

IEEE Xi'an Section Report

PART A - SECTION SUMMARY

A.1 Executive Summary

- Section Executive Committee Member List

Chair: Jingdong Chen, Northwestern Polytechnical University

Vice-chair: Jinjun Liu, Xi'an Jiaotong University

Min Sheng, Xidian University

Steering Committee Chair: Jianguo Huang, Northwestern Polytechnical University

Fellow Recommend Committee Chair: Xiaohong Guan, Xi'an Jiaotong University

Awards & Recognition Committee Chair: Xinbo Gao, Xidian University

Membership Development Committee Chair: Feng Zhou, Xidian University

Technical Activities Committee Chair: Zhiwen Yu, Northwestern Polytechnical University

Student Activities Committee Chair: Feng Gao, Xi'an Jiaotong University

WIE Committee Chair: Wen Zhang, Northwestern Polytechnical University

Newsletter Editor Committee Chair: Qunfei Zhang, Northwestern Polytechnical University

Young Scholars Committee Chair: Jie Chen, Northwestern Polytechnical University

Educational Activities Committee Chair: Qunfei Zhang, Northwestern Polytechnical University

Conference Committee Chair: Chengbing He, Northwestern Polytechnical University

Treasurer: He Xiang, Northwestern Polytechnical University

Office of IEEE Xi'an Section Director: He Xiang, Northwestern Polytechnical University

Secretary of IEEE Xi'an Section: Si Zhao, Northwestern Polytechnical University

- Section Highlights

- Major Events (International, National)

Successfully Organized IEEE ICSPCC2020 (2020 IEEE International Conference on Signal Processing, Communications and Computing)

- Major Chapter Activities

- Major Student and Affinity Group Activities

- Awards

A.2 Financial Report

- Summary (as per submitted L50)

In 2020, the total receipts of Xi'an section is about \$16940.16. It includes the balance of 2019 about \$5626.07, the section rebate is about \$10015.9, the R10 section incentive grant is \$50.00, the student branch rebate is \$1202.00, the interest is about \$46.19.

The total 2020 expenses of Xi'an section is about \$9954.68. The expenditure mainly refers to the Xi'an section (include student branches) academic activities and conferences. Such as hall, reception, transportation, the Xi'an section website management, etc.

The balance of 2020 is about \$6985.48.

- Any other financial activities

Extra financial support mainly comes from the Northwestern Polytechnical University.

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

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

By Dec, 2020, the total amount of active members of IEEE Xi'an Section is 2281, while the number was 1489 for the year 2018 and 1955 for the year 2019. It increases 34% and 14% than the members in 2018 and 2019 respectively.

In 2021, we continue our effort to increase membership, especially the student members.

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

B.2 Chapter Activities

- Total number of Chapters in the Section

By 2020, there are 2 new chapters was founded. In total, there are 16 chapters in Xi'an Section, all of which are active. The chapters are as follows:

IEEE Xi'an Electronic Device Chapter
 IEEE Xi'an Signal Processing Chapter
 IEEE Xi'an Computer Chapter
 IEEE Xi'an Computational Intelligence Chapter
 IEEE Xi'an Communication Chapter
 IEEE Xi'an Systems, Man, and Cybernetics Chapter
 IEEE Xi'an Microwave Theory and Techniques Chapter
 IEEE Xi'an Reliability Chapter
 IEEE Xi'an Electromagnetic Compatibility Chapter
 IEEE Xi'an Power & Energy Chapter
 IEEE Xi'an Dielectrics and Electrical Insulation Chapter
 IEEE Xi'an Antenna and Propagation Chapter
 IEEE Xi'an Broadcast Technology Chapter
 IEEE Xi'an Geoscience & Remote Sensing Chapter
 IEEE Xi'an Industrial Electronics Society Chape
 IEEE Xi'an Instrumentation and Measurement Society Chapter

- Number of Chapters formed in the current year

2

IEEE Xi'an Industrial Electronics Society Chape
 IEEE Xi'an Instrumentation and Measurement Society Chapter

- Number of active Chapters (Chapters who have reported required number of meetings during the year)
- Summary of Chapter activities (Chapter wise with attachment table/information)

Signal Processing Chapter

No.	Date	Topic
1.	2020	Prof. Licheng Fu delivered lectures on Energy-Efficient Coordination Schemes for Underwater Acoustic Sensor Networks
2	2020	Prof. Octavia A. Dobre delivered lectures on From Cognition to Intelligence in Communication Networks

3	2020	Prof. Cedric Richard delivered lectures on A perspective with distributed acoustic sensing
4	2020	Dr. Sijia Liu delivered lectures on A Dissecting Adversarial Robustness of Deep Neural Networks: A Machine Learning and Optimization Perspective
5	08/21-23/2020	Held IEEE ICSPCC2020, Macau, China.

Systems, Man, and Cybernetics Chapter

No.	Date	Topic
1.	9/10/2020	Prof. Yuegang Tao delivered lectures on Optimal control method for maximal plus linear systems
2.	9/5/2020	Prof. Xiangfu Zhao(Yantai University) delivered lectures on Model based diagnosis of Discrete-event systems
3.	7/9/2020	Prof. W. M. Wonham (IEEE Fellow, University of Toronto) delivered lectures on The internal model principle of control theory: an introduction
4.	7/18/2020	Prof. Karen Rudie (IEEE Fellow, Queen's University, Canada) delivered lectures on Discrete-event control to keep secrets secret
5.	10/8-27/2020	Prof. Klaus Werner Schmidt(Middle East Technical University, Turkey) delivered lectures on Modern control theory
6.	6/15-22/2020	Prof. Kamel Barkaoui delivered lectures on Performance and dependability evaluation
7.	6/16-24/2020	Prof. Senan Ece Schmidt delivered lectures on Introduction to Computer Networks
8.	6/15-18/2020	Prof. Ayesha Sohail delivered lectures on Numerical Methods

EMC Chapter

No.	Date	Topic
1.	10/20-23/2020	Held the 6th IEEE Global Electromagnetic Compatibility Conference

DEI and PES Chapter

No.	Date	Topic
1.	10/16/2020	Held the IEEE PES renewable Systems Integration Satellite Committee-China Inaugural Ceremony
2.	8/14-20/2020	Held the The 2020 Asian PhD School on Advanced Power Electronics
3.	10/20-23/2020	Held the 6th IEEE Global Electromagnetic Compatibility Conference, GEMCCon 2020
4.	9/7-10/2020	Held the 2020 IEEE International Conference on High Voltage Engineering and Application , ICHVE 2020

EDS Chapter

No.	Date	Topic
1.	1/9-10/2020	Held the 2020 International Workshop on Advande Electronic Signal Automation
2.	12/15/2020	Prof. Qi-jun Zhang delivered lectures on Artificial Neural Networks for Microwave Modeling and Design
3.	12/16/2020	Prof. Guofu Niu delivered lectures on RF Measurements and Modeling of Transistors
4.	1/5/2021	Prof. Zhangqiang Ma delivered lectures on Seminar on flexible microwave electronics

COMSOC Chapter

No.	Date	Topic
1.	9/3/2020	Held lectures on 5G Code
2.	8/25/2020	Held lectures on TTE
3.	11/05/2020	Held Communication and information theory workshop CITW2020.
4.	22/10/2020	Held 2020 International Workshop on Advanced Intelligence and Self-Organized Networks.
5	2020	Held AISN 2020

BTS Chapter

No.	Date	Topic
1.	11/20-21/2020	Held the International conference on Advanced intelligence and self-organizing networks
2.	12/14-16/2020	Held the 3 rd IEEE International Conference on Electronics and Communications Engineering

COMPUTER Chapter

No.	Date	Topic
1.	9/8/2020	Held the Workshop on Intelligent IoT and city computing
2.	10/16-18/2020	Held the lectures on Tutorial Technical
3	10/10/2020	Held The 4 th IOE 2020/Association for Computing Machinery
4	11/13-15/2020	Held the 15 th GPC

B.3 Professional and Continuing Education Activities

Successfully Organized IEEE ICSPCC2020 (2020 IEEE International Conference on Signal Processing, Communications and Computing) .

In August 21-23, 2020, we hosted “2020 IEEE International Conference on Signal Processing, Communications and Computing” in Macau, China.

More than two hundreds of specialists and scholar from America, French, Japan, Australia, India, South Korea, etc. attended this conference.

B.4 Students Activities

- Total number of Student Branches in the Section

By 2020, there are 4 student branches in IEEE Xi'an Section. No new student branch is formed in 2020.

1. Xi'an Jiaotong University Student Branch
2. Northwestern Polytechnical University Student Branch
3. Xidian University Student Branch
4. Xi'an Institute of Optics and Precision Mechanics Student Branch

- 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)
- There is currently no affinity group in IEEE Xi'an Section.
- Women In Engineering (WIE)
- Life Member

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 2015

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

- Newsletter (name and number of issues in the year)
- Home Page of the Section (give the URL and how often it is updated)
www.ieeexian.org, updated about every three months.
- Other means of contacts with Section members including social media

IEEE Xi'an Section normally contact with its members directly with Emails, informing them when there is some activities or some important information. We also provide support to students who present papers at international conferences

B.8 Industry Relations

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

B.9 Humanitarian Technology Activities

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

B.10 Community Activities

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

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
- 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.)

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
- Joint activities 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

D.2 Goals and Future Plans

- 1) Perfect IEEE Xi'an Section and establish new chapters.
- 2) Prepare establishing WIE for woman and GOLD for young scientists.
- 3) Develop service of membership and upgrading of member class.
- 4) Prepare assisting and holding for international conference.
- 5) Invite worldwide famous specialists and scholars for academic communication.
- 6) Establish long-term partnership with Hi-Tech enterprises in Xi'an.
- 7) Enhance the work of student branches for communication, training and competition.
- 8) Perfect the website of IEEE Xi'an Section.
- 9) Upload related summaries and reports in time.
- 10) Enhance the relationship with Northwestern Polytechnical University for more support.

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

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