

Region 10 Section Report – 2018 Macau Section

PART A - SECTION SUMMARY

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

- Section Executive Committee Member List - 2018
 - Xiaoju Liu – Chair
 - Chi-Seng Lam - Vice Chair
 - Yaling Wang - Secretary
 - Pedro Antonio Mou – Treasurer
 - 2018 Board was elected on Apr 21, 2018.
- Section Highlights
 - Reinforcement/Establishment of collaborative relationship with local associations, Government and companies
 - Joint Activities with local entities
 - Macau Association of Microelectronics;
 - Science and Technology Development Fund (FDCT);
 - MAPST (Associação Promotora das Ciências e Tecnologias de Macau);
 - Information Technology Association;
 - CTT (Direcção dos Serviços de Correios e Telecomunicações);
 - Macau electric power company;
 - University of Macau;
 - University of Science and Technology etc.
- Major Events (International, National)
 - Gathering among IEEE Student Members of IEEE Macau MUST student branch to strengthen the communications and relationship among members on 8 Apr, 2018
 - IEEE Macau was invited to attend World Telecommunication and Information Society Day held by CTT on 17 May, 2018
 - The 9th International Infrastructure Investment and Construction Forum (IIICF) on 7 Jun ~ 8 Jun, 2018. IEEE Macau representatives attended the forum.
 - IEEE Macau visited Liaison Office of the Central People's Government in the Macau S.A.R on 20 Jun, 2018 to enhance the relationship with local government.
 - IEEE Macau visited Government Office for the Development of Energy Sector (GDSE) on 8 Aug, 2018 to enhance relationship with government and seek for support for our activities.
 - Power Decoupling for DC-AC Inverters Seminar, co-organized by IEEE Macau CAS chapter and IEEE Macau section on 3 Aug, 2018.
 - Smart Grid Technology for Smart City seminar, co-organized with Macau University, on 26 Aug 2018.
 - Modeling Cascading Failure in Power Systems from a Network Perspective Seminar, co-organized by IEEE Macau CAS chapter and IEEE Macau section on 19 Sep, 2018
 - Energy Transformation and Smart Grid Seminar, co-organized by IEEE Macau Section & PE/PEL joint chapter on 28 Nov, 2018.
 - High Efficient Wireless Power Transfer for Electrical Vehicles Seminar, co-organized by IEEE Power & CAS chapter on 12 Dec, 2018.
- Major Chapter Activities
 - Various Technical Seminars;
 - Many contacts with oversea universities.
- Major Student and Affinity Group Activities
 - Final Year Project Competition
 - University of Macau Student Branch
 - Macau University Science and Technology Student Branch
- Awards
 - N/A

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

- Summary (as per submitted L50)
 - As submitted in the NetSuite System

Current Assets for 2018		Asset Consideration (2018)	
Account receivable	0.00	Net Asset (2017)	169,567.30
Bank Balance			
Rebate	0.00	Revenue	57,846.40
		Expense	(90,850.77)
Current Liabilities		Surplus (Deficit)	(33,004.37)
Amount due to committee members	0.00		
		Net Asset (2018)	136,562.93
Net Current Assets (2018)	0.00		
Representing:			
GENERAL FUND	0.00		

- Any other financial activities

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.
 - 2018: 206
 - 2017: 206
- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members
 - Technical Seminars, gathering etc.
 - Student activities

B.2 Chapter Activities

- Total number of Chapters in the Section
 - 8 Chapters:
 - CH10366 Hong Kong Macau Jt. Sections Chapter, EMB18 (07/25/2006)
 - CH10773 Macau Section Chapter, RFID741 (04/20/2016)
 - CH10512 Macau Section Chapter, SMC28 (03/03/2010)
 - CH10484 Macau Section Chapter, SSC37 (06/12/2009)
 - CH10349 Macau Section Chapter, C16 (10/11/2005)
 - CH10530 Macau Section Joint Chapter, AP03/MTT17 (05/18/2010)
 - CH10347 Macau Section Joint Chapter, CAS04/COM19 (08/01/2005)
 - CH10639 Macau Section Jt. Chapter, PE31/PEL35 (04/16/2013)
- Number of Chapters formed in the current year
 - 0
- Number of active Chapters (Chapters who have reported required number of meetings during the year)
 - 2
- Summary of Chapter activities (Chapter wise with attachment table/information)
 - High Efficient Wireless Power Transfer for Electrical Vehicles-MACAU PE31/PEL35
 - Technical Visit to China National High DC Voltage Testing Base and Electric Power Research Insitute – MACAU PE31/PEL35
 - Energy Transformation and Smart Grid Seminar – MACAU (section)
 - Energy Transformation and Smart Grid – MACAU PE31/PEL35
 - Printed Electronics and RFID – MACAU AP03/MTT17
 - A Novel Physical Model for the Correlation of Shadow Fading – MACAU AP03/MTT17
 - Advances in Machine Learning Techniques with Applications to Communications and Image Processing – MACAU AP03/MTT17
 - Algorithms and Formats for Adaptive Streaming – MACAU AP03/MTT17
 - 2018 IEEE International Conference on Radio Frequency Identification Technology and Applications – MACAU AP03/MTT17
 - Air conditioning system demand control and operating efficiency optimization – MACAU PE31/PEL35
 - An Additive Manufacturing Approach for Printing 2D and 3D Electronics - MACAU AP03/MTT17
 - Modeling Cascading Failure in Power Systems from a Network Perspective - MACAU PE31/PEL35
 - Wireless Grid Integration of EVs for V2G Applications - MACAU PE31/PEL35
 - Smart Grid Technology for Smart City Seminar – MACAU PE31/PEL35
 - Power Decoupling for DC-AC Inverters Seminar – MACAU (section)
 - Machine Learning Meets Wireless Network Optimization – MACAU AP03/MTT17
 - Next-Generation Green Cognitive Radio – MACAU AP03/MTT17
 - 3D Frequency Selective Structures With Multi-Mode Resonators - MACAU AP03/MTT17
 - Applied Electromagnetics for Multiphysics Applications - MACAU AP03/MTT17
 - Artificial Impedance Surfaces for Controlling Scattering, Radiation, and Guidance of Electromagnetic Waves - MACAU AP03/MTT17

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

- Technical seminars
 - Technical Visit, Chinese National High DC Voltage Testing Base Chinese State Grid: China Electric Power Research Institute, Beijing China, 07/12/2018
 - Seminar on “ High Efficient Wireless Power Transfer for Electrical Vehicles” by Professor Hao MA, College of Electrical Engineering, Vice Dean of ZJU-UIUC Institute, Zhejiang University, China (12/12/2018)
 - Seminar on “Energy Transformation and Smart Grid”, by Xiaoli HUANG, Deputy Chief Engineer, Professor-level Chartered Engineer, Electric Power Planning and Engineering Institute (National Electric Power Planning Research Center), China (28/11/2018)
 - Seminar on “Modeling Cascading Failure in Power Systems from a Network Perspective” by Professor Chi K. Michael Tse (IEEE Fellow, IEAust Fellow, Chang Jiang Scholar Chair), Chair Professor of Electronic Engineering, Hong Kong Polytechnic University, Hong Kong (19/09/2018)
 - Seminar on “Wireless Grid Integration of EVs for V2G Applications”, by Professor Udaya K Madawala, The University of Auckland, New Zealand (IEEE Fellow) (27/08/2018)
 - Seminar on “Power Decoupling for DC-AC Inverters” by Professor Yaow-Ming CHEN, Vice-Chair, Department of Electrical Engineering, National Taiwan University, Taiwan (03/08/2018)
 - Seminar on “Optical Fiber Sensors” by Prof. Ping Shum, the Director of Centre for Optical Fibre Technology, Nanyang Technical University, March 8, 2018.
 - Seminar on “Sensitivity-Based Robust Learning Algorithm for Stacked Autoencoder” by professor Daniel S. Yeung, the former president of IEEE(SMC), March 29, 2018.
 - Seminar on “VPP (Virtual Power Plant) Practice through Energy IOT Construction”, Prof. Guilin Zheng, the chair of IEEE Wuhan section, April 12, 2018.
 - Seminar on “Shaping the future of commercial quantum computer”, Prof. Chao Wang, the vice chair of IEEE China council, April 12, 2018.

B.4 Students Activities

- Total number of Student Branches in the Section
 - 2
- Number of Student Branches formed in the current year
 - 0
- Section level student activities (student congress, paper and other contests, awards etc)
 - 2 IEEE Project Competitions in 2 universities
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year)
 - 0
- Summary of Student Branch activities (Student Branch wise with attachment table/information)

B.5 Affinity Group Activities

- Young Professional (YP)
 - N/A
- Women In Engineering (WIE)
 - N/A
- 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 2018
 - N/A

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

- Newsletter (name and number of issues in the year)
 - 3
- Home Page of the Section (give the URL and how often it is updated)
 - <http://www.ieee.org.mo/>

- Other means of contacts with Section members including social media
 - Email
 - Wechat

B.8 Industry Relations

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

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
 - Friend organization
- Details of joint activities
 - Be invited to join the activities (such as technical seminars, gathering etc.) they organized
- Benefit to IEEE members (for example discounts, access to technical information etc.)
 - Keep close communication with local and external experts
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)
 - Make IEEE Macau section more popular and known by more people

C3. Collaboration with other IEEE Sections

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

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

- Support extended for organising technical, educational and professional activities

- Financial support to chapters and student branch for organizing technical seminars, member gathering, technical project competition etc.
- Joint activities for membership development
 - Organize activities with students to promote membership development.
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full 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

- Limited financial support and income

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

- Continue to organize high-quality technical seminars, workshops, visits etc.

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

- Planned to set up a membership's Wechat group

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

- N/A