Region 10 Section Report Format

(Please replace above heading with your Section name)

* Please use the following format to prepare and submit your Section's annual report to Region 10.

* Please note that the annual reports are used to evaluate the outstanding Sections in the region and reports submitted after the announced due date will not be considered for the award. Please <u>do not</u> include more than 3 photographs and preferably put them on additional pages attached to the report (please delete this paragraph in your report).

* Please try to limit your Section's annual report not more than 15 pages.

PART A - SECTION SUMMARY

A.1 Executive Summary – (Please follow the format given below)

• Section Executive Committee Member List

Chair:	Pongsakorn Yuthagovit
Vice Chair:	Supavadee Aramvith
Treasurer:	Vidhya Rugpong
Secretary:	Boonsit Yimwadsana
Membership Development:	Khanita Duangchaemkarn
Chapter Coordinator:	Datchakorn Tancharoen
Newsletter Editor:	Praditpong Suksirithawornkul
Professional Activities:	Tritos Laosirihongthong
SAMIEEE recipient:	Amorn Jiraseree-Amornkun
Student Activities:	Wattana Kaewmanee

Section Highlights

Founded by the three national electric power agencies of Thailand in 1979, the IEEE Thailand Section is regarded as one of Thailand's strongest academic engineering institutions providing knowledge and consultancy to professional engineers and institutions in the country in order to create a strong foundation for the country's technological advancement.

• Major Events (International, National)

Sponsoring organization of key international academic and engineering conferences in the country to support local academic and engineering communities

- JCSSE: International Joint Conference on Computer Science and Software Engineering
- ICSEC: International Computer Science and Engineering Conference
- ICPEI: International Conference on Power, Energy and Innovations
- Major Chapter Activities

Power and Energy Society Chapter (PES)

- monthly talk series (http://www.ieeepes-thailand.org/)
- PES Dinner Talk
- Annual Symposium on "Green Energy"
- Conferences
 - IEEJ P&ES IEEE PES Thailand Joint Symposium on Advanced Technology in Power Systems 2022
 - The 45th Electrical Engineering Conference (EECON-45)
 - The 14th Conference of Electrical Engineering Network 2022 (EENET2022)

- The 2022 International Electrical Engineering Congress (iEECON2022)
- The 2022 International Conference on Power, Energy and Innovations (ICPEI 2022)
- Seminar/Talk series on
 - Underground Power and Communication Systems
 - Smart Grids and Microgrid
 - o Substation
 - o Renewable Energy
 - Energy Storage
 - o Safety/Maintenance
 - o Digitalization
 - Solar Rooftop and Solar Floating
 - o Power Quality
- PES Student Project Competition
- Site visit
 - Electricity Generating Authority of Thailand (EGAT)
 - Provincial Electricity Authority (PEA)
 - o Chiang Mai University
 - Wind Energy Holding
- Women in Power activities including
 - Talk on "Powering a Sustainable Future"
 - International Women in Engineering Day
 - International Women in Engineering Personal Development Training
 - o Site visit at Solar Floating at Sirindhorn Dam
 - o WE Forum Thailand 2022

Computer Society Chapter

- JCSSE: International Joint Conference on Computer Science and Software Engineering
- ICSEC: International Computer Science and Engineering Conference
- IBDAP: International Conference on Big Data Analytics and Practices
- TNIAC: TNI Academic Conference
- ICBIR: International Conference on Business and Industrial Research
- KST: International Conference on Knowledge and Smart Technology
- CyMaEn: International Conference on Cyber Management and Engineering
- ICLT: International Conferences on Logistics and Transport
- ICT-KE: International Conference on ICT and Knowledge Engineering
- InCIT: International Conference on Information Technology

Broadcast Technology Society Chapter

- International Conference on Engineering, Applied Science and Technology (ICEAST)
- The 7th International Conference on Digital Arts, Media and Technology (DAMT) and 5th ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (NCON) 2022
- Research group meeting on digital broadcast technology

Communication Society Chapter

- Seminar on Proof of Concept of QKD

Control System Society Chapter

- International Symposium on Instrumentation, Control, Artificial Intelligence, and Robotics (ICA SYMP 2022)
- Instrumentation, Control, and Automation Senior Project Conference (ICA SP-CON)
- ECTI CON 2022 "Advances in Control Engineering and Applications"
- SICE 2022: SICE-ECTI Organized Sessions on "Advances on Control Engineering and Applications"
- ICCAS 2022: ICROS and ECTI Organized Sessions on "Advances Control Design and Applications"

Magnetics Society Chapter

- International Conference on Applied Physics and Materials Applications (ICAPMA-2022) & Applied Magnetism and Ferroelectrics (JMAG-2022)
- IEEE Magnetic Society Conference 2022 (Thailand Chapter): IMAGSOC 2022
- Monthly seminar

- Materials characterization and analysis by synchrotron X-ray tomography microscopy technique
- Triboelectric-piezoelectric hybrid nanogenerator based on BaTiO₃-Nanorods/Chitosan enhanced output performance with self-charge-pumping system
- Read sensor design for next generation recording technology
- When small worlds collide: the converging of metallurgy and microscopy
- Exploring the potentials of spin-orbitronics
- Company Field Trip & Tutorial (Seagate Thailand)

Education Society Chapter

- Learning Exchange Activity: Managing an Online Classroom with Google Workspace
- Learning Exchange Activity: Managing an Online Classroom with Classkick
- 2021 Research, Invention, and Innovation Congress (RI2C2021)
- Workshop: Using Online Tools for Digital Innovators
- The 2021 International STEM Education Conference (iSTEM-Ed 2021)
- Major Student and Affinity Group Activities
 - WIE Activities
 - R10 Robotics Competition (Final Round)
 - Volunteer activities
 - Team Building Activities at Sirindhorn dam
 - Talk Forum on "Uplifting Women in the Clean Energy Economy"
- Awards

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

- Summary (as per submitted on NetSuite): see attachment at the end of this document
- Any other financial activities

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years. 747
- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members

Membership discount for participation in academic conferences sponsored by IEEE Thailand Section and its Chapters.

B.2 Chapter Activities

- Total number of Chapters in the Section: 16
- Number of Chapters formed in the current year: 1
- Number of active Chapters (Chapters who have reported required number of meetings during the year):
 8
- Summary of Chapter activities (Chapter wise with attachment table/information):
 - Power and Energy Society Chapter (PES)
 - monthly talk series (<u>http://www.ieeepes-thailand.org/</u>)
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Magnetics Society Chapter

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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

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- Volunteer activities
- Team Building Activities at Sirindhorn dam
- Talk Forum on "Uplifting Women in the Clean Energy Economy"
- Awards

B.4 Students Activities

- Total number of Student Branches in the Section
- Number of Student Branches formed in the current year
- Section level student activities (student congress, paper and other contests, awards etc)
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year)
- Summary of Student Branch activities (Student Branch wise with attachment table/information)

B.5 Affinity Group Activities

- Young Professional (YP)
- Women In Engineering (WIE)
- Life Member (LM)

B.6 Awards & Recognition Activities

- Award constituted by the Section
- Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year

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

- Newsletter (name and number of issues in the year)

 e-newsletter (For example, <u>https://www.facebook.com/IEEEThailandSection, http://www.ieee-thailand.org/</u>, <u>https://www.facebook.com/IEEE-Power-Energy-Society-Thailand-551350388280955</u>
 and <u>http://www.ieeepes-thailand.org/</u>)
- Home Page of the Section (give the URL and how often it is updated): <u>http://www.ieee-thailand.org/</u>update once a month
- Other means of contacts with Section members including social media Website and Facebook (<u>https://www.facebook.com/IEEEThailandSection</u>, <u>http://www.ieee-thailand.org/</u>)

B.8 Industry Relations

• Membership growth and retention

Membership growth is steady and most members are very loyal.

• Activities for/with industrial members

National Electric Power Agencies as permanent members along with other industrial members provides supports for conferences, workshops and talk series including

- Electricity Generating Authority of Thailand (EGAT)
- Provincial Electricity Authority (PEA)
- Metropolitan Electricity Authority (MEA)
- Seagate Thailand

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
 - Training on Power Systems

B.10 Community Activities

• IEEE Social activities (Family day, IEEE day, Engineers Week)": None due to Covid-19

PART C - OTHERS

C.1 Special Events

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

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

• Nature of relationship and details of any formal agreement signed

IEEE Thailand Section is a committee of the National Engineering Council of Thailand. IEEE Thailand Section provides advises and experts to help out the engineering policy of the country.

• Details of joint activities

Meeting for policy making related to engineering.

• Benefit to IEEE members (for example discounts, access to technical information etc.)

Membership development: Improved training programs, knowledge sharing, conferences, access to technical knowledge,

• Benefit to Section (for example help in membership development, venue facilities, cost saving etc.) Membership development.

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections
- Joint activities with any other Section

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

• Support extended for organising technical, educational and professional activities

Support for organizing technical, educational and professional activities including conferences and workshops.

• Joint activities for membership development

Financial support for membership development

• Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

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

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

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

IEEE Thailand Section continues to support local activities related to membership development, technical knowledge sharing, and professional training. In addition, IEEE Thailand Section will continue to support the SIGHT Affinity Group to help Thai local communities in various areas.

D.2 Goals and Future Plans

The goal of IEEE Thailand Section is

- to provide technical support for local engineers by sponsoring academic conferences, workshop, access to technical experts and information in order to help develop the country.
- 2) to provide humanitarian support for local communities

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

Special grant to support international mobility of engineers through research and professional experience/skills sharing

D.4 Business Plan for Sustainable Growth and Financial Stability.

IEEE Thailand Section is a non-profit organization. The section plans to collaborate with local industries to support local activities.