: Dec. 3,2013
Title: Dynamic Adaptation for Resilient Integrated Circuits and Systems
Speaker Name: Dr. Krishnendu Chakrabarty
Affiliation: Chief Technology Officer, AndroLead Technology Co., Ltd.
Attendance: IEEE Members 10, Guests 30
- Date: Dec. 11,2013
Title: Dynamic Adaptation for Resilient Integrated Circuits and Systems
Speaker Name: Dr. Krishnendu Chakrabarty
Affiliation: Duke University
Attendance: IEEE Members 20, Guests 20
- Date: Dec. 13,2013
Title: Dynamic Adaptation for Resilient Integrated Circuits and Systems
Speaker Name: Dr. Krishnendu Chakrabarty
Affiliation: Duke University
Attendance: IEEE Members 20, Guests 30

7. Electron Devices Society Tainan Chapter – 1 meetings

- Date: Jun. 20, 2013
Title: RF Circuit Reliability and Variability
Speaker Name: Dr. Jiann-shiun Yuan
Affiliation: University of Center Florida
Attendance: IEEE Members 15, Guests 14

8. Engineering in Medicine and Biology Society Tainan Chapter– 3 meetings

- Date: Dec. 13, 2013

Title: UHC 2013

- Date: Nov. 7, 2013
Title: SPECT Quantification of Abnormalities of Myocardial Perfusion and Left Ventricular Function
Speaker Name: Prof. Yi-Hwa Liu
Affiliation: National Yale School of Medicine Heart and Vascular Center, Yale New Haven Hospital, New Haven, CT, USA.
- Date: Dec. 13, 2013
Title: Ubiquitous Orange Technology: Innovation and Applications
Speaker Name: Prof. Kuo-Sheng Cheng
Affiliation: National Cheng Kung University

9. Information Theory Society Tainan Chapter – 2 meetings

- Date: Nov. 28, 2013
Title: Renew IEEE Membership
Speaker Name: Dr. Trieu-Kien Truong
Affiliation: I-Shou University
- Date: Nov. 27, 2013
Title: Introduction to IEEE and IT Society
Speaker Name: Dr. Trieu-Kien Truong
Affiliation: I-Shou University

10. Magnetic Society Tainan Chapter – 6 meetings

- Date: Apr. 22-26, 2013
Title: 2013 Distinguished Lecture: Magneto-Optic Analysis of Magnetic Microstructures
Speaker Name: Prof. Rudolf Schaefer
Affiliation: Leibniz Institute for Solid State and Materials Research (IFW), Dresden, Germany
Attendance: IEEE Members 20, Guests 35
- Date: May 27, 2013
Title: Couple Inductors in Multi-level Inverter Drives
Speaker Name: Prof. John Salmon
Affiliation: Department of Electrical and Computer Engineering
Attendance: IEEE Members 7, Guests 34
- Date: May 29, 2013
Title: Advanced Motion Control Technologies and Future Trends of Electric Vehicles
Speaker Name: Prof. Hiroshi Fujimoto
Affiliation: The University of Tokyo
Attendance: IEEE Members 6, Guests 29
- Date: Jul. 21, 2013
Title: 2013 Distinguished Lecture: Advanced spintronic materials for generation and control of spin current
Speaker Name: Prof. Koki Takanashi
Affiliation: Institute for Materials Research (IMR), Tohoku University
Attendance: IEEE Members 25, Guests 20
- Date: Sep. 16-18, 2013
Title: 2013 Distinguished Lecture: Artificial Ferromagnetic Nanostructures: An Experimental Platform for Magnonics
Speaker Name: Prof. Adekunle Adeyeye
Affiliation: Department of Electrical & Computer Engineering, National University of Singapore
Attendance: IEEE Members 25, Guests 45
- Date: Oct. 1, 2013
Title: Technology Development of IE4 Motor
Speaker Name: Dr. David Dorrell

Affiliation: University of Technology Sydney
Attendance: IEEE Members 6, Guests 15

11. IEEE Microwave Theory and Techniques Society Tainan Chapter – 2 meetings

- Date: Apr. 26, 2013
Title: Implantable Wireless Medical Devices and Systems
Speaker Name: Prof. Jung-Chih Chiao
Affiliation: Department of Electrical Engineering, University of Texas - Arlington
Attendance: IEEE Members 8, Guests 74
- Date: Sep. 03, 2013
Title: Wireless Power Transfer via Wheels to Running Electric Vehicles
Speaker Name: Takashi Ohira
Affiliation: Toyohashi University of Technology, Japan
Attendance: IEEE Members 17, Guests 71

12. Nanotechnology Council Tainan Chapter – 2 meetings

- Date: May 2, 2013
Title: Molecular Simulations on Nanostructures and Nanomaterials
Speaker Name: Prof. Chang I-Ling
Affiliation: NCKU
Attendance: IEEE Members 10, Guests 90
- Date: Oct. 24, 2013
Title: A Non-Destructive Micro-Indentation Test Methodology for TBC Spallation Detection
Speaker Name: Prof. Kang
Affiliation: West Virginia University
Attendance: IEEE Members 7, Guests 90

13. IEEE Signal Processing Society Tainan Chapter – 2 meetings

- Date: Oct. 31, 2013
Title: Advances in Signal Processing for Networked Applications
Speaker Name: Dr. John Apostolopoulos
Affiliation: VP, Cisco
- Date: Dec. 10, 2013
Title: Information Retrieval with Machine Learning
Speaker Name: Prof. Lipo Wang
Affiliation: Nanyang University of Technology, Singapore

14. IEEE Solid-State Circuits Society Tainan Chapter – 9 meetings

- Date: Feb. 2, 2013
Title: A Surgeon's Experience with Entrepreneurship
Speaker Name: Prof. John Rodenbeck Adler
Affiliation: Stanford University, USA
Attendance: IEEE Members 63, Guests 170
- Date: Feb. 2, 2013
Title: Development and application of a chair cycle for the patient with walking disability
Speaker Name: Prof. Yasunobu Handa
Affiliation: Tohoku University, Japan
Attendance: IEEE Members 63, Guests 170
- Date: Feb. 2, 2013
Title: Micro-Radar Sensors for Non-contact Pervasive Monitoring of Respiration and Heartbeats
Speaker Name: Prof. Jenshan Lin
Affiliation: University of Florida, USA
Attendance: IEEE Members 63, Guests 170

- Date: Feb. 2, 2013
Title: Joint Development of Perception and Active Eye Movements
Speaker Name: Prof. Bert Shi
Affiliation: Hong Kong University of Science and Technology, China
Attendance: IEEE Members 63, Guests 170
- Date: Feb. 2, 2013
Title: Integrated circuits and systems interacting with biology: exploring mechanisms and therapeutic closed loop paradigms
Speaker Name: Prof. Noëlle Lewis
Affiliation: Bordeaux University, France
Attendance: IEEE Members 63, Guests 170
- Date: Feb. 2, 2013
Title: Emulating the retina : efficient hardware architecture for robotic vision and neural simulation
Speaker Name: Prof. Hirotsugu Okuno
Affiliation: Osaka University, Japan
Attendance: IEEE Members 63, Guests 170
- Date: Feb. 2, 2013
Title: Printed Electronics
Speaker Name: Prof. Joseph Chang
Affiliation: Nanyang Technological University, Singapore
Attendance: IEEE Members 63, Guests 170
- Date: Oct. 14, 2013
Title: Molecular Imaging with Integrated Ultrasound/Photoacoustics
Speaker Name: Prof. Matthew O'Donnell
Affiliation: University of Washington, USA
Attendance: 60
- Date: Oct. 14, 2013
Title: Stream Programming for Embedded Applications on Parallel Platforms
Speaker Name: Jorn W. Janneck
Affiliation: Jund University, Sweden
Attendance: 60

15. SMC Society Tainan Chapter – 1 meetings

- Date: Oct. 1, 2013
Title: Symposium of Cross-Strait on Robotics
Affiliation: National Sun Yat-sen University

16. Vehicular Technology Society Tainan Chapter – 2 meeting

- Date: Aug. 24, 2013
Title: Are WSN Assisted Home Safer for the Elderly? An Embedded Computing Approach
Speaker Name: Dr. Subhas Chandra Mukhopadhyay
Affiliation: Massey University, Palmerston North, New Zealand
Attendance: IEEE Members 16, Guests 40
- Date: Aug. 23 - 25, 2013
Title: The 8th International Conference on Embedded and Multimedia Computing (EMC 2013)
Affiliation: Taipei, Taiwan,

17. Tainan Section Affinity Group, WIE – 2 meetings

- Date: Apr. 8, 2013
Title: Ultrasound and Computational Chemistry Development
Speaker Name: Prof. Nelson G. Chen
Affiliation: Research Scientist at Sci-Tec, Inc.
Attendance: IEEE Members 5, Guests 98

- Date: Nov. 1, 2013
Title: When East meet West – Opus One: how ICT and Big Data help reconcile Traditional Chinese Medicine with Science?
Speaker Name: Dr. Lai, Feipei
Affiliation: Chair at Graduate Institute of Biomedical Electronics and Bioinformatics, National Taiwan University
Attendance: IEEE Members 5, Guests 90

18. Tainan Section Affinity Group, GOLD– 3 meetings

- Date: Mar. 22, 2013
Title: Microkernel based Operating System Design for Embedded Systems
Speaker Name: Prof. Jim Huang
Affiliation: MEDiatek, App Univerz
Attendance: IEEE Members 10, Guests 20
- Date: Oct. 4, 2013
Title: The essential knowledge and experience sharing of patent litigation: The academic point of view
Speaker Name: Prof. Po-Chuan Lin
Affiliation: Tung Fang Design Institute
Attendance: IEEE Members 5, Guests 25
- Date: Oct. 4, 2013
Title: Discussion of 2014 Plans
Speaker Name: Prof. Ing-Chao Lin
Affiliation: Department of Computer Science and Information, NCKU
Attendance: IEEE Members 5

B.3 Professional and Continuing Education Activities

The Tainan Section held educational activities as follows:

- Date: Jan. 10-11, 2013
Title: Electrical Engineering and Information Technology Workshop
Speaker Name: Prof. Jar-Ferr Yang
Attendance: IEEE Members 23, Guests 42
- Date: Jul. 10, 2013
Title: High school students programming contest
Speaker Name: Prof. Kao-Shing Hwang
Attendance: IEEE Members 15, Guests 86
- Date: Dec. 27, 2013
Title: Meet Prof. Wood-Hi Cheng at NSYSU
Speaker Name: Prof. Wood-Hi Cheng
Attendance: IEEE Members 65, Guests 7

B.4 Students Activities

B.4.1 Total number of Student branches in the Section

Currently, there are two student branches, NCKU and NSYSU branches, in the Tainan Section. The first one (NCKU student branch) was established in 2005 and the other one (NSYSU student branch) was established in 2006. These two student branches were both active and held technical meetings and invited talks in 2013 for their branch members.

B.4.2 Section level student activities (student congress, paper and other contests, awards etc)

The Tainan Section has designed 2 awards related to theses by graduate students as follows:

- Best Ph.D. Thesis Award
- Best Master Thesis Award

Both of the above awards were created to recognize outstanding performances of student members in the Tainan Section. And all the 2013 award recipients were awarded at annual member meeting in December.

B.4.3 Summary of Student branch activities student branch wise with attachment table / information

1. National Cheng Kung University(NCKU) Student Branch

- Date: Mar. 29 , 2013
Title: UW EE Research and UW Life
Speaker Name: Dr. Vikram Jandhyala
Affiliation: U. of Washington, USA
Attendance: IEEE Members 12, Guests 80
- Date: Aug. 22, 2013
Title: Machine Learning Models for Feature Selection and Classification of Traffic Anomalies
Speaker Name: Prof. Ljiljana Trajkvić
Affiliation: Simon Fraser University, Vancouver, British Columbia, Canada
Attendance: IEEE Members 10, Guests 50
- Date: Oct 25, 2013
Title: The Road to Integrated Power Conversion via the Switched Capacitor Approach
Speaker Name: Prof. Seth Sanders
Affiliation: University of California, Berkeley, USA
Attendance: IEEE Members 15, Guests 50
- Date: Dec.17-18, 2013
Title: 1. Design of High-Performance Low-Dropout Regulator ICs.
Designing Tiny DC-Sourced Single-Inductor Charger–Supply ICs
Speaker Name: Prof. Gabriel Rincon Mora
Affiliation: Georgia Tech , USA
Attendance: IEEE Members 10, Guests 48

2. National Sun Yat-Sen University(NSYSU) Student Branch

- Date: Oct. 29 – Nov. 1, 2013
Location: 85 Sky Tower Hotel, Kaohsiung, Taiwan
Title: Support APSIPA ASC 2013 (APSIPA Annual Summit and Conference)

B.5 Awards & Recognition Activities

Our APS Tainan Chapter received “2011 Best Chapter Award” from IEEE Antennas and Propagation Society. Because of hard work by chapter officers: Prof. Hua-Ming Chen, Prof. Wen-Shan Chen and Prof. Shun-Yun Lin, this award went to the APS Tainan Chapter finally. Their dedications to chapter activities were very impressive and worthy to share with other chapters. All three professors were awarded for their “*long-term and distinguished contributions to IEEE Antennas and Propagation Society Tainan Chapter activities*” separately in front of section members at annual member meeting. Congratulations to them.

B.6 Communication Activities

Messages or announcements from the section usually send to section members for their reference via e-mail. Our members and chapter officers also communicate with us on the phone whenever they need if emergency or necessary during office hours. For those not emergency, members often write emails to us for inquiry and will be replied soon. To promote the communication of different society chapters, we’ve designed webpages for each society chapter already formed in the Tainan Section. The interface

provides each society chapter more opportunities to communicate with members. The section webpage are updated monthly if there is new information and useful news to members as well at <http://ewh.ieee.org/r10/tainan/>.

B.7 Community Activities

To promote the linking of IEEE organization, technical people, and local residents, Tainan Section held a “Workshop for Intelligent Life Technology” in April, 2011. The workshop contains not only several lectures about intelligent life technologies, but plan a small exhibition in a display room to make people have interaction with the designs. The workshop invited the Mayor of Tainan city and his office staff to join our program, which can indeed increase the visibility and reputation of IEEE in Tainan city.

PART C - GOALS AND PLANS

C.1 Continuation of Project/Activity in Progress and Their Implementation Plans

- The Tainan Section will help technical parts of 2013 IEEE International Conference on Orange Technologies (ICOT 2013), March 12~16, 2013, in Tainan, Taiwan. We will assist in the preparation for ICOT 2013 and also will promote this exciting event during 2013. So as 2014 Tainan Section will be very active and held many IEEE activities such as ICICDT 2011, CASS Region10 Summer School last year.

C.2 Goals and Future Plans

- To assist IEEE members to form new society chapters in the Tainan Section.
- To provide assistance to members of the Tainan Section in their IEEE career.
- To encourage and assist members joining in IEEE activities and award applications.
- To provide support to Student Branches.
- Dissemination of knowledge in the broader fields of electrical and Electronics Engineering through holding of technical talk, seminar, conference, symposium, workshop, tutorial, etc.
- To have more connections and cooperation with industry.