

# 2008 IEEE Shikoku Section Activity Report

## PART A - SECTION SUMMARY

### A.1 Executive Summary

- CAS Shikoku Chapter received the R10 Chapter of the Year Award
- Held 16 technical meetings and 6 educational meetings
- English presentation competition at the technical meeting.
- Held "Meet the CAS President!" meeting.
- Launched a Student Branch at Tokushima University.

### A.2 Financial Report

Income	1,942,917 Yen
Expense	621,925 Yen
Balance	1,302,992 Yen

### A.3 List of Section Officer and Executive Committee Members

Chair: Shigeaki Ogose (Kagawa University)  
ogose@ieee.org

Vice chair: Katsushi Iwashita (Kochi University of Technology)  
iwashita.katsushi@kochi-tech.ac.jp

Secretary: Hiroyuki Tarumi (Kagawa University)  
tarumi@eng.kagawa-u.ac.jp

Treasurer: Hideyuki Sawada (Kagawa University)  
sawada@eng.kagawa-u.ac.jp

Membership Development Chair: Yoshifumi Nishio (University of Tokushima)  
nishio@ee.tokushima-u.ac.jp

Student Activities Chair: Tetsushi Ueta (University of Tokushima)  
tetsushi@is.tokushima-u.ac.jp

Nominations Activities Chair: Hiroshi Kai (Ehime University)  
kai@cs.ehime-u.ac.jp

Professional Activities Chair: Kazuo Ono (Ehime University)  
onokazuo@dpc.ehime-u.ac.jp

Past Chair: Yoneo Yano (University of Tokushima)  
yano@is.tokushima-u.ac.jp

## PART B - ORGANIZATIONAL ACTIVITIES

### B.1 Membership Development Programs

Number of Members: 298 (Jan. 13, 2009) [+28 from Dec. 2006]

### B.2 Professional and Continuing Education Activities

[Technical Meetings]

(1) Jan. 28, 2008

Attendance:

IEEE Members: 21, Guests: 47

Title: Recent Trends in Elevator Group Control Systems

Speaker: Sandor Markon

Title: A Control Algorithm for Multi-Car Elevators by Considering Moving Range and Direction of Cars

Speaker: Yuki Kuroda

(2) Jan. 29, 2008

Attendance:

IEEE Members 19, Guests: 28

Title: On Scheduling of Sugarcane Farming in Multiple Farms

Speaker: Hirofumi Matsuda

Title: A Method of Generating Graphs of Character Structures for Japanese Historical Documents

Speaker: Masaki Hayashi

(3) Apr. 4, 2008

Attendance:

IEEE Members 8, Guests: 9

Title: Statistical learning techniques for bio-medical applications

Speaker: Maciej Ogorzalek

(4) Jul. 31, 2008

Attendance:

IEEE Members 18, Guests 17

Title: Nonlinear Spring Model of Self-Organizing Map Arranged in Rectangular Grid

Speaker: Haruna Matsushita

Title: Blurred Structure of Basin Boundary and Numeric Operation Error in a Singular Response

Speaker: Yusuke Nishiuchi

(5) Aug. 1, 2008

Attendance:

IEEE Members 18, Guests: 14

Title: Complex Phase Pattern in Chaotic Circuits with Time-Varying Resistors

Speaker: Yoko Uwate

Title: Numerical Bifurcation Analysis of System with Affine Switching Conditions

Speaker: Quentin Brandon

(6) Aug. 4, 2008

Attendance:

IEEE Members 35, Guests: 15

Title: A CNN Learning Algorithm

Speaker: Chi K. Tse

Title: Envelope Analysis to Communication Circuits

Speaker: Akio Ushida

(7) Aug. 5, 2008

Attendance:

IEEE Members 30, Guests: 15

Title: Applications of Complex Networks

Speaker: Mamoru Tanaka

Title: Performance Modeling and Cross-Layer Design for Wireless Sensor Networks

Speaker: Chen He

(8) Aug. 6, 2008

Attendance:

IEEE Members 20, Guests 15

Title: Nonlinearity in Power Electronics

Speaker: Chi K. Tse

Title: Image Processing by Cellular Neural Networks

Speaker: Hisashi Aomori

(9) Aug. 20, 2008

Attendance:

IEEE Members 20, Guests: 10

Title: Oscillation Phenomena Observed from Cellular Neural Networks

Speaker: Koji Urabe

(10) Sep. 27, 2008

Attendance:

IEEE Members 33, Guests: 0

Title: Studying Abroad

Speaker: Quentin Brandon

Title: Encouragement of Studying Abroad

Speaker: Shuich Aono

(11) Oct. 24, 2008

Attendance:

IEEE Members 5, Guests: 46

Title: Autonomous control and environment recognition for mobile robots

Speaker: Shinichi Yuta

Title: Development of Arm Robot Synchronized with Human Action

Speaker: Taishi Ohmi

(12) Nov. 8, 2008

Attendance:

IEEE Members 10, Guests: 110

Title: Shikoku Mobile and Autonomous Robot Tournament 2008

(13) Nov. 19, 2008

Attendance:

IEEE Members 5, Guests: 63

Title: Digitalization of Amateur Radio

Speaker: Noriyoshi Sakurai

(14) Dec. 4, 2008

Attendance:

IEEE Members 25, Guests: 10

Title: On a Multi-Hysteresis Systems

Speaker: Kenya Jinno

Title: Deterministic and Analog Signal Processing Using Quantum Circuits

Speaker: Hisato Fujisaka

(15) Dec. 5, 2008

Attendance:

IEEE Members 25, Guests: 28

Title: Data Mining CNN to Circuit Modeling Based on Covariance Structural Analysis

Speaker: Mamoru Tanaka

Title: Discrete-Time Control Approach for Stabilizing Unknown Steady State of Chaotic Spiking Oscillator

Speaker: Tadashi Tsubone

(16) Dec. 6, 2008

Attendance:

IEEE Members 37, Guests: 28

Title: Rotation map with a window and its encoding function

Speaker: Toshimichi Saito

Title: A Bifurcation Problem for an Impact Oscillator

Speaker: Takuji Kousaka

[Lecture for Students]

(1) Mar. 29, 2008

Attendance:

IEEE Members: 18, Guests: 0

Title: "Meet the CAS President!"

Speaker: Maciej Ogorzalek

(2) Aug. 27, 2008

Attendance:

IEEE Members: 12, Guests: 0

Title: "English Brash-Up Seminar at Kagawa University part 1"

Speaker: Gancho Vachkov

(3) Sep. 16, 2008

Attendance:

IEEE Members: 20, Guests: 0

Title: "English Brash-Up Seminar at the University of Tokushima"

Speaker: Stephen Karungaru

(4) Sep. 19, 2008

Attendance:

IEEE Members 2, Guest: 1

Title: "English Brash-Up Seminar at Kochi University of Technology"

Speaker: Masahiro Nagasaki

(5) Sep. 24, 2008

Attendance:

IEEE Members: 2, Guests: 13  
Title: "English Brash-Up Seminar at Ehime University"  
Speaker: Keiichi Endo

(6) Sep. 26, 2008

Attendance:

IEEE Members: 10, Guest: 1  
Title: "English Brash-Up Seminar at Kagawa University part 2"  
Speaker: Gancho Vachkov

### B.3 Students Activities

- Recruitment of student members

Shikoku Section recommended the students who presented their papers at Shikoku-section Joint Convention of the Institutes of Electrical and related Engineers to be student members.

- Student paper contest

Five students who did excellent presentation in English at Shikoku-section Joint Convention of the Institutes of Electrical and related Engineers 2008 were given IEEE Presentation Award (Shikoku Section). They were elected out of 66 students.

- Mitsuki Kitani (Kagawa University)
- Shingo Tomonaga (Oita University)
- Shuichi Aono (Tokushima University)
- Hiroyuki Asahara (Oita University)
- Samia Rahman (Tokushima University)

Further information is available at

[http://ieeshikoku.eng.kagawa-u.ac.jp/IEEE-Presen/student\\_award2008.html](http://ieeshikoku.eng.kagawa-u.ac.jp/IEEE-Presen/student_award2008.html)

### B.4 E-mail and Newsletter Activities, Home Page

Section Web site:

English: <http://ewh.ieee.org/r10/shikoku/>

Japanese: <http://ieeshikoku.eng.kagawa-u.ac.jp/>

IEEE CAS Society, Shikoku Chapter:

<http://tameone.ee.tokushima-u.ac.jp/~scas/>

IEEE EMBS Society, West Japan Chapter:

<http://www.ieee-jp.org/section/fukuoka/embwj/>

Kagawa University Student Branch Web site:

[http://www.eng.kagawa-u.ac.jp/~ieee\\_kgw/](http://www.eng.kagawa-u.ac.jp/~ieee_kgw/)

Tokushima University Student Branch Web site:

<http://ieee-sb.is.tokushima-u.ac.jp/>

### B.5 Chapter Activities

- Summary of Chapter Activities

[Administrative Meetings]

(1) Feb. 29, 2008

Shikoku Section Executive Committee Meeting

Attendance: 9

(2) Mar. 11, 2008

Shikoku Section Executive Committee Meeting

Attendance: 9

(3) May 16, 2008

Shikoku Section Executive Committee Meeting

Attendance: 6

(4) Jun. 23, 2008

Shikoku Section Executive Committee Meeting

Attendance: 9

(5) Sep. 27, 2008

Shikoku Section Executive Committee Meeting

Attendance: 7

(6) Sep. 27, 2008

Shikoku Section Annual Meeting

Attendance: 14

(7) Dec. 9, 2008

Shikoku Section Executive Committee Meeting

Attendance: 9

## PART C - GOALS AND PLANS

### C.1 Goals

Our goal is making the dissemination of IEEE Shikoku section using Internet.

## **C.2 Implementation Plans**

- (1) Committee Meeting
  - Annual meeting in September.
  - Meetings by email
- (2) General Meeting
  - take place with the annual committee meeting.
- (3) Technical Conference/Meeting
  - a) Technical Conference
    - 2009 Shikoku-section Joint Convention of the Institutes of Electrical and related Engineers in September 26, 2009 at Ehime University (Hold English Sessions).
  - b) Technical Meeting
    - about 6 meetings in cooperation with national societies

### **1-2 Standing Committees Activities**

- (1) Membership Development
  - Promote IEEE activities at the technical meetings or conference.
  - Encouragement of upgrade to senior members
  - Application to R10 Membership Development Grants
- (2) Student Activities
  - English discussion meetings
  - Participation in IEEE Student Branch Leadership Training Workshop
  - Encouragement of English presentation
  - Promotion of IEEE student membership
- (3) Nominations
  - Support to upgrade fellow or senior Member
  - Provide information for the nominations at the web page.
- (4) Professional Activities
  - Hold professional activities, especially on PIC processor.

## **PART D - OTHERS**

### **D.1 Relationship with National Societies**

- Co-sponsorship for Technical meeting  
Technical Meeting (1), (2), (4), (5), and (11): Co-sponsored with IEICE