

# Region 10 Guangzhou Section Report 2018

## PART A - SECTION SUMMARY

### A.1 Executive Summary

- Section Executive Committee Member List

| Position                | Last Name | First Name | Member No. |
|-------------------------|-----------|------------|------------|
| Chair                   | Liu       | Derong     | 1535400    |
| Chair*                  | Zhang     | Jun        | 41426950   |
| Coordinator             | Yu        | Wei-Jie    | 92461107   |
| Membership Development  | Zhan      | Zhi-Hui    | 90581021   |
| Professional Activities | Gao       | Ying       | 95116933   |
| Secretary               | Hu        | Xiaomin    | 80465144   |
| Student Activities      | YING      | LIN        | 90351741   |
| Treasurer               | Shi       | Wen        | 94080909   |
| Vice Chair              | CHEN      | WEI-NENG   | 80729331   |

\*The interim Chair in 2018.

- Section Highlights

In 2018, nine technical meetings were held by Guangzhou Section, covering the fields of artificial intelligence, cybersecurity, deep learning, virtual reality, networking, power, disease-specific biomarker research, and Chinese medicine classification. The series of lectures attracted more than 100 members and targeted audiences.

- Major Events (International, National)

The section technically supported the 9th International Conference on Computer Aided Design for Thin-Film Transistors (CAD-TFT), which was held in Shenzhen, on November 16-18, 2018.

The conference provided a forum for discussions and current practices on compact TFT modeling and promoted research on CAD techniques at all levels (TCAD, compact modelling, circuit & system design) for TFT technologies. More than 200 attendances including professionals, company experts, and student joined in the conference. Their accepted papers have been included in IEEE Xplore.

- Major Chapter Activities

Guangzhou Section ED/SSC Shenzhen Chapter technically supported the 9th International Conference on Computer Aided Design for Thin-Film Transistors (CAD-TFT) 2018.

One new Chapter, Guangzhou Section Chapter, CAS04 Shenzhen, was formed in 2018.

A new Chapter termed Guangzhou chapter of Geoscience and Remote Sensing Society (GRSS) was in petition.

- Major Student and Affinity Group Activities

The student branches in Guangdong took part in various activities such as competitions and lectures.

- Awards

None.

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

- Summary (as per submitted L50)

This section was upgraded to Section in 2018. There was no financial information available to report.

- Any other financial activities

None.

## PART B - ORGANIZATIONAL ACTIVITIES

### B.1 Membership Development Activities

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

By the year 2015, there were 1073 members.

By the year 2016, the data is not available.

By the year 2017, there were 1287 members.

By the year 2018, there were 1598 members.

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

A celebration of the upgradation of Guangzhou Subsection to Section was held on March 30, 2018. The meeting inaugurated the committee members of Guangzhou Section and it had attracted various professionals, company representatives, and students to join in. Moreover, several high quality lectures were supported by the Section and they provided a platform for section members to communicate with each other.

### B.2 Chapter Activities

- Total number of Chapters in the Section

There are 17 Chapters in Guangzhou Section, which are listed as

| No. | OU Type       | OU Name   |
|-----|---------------|---|
| 1   | Chapter       | Beijing Section Chapter, AP03 – Shenzhen (This one should be in Guangzhou Section Chapter.) |
| 2   | Chapter       | Guangzhou Section Chapter, CAS04 Shenzhen   |
| 3   | Chapter       | Guangzhou Section Chapter, NANO42 Guangdong   |
| 4   | Chapter       | Guangzhou Section Chapter, SSC37  |
| 5   | Chapter       | Guangzhou Section Chapter, CAS04  |
| 6   | Chapter       | Guangzhou Section Chapter, CE08 Shenzhen  |
| 7   | Chapter       | Guangzhou Section Chapter, CIS11  |
| 8   | Chapter       | Guangzhou Section Chapter, ED015  |
| 9   | Chapter       | Guangzhou Section Chapter, EMB18 Shenzhen   |
| 10  | Chapter       | Guangzhou Section Chapter, PE31   |
| 11  | Chapter       | Guangzhou Section Chapter, PHO36 Guangdong  |
| 12  | Chapter       | Guangzhou Section Chapter, SMC28 Shenzhen   |
| 13  | Chapter       | Guangzhou Section Chapter, SP01   |
| 14  | Joint Chapter | Guangzhou Section Chapter, AP03/MTT17   |
| 15  | Joint Chapter | Guangzhou Section Chapter, ED15/SSC37 Shenzhen  |
| 16  | Joint Chapter | Guangzhou Section Jt. Chapter, SP01/COM19-Shenzhen  |
| 17  | Joint Chapter | Guangzhou Section Jt. Chapter, EMC27/AP03   |

- Number of Chapters formed in the current year

Two new Chapters were formed in 2018 as listed

1. Guangzhou Section Chapter, CAS04 Shenzhen,
2. Guangzhou Section Jt. Chapter, EMC27/AP03..

- Number of active Chapters (Chapters who have reported required number of meetings during the year)

There were 12 Chapters that had reported meetings in 2018.

- Summary of Chapter activities (Chapter wise with attachment table/information)

| OU Name   | No. of Reported Meetings | Highlights   |
|---|--------------------------|--|
| Beijing Section Chapter, AP03 – Shenzhen (This one should be in Guangzhou Section Chapter.) | 1                        | 2018 International Workshop on Antenna Technologies in Shenzhen University (2018 IWAT-SZU)   |
| Guangzhou Section Chapter, NANO42 Guangdong   | 10                       | Conference on Vibration and Energy Harvesting Application (WEH 2018)<br>Lectures:<br>Micro-Lasers Fabricated by Soft Matter Approach<br>Colloidal quantum dots for optoelectronic applications   |
| Guangzhou Section Chapter, SSC37  | 2                        | ISSCC 2019 Promotion Conference<br>IEEE SSCS Guangzhou Chapter technical seminar   |
| Guangzhou Section Chapter, CAS04  | 9                        | IEEE CASS Shenzhen Pre-ISCAS Workshop<br>IEEE CASS Shenzhen Chapter Technical Workshop<br>IEEE Distinguished Lecture by Prof. Hai “Helen” Li   |
| Guangzhou Section Chapter, CIS11  | 8                        | Lectures:<br>New Development of Smooth Projective Hash Function<br>Applications of Computational Intelligence to Condition-Based Maintenance   |
| Guangzhou Section Chapter, ED015  | 4                        | 2018 IEEE Electronic Exploration Camp in Guangzhou<br>2018 Reliability Physics Annual Meeting of China   |
| Guangzhou Section Chapter, PE31   | 2                        | Lectures:<br>Computational high voltage engineering (CHVE)<br>Power transformer technology   |
| Guangzhou Section Chapter, PHO36 Guangdong  | 3                        | 2018 the 3rd Optoelectronics Global Conference<br>Lectures:<br>The Miracle of Light and the Power of Photonics   |
| Guangzhou Section Chapter, SP01   | 1                        | Lectures:<br>Open Resource-aided Scene Classification  |
| Guangzhou Section Chapter, ED15/SSC37 Shenzhen  | 3                        | IEEE International Conference on Electron Devices and Solid-State Circuits<br>IEEE International Solid-State Circuits Conference (ISSCC) Shenzhen Promotion/Orientation Even<br>DL talk by Prof. Ru Huang from Peking University (Academician of Chinese Academy of Sciences, IEEE fellow) |
| Guangzhou Section Jt. Chapter, SP01/COM19-Shenzhen  | 3                        | 2018 the 3rd Optoelectronics Global Conference<br>Lectures:<br>The Miracle of Light and the Power of Photonics   |
| Guangzhou Section Jt. Chapter, EMC27/AP03   | 1                        | Establishment of Guangzhou Section Jt. Chapter,  |

### 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

None.

## B.4 Students Activities

- Total number of Student Branches in the Section

There were 10 student branches.

| No. | Student Branch                                    |
|-----|---|
| 1   | Guangdong University of Technology,IE13           |
| 2   | Guangdong University of Technology,PE31           |
| 3   | Guangdong University of Technology,SMC28          |
| 4   | Shenzhen Institutes of Advanced Technology,UFFC20 |
| 5   | South China University of Technology,IM09         |
| 6   | Guangdong University of Technology                |
| 7   | Shenzhen Institutes of Advanced Technology        |
| 8   | Shenzhen University                               |
| 9   | South China University Of Technology              |
| 10  | Sun Yat-Sen University-Guangzhou                  |

- Number of Student Branches formed in the current year

No new branches were formed in 2018.

- Section level student activities (student congress, paper and other contests, awards etc)

None.

- Number of active Student Branches (Student Branches who have reported required number of meetings during the year)

Two student branches have reported meetings in 2018.

- Summary of Student Branch activities (Student Branch wise with attachment table/information)

| OU Name   | No. of Reported Meetings | Highlights   |
|---|--------------------------|--|
| Guangdong University of Technology,PE31           | 2                        | An Energy-Efficient Battery Parameter Extraction Technique<br>Smart Grids: An Intellectual Exercise or a Practical Reality |
| Shenzhen Institutes of Advanced Technology,UFFC20 | 2                        | CBME2018<br>CBS 2018- IEEE International Conference on Cyborg and Bionic Systems   |

## B.5 Affinity Group Activities

- Young Professional (YP)

None.

- Women In Engineering (WIE)

None.

- Life Member

None.

## **B.6 Awards & Recognition Activities**

- Award constituted by the Section

None.

- Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year 2015

None.

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

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

IEEE China.

- Home Page of the Section (give the URL and how often it is updated)

Under construction.

- Other means of contacts with Section members including social media

[http://cn.ieee.org/china\\_section.html](http://cn.ieee.org/china_section.html)

## **B.8 Industry Relations**

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

Not available.

## **B.9 Humanitarian Technology Activities**

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

None.

## **B.10 Community Activities**

- IEEE Social activities (Family day, IEEE day, Engineers Week)”

None.

# **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

None.

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

- Nature of relationship and details of any formal agreement signed
- Details of joint activities
- Benefit to IEEE members (for example discounts, access to technical information etc.)
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)

None.

## **C3. Collaboration with other IEEE Sections**

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

None.

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

- Support extended for organising technical, educational and professional activities
- Joint activities for membership development
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

Not available.

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

Not available.

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

None.

## **PART D - GOALS AND PLANS**

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

For enhancing member benefits & making IEEE a preferred professional platform in Guangdong, an annual technology frontier forum will be held. The participants are all the IEEE members in Guangdong Section. The forum will have keynotes and the opportunity for the members to meet and communicate together. Building the connections of research, academia and industry is our target.

### **D.2 Goals and Future Plans**

Forum of Year 2019 – Guangdong University of Technology + local companies

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

Routine publicity of local news of IEEE such as conferences, students competitions, Winter/Summer Schools will be pushed to our members. Our target is to attract more participants of our members and potential new members.

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

1. Build an IEEE framework connecting main universities and modern industries in the Guangdong Province through the formation of chapters and student branches.
2. Maintain a series of IEEE activities in every month.
3. Attract more members to join in the activities and let them know the benefits of joining IEEE.