IEEE Thailand Section Report 2017

PART A - SECTION SUMMARY

A.1 Executive Summary

- Section Executive Committee Member List
  Chair: Jitkasem Ngamnil
  Vice Chair: Viboon Rerksirathai
  Treasurer: Amorn Jiraseree-amornkun
  Secretary: Panavy Pookaiyaudom

- Section Highlights
  - The signing ceremony of the Memorandum of Understanding (MOU) between the IEEE Thailand Section and the Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI) Association.
  - Transformation of professional training course material into books.
- Major Events (International, National)
  - March 4-5, 2017, Dr. Jitkasem Ngamnil (Chariman) attended the Annual R10 Meeting 2017 (SC2017), held on in Chiba, Japan.
  - August 11-13, 2017, Dr. Amorn Jiraseree-amornkun (Treasurer) attended the IEEE Sections Congress 2017 (SC2017), held on in Sydney, Australia.

- Major Chapter Activities
  - Technical seminars
  - Conferences
  - Workshops
- Major Student and Affinity Group Activities
  - Seminars
  - Conferences
  - Design Challenges
- Awards
  - IEEE HKN Mu Theta Chapter won IEEE-HKN Outstanding Chapter Award

A.2 Financial Report – (Please follow the format given below)

- Summary (as per submitted L50)

Income Statement

FINANCIAL ROW	AMOUNT
Ordinary Income/Expense	
Income	
3.10 - Rebate from IEEE HQ	$6,482.90
3.34 - IEEE HQ & Societies	$14,490.00
3.70 - Other Receipts	$128.71
Total - Income	**$21,101.61**
Gross Profit	**$21,101.61**
Expense	
4.10 - Meetings & Social Events Expense	$7,579.27
5.56 - IEEE HQ & Society Expenses	$13,800.00
6.20 - Other Expenses	$12.87
Total - Expense	**$21,392.14**
Net Ordinary Income	**($290.53)**
Net Income	**($290.53)**

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.

Year	F	LS	SM	LM	M	AF	A	GS	S	TOTAL
2017	1	5	49	15	486	15	16	119	92	783
2016	1	6	51	16	483	8	36	76	102	779
2015	1	4	46	16	451	5	21	90	127	761

- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members
  - Arrange technical seminars and meetings
  - Provide subsidy for Student Membership to selected students
  - Encourage university to found student branch chapters

B.2 Chapter Activities

- Total number of Chapters in the Section
  - 16 Chapters:
    1. Signal Processing (SP01)
    2. Broadcast Technology (BT02)
    3. Joint Antennas&Propagation/ Electron Devices /Microwave Theory & Techniques (AP03/ED15/MTT17)
    4. Circuits & Systems (CAS04)
    5. Computational Intelligence (CIS11)
    6. Joint Industrial Electronics/ Industry Applications/ Power Electronics (IE13/IA34/PEL35)
    7. Technology and Engineering Management (TM14)
    8. Computer (C16)
    9. Engineering in Medicine & Biology (EMB18)
    10. Communications (COM19)
    11. Control Systems (CS23)
    12. Robotics and Automation (RA24)
    13. Education (E25)
    14. Power & Energy (PE-31)
    15. Photonics (PHOT36)
    16. Solid-State Circuits (SSC37)
- Number of Chapters formed in the current year
  - 1 Chapter (EMB18)
- Number of active Chapters (Chapters who have reported required number of meetings during the year)
  - 8 Chapters (SP01, CAS04, CIS11, IE13/IA34/PEL35, COM19, CS23, PE31, SSC37)
- Summary of Chapter activities (Chapter wise with attachment table/information)
  - Topics in quantum technology workshop
  - Technical Seminar on Solar Power Generation
  - The 2nd Joint Seminar on Computational Intelligence
  - The 3rd Joint Seminar on Computational Intelligence
  - Technical Seminar on Battery Technology for Electric Vehicles
  - Technical Seminar on Power Generation from biomass and biogas energy
  - Workshop: Fraud in R&D
  - The International Electrical Engineering Congress
  - Technical seminar on Video Analysis Implementation on FPGA and Single Board Computers
  - Technical Seminar on Power Generation from Municipal Solid Waste (MSW)
  - IEC SEG 6: Non-Conventional Distribution Networks Microgrids Workshop
  - Special Lectures: Workshop on Introduction to Social Computing
  - Technical Seminar on Recent Trends in Power System Protection
  - Technical Seminar on Switch Reluctance Motors and Application
  - Technical Seminar on Gas-Insulated Switchgear
  - Technical Seminar on Power Quality Problems and Solutions

- Technical Seminar on Power System Protection
- Technical Talk: China's Quantum Cryptography - From Terrestrial to the Sky
- Technical Seminar on High Voltage Substation
- 2017 IEEE SSCS-CASS Seminar and Student Poster Presentations
- Technical Talk: Light in the Metrology
- Technical Talk: Quantum Computer for Classical Computer Engineering
- Special Lectures: Synchronization and Frustration in Coupled Oscillatory Circuits
- The 3rd International Conference on Photonics Solutions
- PES Dinner Talk: Modernizing the Thailand Grid
- Technical Seminar on Renewable Energy Generation System for SPP Hybrid Firm
- Joint Seminar on Control Systems
- The 2nd Workshop on Quantum Technologies

B.3 Professional and Continuing Education Activities

Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information

- SPS Distinguished Lecture - Learning Sparsifying Transforms for Signal, Image, and Video Processing
- SSCS Distinguished Lecture - Body area (sensor) network and Design strategies for wearable sensor interface circuits
- PES Distinguished Lecture - Reliability Evaluation of Smart Grid including the impact of Cyber-physical Interactions
- IC Design EDA tools training
- Technical talk on visible light communication (VLC) technology
- Applications and PDK training
- Dinner Talk: Filling the gap of Thai physics society and with electrical engineering
- HRD for IC Design Ecosystem
- HRD for IC Process and Fabrication
- HRD for IC Packaging
- Joint IEICE-IEEE SPS Seminar on how to write good quality paper

B.4 Students Activities

- Total number of Student Branches in the Section
  - 8
- Number of Student Branches formed in the current year
  - 0
- Section level student activities (student congress, paper and other contests, awards etc)
  - 2017 IC Design Challenge
  - The Instrumentation, Control, and Automation Senior Project Conference
  - IEEE Thailand Control Systems Society Summer School
  - The Conference of TRS on Robotics and Industrial Technology
  - Pre-Engineering Skill for High School Students
  - Mentoring workshop for pre-university students
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year)
  - 1
- Summary of Student Branch activities (Student Branch wise with attachment table/information)
  - Seminar for EE Students: Engineer Career in Power and Energy Sectors
  - Seminar for EE Students: Power and Energy Trends in Thailand

B.5 Affinity Group Activities

- Young Professional (YP)
  - IC DESIGN EDA Tools Training, 24 – 28 April.
  - Applications and PDK Training, 2 – 4 May.
  - Seminar, "0.4 Movement in Hi-Tech Business towards THAILAND 4.0", 23 May.
  - Special Seminar and Student Poster Presentations, 25 July.
  - IEEE Membership Promoting, 31 July.
- Women In Engineering (WIE)
  - Mentoring workshop for pre-university students, 17 Aug.
  - WIE Thailand Section member meeting, 16 Oct.
  - Joint IEICE-IEEE SPS Seminar on how to write good quality paper, 20 Oct.

- Life Member
  - N/A

B.6 Awards & Recognition Activities

- Award constituted by the Section
  - N/A
- Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year 2017
  - IEEE HKN Mu Theta Chapter won IEEE-HKN Outstanding Chapter Award.

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter (name and number of issues in the year)
  - N/A
- Home Page of the Section (give the URL and how often it is updated)
  - http://www.ieeethailand.org/
- Other means of contacts with Section members including social media
  - Email

B.8 Industry Relations

- Membership growth and retention
  - N/A
- Activities for/with industrial members

  - N/A

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
  - N/A
- SIGHT Activities

  - N/A

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)"
  - N/A

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved
  - N/A
- Funding secured from the IEEE and external sources including sponsorships

  - N/A

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- Nature of relationship and details of any formal agreement signed
  - Signed MOU with the Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI) Association as Sister Soceity

- Details of joint activities
  - Conferences
  - Technical Talks
  - Workshops
- Benefit to IEEE members (for example discounts, access to technical information etc.)
  - Discounts for conference registration fee
  - Participation in technical activities
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)
  - Attracted more membership
  - Shared facilities/activities

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections
  - Helped founding Myanmar Subsection
- Joint activities with any other Section
  - Joint conference arrangement with Malaysia and Indonesia Section

C.4 Support extended to Sub-sections & Society Chapters within the Section

- **N/A**

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

- **N/A**

C.6 Problems anticipated and suggestions for solutions, if any

- **N/A**

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans
- **N/A**

D.2 Goals and Future Plans
- Attracting more members, esp. from industrial sectors, by arranging trendy and inspiring social/technical activities.
- Promoting current members to higher membership levels.

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.
- **N/A**

D.4. Business Plan for Sustainable Growth and Financial Stability.
- **N/A**