

Region 10 Section Report Format

(Please replace above heading with your Section name)

Please use the following format to submit your Section's annual report to Region 10. Please note that the annual reports are used for selecting the outstanding Sections in the region and reports submitted after the announced due date will not be considered for the award. Please do not include more than 3 photographs and preferably put them on additional pages attached to the report (please delete this paragraph in your report).

PART A - SECTION SUMMARY

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

- Section Executive Committee Member List
 - ✧ Dianguo Xu (Section Chair)
 - ✧ Qun Wu (Vice Chair and member of IEEE China Council)
 - ✧ Guohui Yang (Secretary and member of IEEE China Council)
 - ✧ Jiahui FU (membership development)
 - ✧ Fanyi Meng (MTT chapter vice chair)
 - ✧ Guangren Duan (Academic exchange)
 - ✧ Lixian Zhang (Industry contact)
 - ✧ Qi Wang (Life membership)
 - ✧ Bin Zou (Chapter coordinator)
 - ✧ Weixiao Meng (Conference management)
 - ✧ Tao Jiang (Local member activity)
 - ✧ Min Jia (Chair for WIE)
 - ✧ Kuang Zhang (Treasurer, and the Chair for student branch and YP)
 - ✧ Cong Wang (Industry cooperation)
 - ✧ Datong Liu (Technical activity)
 - ✧ Shuai Han (Humanitarian Technology Activities)
 - ✧ Yueyi Yuan (the Chair for student branch)
 - ✧
- Section Highlights
 - AFFINITIES**
 - ✧ Harbin Section Affinity Group, WIE (WE00208)
 - ✧ Harbin Section Affinity Group, YP
 - CHAPTERS**
 - ✧ Harbin Section Chapter, COM19 (CH10606)
 - ✧ Harbin Section Chapter, CS23 (CH10491)
 - ✧ Harbin Section Chapter, GRS29 (CH10765)
 - ✧ Harbin Section Chapter, GRS29 CHANGCHUN (CH10789)
 - ✧ Harbin Section Chapter, IE13 (CH10672)
 - ✧ Harbin Section Chapter, PE31 (CH10817)
 - ✧ Harbin Section Chapter, SP01 (CH10734)
 - ✧ Harbin Section Chapter, VT06 (CH10795)
 - ✧ Harbin Section Chapter, AP03 (CH11035)
 - ✧ Harbin Section Chapter, BT02 (CH11009)
 - ✧ Harbin Section Chapter, IA34 (CH10918)
 - ✧ Harbin Section Chapter, IM09 (CH10926)
 - ✧ Harbin Section Chapter, IT12 (CH11044)
 - ✧ Harbin Section Chapter, NANO42 (CH10991)
 - ✧ Harbin Section Chapter, SEN39 (CH10925)
 - ✧ Harbin Section Chapter, SMC28 (CH10875)
 - ✧ Harbin Section Chapter, ED15 DALIAN (CH10411)
 - JOINT CHAPTERS**
 - ✧ Harbin Section Chapter, JOINT CHAPTER, ED15/PHO36 (CH10406)
 - ✧ Harbin Section Chapter, JOINT CHAPTER, EMC27/MTT17/AP03 (CH10460)
 - STUDENT BRANCHES**
 - ✧ Harbin Inst of Tech Shenzhen Graduate School, IA34 (SBC65591A)

- ✧ Harbin Institute of Tech-Main Campus, IM09/SEN39 (SBC66231B)
- ✧ Harbin Institute of Technology-Main Campus, EP21 (SBC66231C)
- ✧ Harbin Institute of Technology-Main Campus, GRS29 (SBC66231A)
- ✧ Harbin Institute of Technology-Main Campus, IA34 (SBC66231)
- ✧ Harbin Institute of Technology-Main Campus, MTT17 (SBC66231E)
- ✧ Harbin Institute of Technology-Main Campus, PEL35 (SBC66231D)

SECTIONS

- ✧ Harbin Section(R00208)

STUDNET BRANCH CHAPTERS

- ✧ HIT-Shenzhen Graduate School, Ia34 (Shenzhen, Cn. Sbc65591a)
- ✧ HIT-Main Campus, Im09/Sen39 (Harbin, Cn Sbc66231b)
- ✧ HIT-Main Campus, Grs29 (Harbin, Cn Sbc66231a)
- ✧ HIT-Main Campus, Ia34 (Harbin, Cn Sbc66231)
- ✧ Changchun University of Science and Technology PHO36

● Major Events (International, National)

Sponsored some International conferences

Conference Name	Date
2023 IEEE 3rd International Conference on Power, Electronics and Computer Applications (ICPECA)	January 29-31, 2023
2023 IEEE 2nd International Conference on Electrical Engineering, Big Data and Algorithms (EEBDA)	February 24-26, 2023
2023 IEEE International Conference on Control, Electronics and Computer Technology (ICCECT)	April 28-30, 2023
2023 IEEE 3rd International Conference on Electronic Technology, Communication and Information (ICETCI)	May 26-28, 2023
2023 IEEE 5th International Conference on Power, Intelligent Computing and Systems (ICPICS).	July 14-16, 2023
2023 IEEE International Workshop on Electromagnetics: Applications and Student Innovation Competition (IEEE iWEM2023)	July 15-18, 2023
2023 IEEE 6th International Conference on Electronic Information and Communication Technology (ICEICT)	July 21-24, 2023
2023 IEEE International Conference on Image Processing and Computer Applications (ICIPCA)	August 11-13, 2023
2023 IEEE International Conference on Sensors, Electronics and Computer Engineering (ICSECE)	August 18-21, 2023
2023 IEEE 16th International Conference on Electronic Measurement & Instruments (ICEMI2023)	August 9-11, 2023
2023 IEEE 6th International Conference on Information Systems and Computer Aided Education (ICISCAE)	September 23-25, 2023
2023 IEEE 3rd International Conference on Data Science and Computer Application (ICDSCA)	October 27-29, 2023
Seminar on Optic-Electronics High-tech Industry	November 25, 2023
2023 5th International Conference on Artificial Intelligence and Computer Applications (ICAICA)	November 28-30, 2023
2023 IEEE 11 th International Conference on Computer Science and Network Technology (ICCSNT)	October 21-22, 2023

● Major Chapter Activities;

- ✧ Membership Development (May, 2023);
- ✧ Chapter election (June, 2023);
- ✧ Organized distinguished lectures (August, 2023):

- Lecture 1: Global advances in science popularization of electronic communications and computer science fields
 Lecture 2: Emerging Wireless Technologies in the Era of 5G and Beyond
 Lecture 3: 5G/6G antenna and architecture
 Lecture 4: Reconfigurable Intelligent Surfaces for B5G/6G Communications
 Lecture 5: Intelligent Wireless Communication Technology and Antenna
 Lecture 6: Advanced Technologies and Emerging Applications in Radar Signal and Image Processing
 Lecture 7: Intelligent Flexible Sensing System
 Lecture 8: Intelligent signal processing and transmission Technologies

- ✧ A talk on High Efficiency Millimeter-wave Signal Generation and Future Prospects of Millimeter-wave Applications was given by Xiaoguang Liu from Southern University of Science and Technology (SUSTech), Shenzhen
- ✧ Prof. Dau-Chyrh Chang was invited to give a report on Title: Efficient measurement of ground user terminals and ground stations in LEO satellites
- ✧ Title: Antenna Radar Cross Section: Theory and Design by Ying Liu from Xidian University.
- ✧ Prof. Ming Liu, Xi'an Jiaotong University was invited to give a lecture on Free-standing Ferroelectric and Magnetolectric Single Crystal Membranes With Super-elasticity.
- ✧ Title: Wearable Devices EMC was given by Jianqing Wang, Nagoya Institute of Technology, Japan
- ✧ Title: RF Biosensor Technology was given by Nam-Young Kim, Kwangwoon University, Korea

- Major Student and Affinity Group Activities

Table of Seminars:

Title	Date / Location
Magnetic properties of broadened Landau levels at the saddle (or Van Hove) point energy of two dimensional lattices	July 18, 2023 Lixue Building 202 room
Functional Polymers and Their Composites under External Fields: Rheology and Applications	September 26, 2023 Mingde Building C1116 room
LDPC for SSD - From Theory to Practice	April 8, 2023 Science park 2A building 714 room
Skin like hypersensitive biosensing materials and devices	July 11, 2023 Mingde Building C1116 room
Study on cyclic deformation behavior of shape memory alloys over a wide temperature range	September 28, 2023 Science park A building 315 room
Application of Zero Sample Learning in Artificial Intelligence Large Models	April 17, 2023 Zhizao Building 318 room
Key Technologies of Underwater Fishing Robot	April 26, 2023 Zonghe Building 717 room
MINE-based (Molecular Integration Nanoscope-based) Closer Look into Materials and Beyond	October 18, 2023 Mingde Building D702 room
Phase field model for fracture and its application to composites	June 2, 2023 Science park B1 building 410 room
Design, Preparation, and Performance Characterization of Magnetic Topological Materials	May 25, 2023 Lixue Building 202 room
Transforming Vehicle Security and Mobility in Smart Cities: A Comprehensive Examination of the Abu Dhabi Case Study	August 28, 2023 Science park B1 building 501 room

- Awards

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

- Summary (as per submitted L50)

Amount	Transaction Description	Record Type
117.73	Interest Paid Interest Calculation: 12/1/2022 - 12/31/2022 @ 2.18	Revenue
-500	- OTHER REFERENCE: IA01170000001ZBA BALANCE ACCOUNT TRANSFER TO 2011306738416 0	Cost
130.46	Interest Paid Interest Calculation: 1/1/2023 - 1/31/2023 @ 2.42	Revenue
130.24	Interest Paid Interest Calculation: 2/1/2023 - 2/28/2023 @ 2.69	Revenue
500	- reverse incorrectly posted OTHER REFERENCE: IA01170000001ZBA BALANCE ACCOUNT TRANSFER TO 2011306738416	Revenue
-0.22	CB Card Transaction 8371-M951477361-15-MAR-23--0.22-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-21.55	CB Card Transaction 8371-M951477362-15-MAR-23--21.55-NINGBONINGDONGKAIYUAND-NINGBO--000000000-Lodging Hotels Motels Resorts-----0.00	Cost
155.33	Interest Paid Interest Calculation: 3/1/2023 - 3/31/2023 @ 2.86	Revenue
-1.02	CB Card Transaction 8371-M954624279-09-APR-23--1.02-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-1.12	CB Card Transaction 8371-M954624280-07-APR-23--1.12-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-1.35	CB Card Transaction 8371-M954624281-08-APR-23--1.35-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-102.31	CB Card Transaction 8371-M954544968-09-APR-23--102.31-NORTH LATITUEDS 40HOTEL-BEIJING--000000000-Lodging Hotels Motels Resorts-----0.00	Cost
-112.18	CB Card Transaction 8371-M954544969-07-APR-23--112.18-NINGBONINGDONGKAIYUAND-NINGBO--000000000-Lodging Hotels Motels Resorts-----0.00	Cost
-135.31	CB Card Transaction 8371-M954624282-08-APR-23--135.31-YANQI HOTEL-BEIJING--000000000-Eating Places Restaurants-----0.00	Cost
164.6	Interest Paid Interest Calculation: 4/1/2023 - 4/30/2023 @ 3.14	Revenue
-0.59	CB Card Transaction 8371-M959662176-19-MAY-23--0.59-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-58.82	CB Card Transaction 8371-M959705217-19-MAY-23--58.82-NINGBONINGDONGKAIYUAND-NINGBO--000000000-Lodging Hotels Motels Resorts-----0.00	Cost
1300	CBTRA IEEE Harbin Section AP-S Chapter - 2023 Annual Chapter Support	Revenue
178.13	Interest Paid Interest Calculation: 5/1/2023 - 5/31/2023 @3.27	Revenue
-1.27	CB Card Transaction 8371-M961847798-10-JUN-23--1.27-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-126.52	CB Card Transaction 8371-M961847799-10-JUN-23--126.52-NORTH LATITUEDS 40HOTEL-BEIJING--000000000-Lodging Hotels Motels Resorts-----0.00	Cost
-0.5	CB Card Transaction 8371-M962267441-13-JUN-23--0.50-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-49.87	CB Card Transaction 8371-M962267442-13-JUN-23--49.87-NORTH LATITUEDS 40HOTEL-BEIJING--000000000-Lodging Hotels Motels Resorts-----0.00	Cost
-0.14	CB Card Transaction 8371-M962925241-20-JUN-23--0.14-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-13.99	CB Card Transaction 8371-M962925242-20-JUN-23--13.99-BAIJIADAYUANCANYIN-BEIJING--000000000-Eating Places Restaurants-----0.00	Cost
-1.16	CB Card Transaction 8371-M963016979-20-JUN-23--1.16-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-115.71	CB Card Transaction 8371-M963016980-20-JUN-23--115.71-BAIJIADAYUANCANYIN-BEIJING--000000000-Eating Places Restaurants-----0.00	Cost
185.6	Interest Paid Interest Calculation: 6/1/2023 - 6/30/2023 @ 3.47%	Revenue
8657.2	CBTRA Harbin Section 2023 IEEE MGA SECTION REBATE	Revenue
205.03	Interest Paid Interest Calculation: 7/1/2023 - 7/31/2023 @ 3.61	Revenue
-0.96	CB Card Transaction 8371-M969636631-30-AUG-23--0.96-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-96.48	CB Card Transaction 8371-M969636632-30-AUG-23--96.48-NORTH LATITUEDS 40HOTEL-BEIJING--000000000-Lodging Hotels Motels Resorts-----0.00	Cost
234.64	Interest Paid Interest Calculation: 8/1/2023 - 8/31/2023 @ 3.74	Revenue
236.95	Interest Paid Interest Calculation: 9/1/2023 - 9/30/2023 @ 3.90	Revenue
-0.04	CB Card Transaction 8371-M972275176-30-SEP-23--0.04-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-0.19	CB Card Transaction 8371-M972275177-30-SEP-23--0.19-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-0.26	CB Card Transaction 8371-M972230360-30-SEP-23--0.26-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-4.25	CB Card Transaction 8371-M972275178-30-SEP-23--4.25-MISS PI 4301574-94VILLEJUIF--948000000-Bakeries-----0.00	Cost
-19.37	CB Card Transaction 8371-M972230362-30-SEP-23--19.37-SM CASINO CS369-VILLEJUIF--948000000-Grocery Stores Supermarkets-----0.00	Cost
-26.22	CB Card Transaction 8371-M972230361-30-SEP-23--26.22-SM CASINO CS369-VILLEJUIF--948000000-Grocery Stores Supermarkets-----0.00	Cost
-0.08	CB Card Transaction 8371-M972319085-01-OCT-23--0.08-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost
-0.34	CB Card Transaction 8371-M972319086-01-OCT-23--0.34-CROSS BORDER TRANS FEE---000000000-Bank Fee-----0.00	Cost

	CB Card Transaction 8371-M972316044-01-OCT-23--7.91-PRETAMANGER	
-7.91	4335952-77007 LA VALL--777000000-Fast Food Restaurants-----0.00	Cost
	CB Card Transaction 8371-M972319087-01-OCT-23--34.19-DRAGON	
-34.19	DaposEUROPE-SERRIS--777000000-Eating Places Restaurants-----0.00	Cost
	CB Card Transaction 8371-M972453915-03-OCT-23--0.04-CROSS BORDER TRANS	
-0.04	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M972453916-03-OCT-23--0.18-CROSS BORDER TRANS	
-0.18	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M972453917-03-OCT-23--4.24-MISS PI 4301574-	
-4.24	94VILLEJUIF--948000000-Bakeries-----0.00	Cost
	CB Card Transaction 8371-M972427607-03-OCT-23--17.86-SM CASINO CS369-	
-17.86	VILLEJUIF--948000000-Grocery Stores Supermarkets-----0.00	Cost
	CB Card Transaction 8371-M972508254-04-OCT-23--11.50-CGF17517PRAD2	
-11.5	4033737-75PARIS--755710000-Fast Food Restaurants-----0.00	Cost
	CB Card Transaction 8371-M972508253-04-OCT-23--0.12-CROSS BORDER TRANS	
-0.12	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M972796148-07-OCT-23--1.53-CROSS BORDER TRANS	
-1.53	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M972796149-06-OCT-23--1.60-CROSS BORDER TRANS	
-1.6	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M972796150-07-OCT-23--152.67-LA VOUTE-UZES--	
-152.67	307000000-Eating Places Restaurants-----0.00	Cost
	CB Card Transaction 8371-M972748571-06-OCT-23--160.42-DU NORD AU SUD-	
-160.42	GORDES--842200000-Fast Food Restaurants-----0.00	Cost
	CB Card Transaction 8371-M972870280-09-OCT-23--0.06-CROSS BORDER TRANS	
-0.06	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M972866079-09-OCT-23--0.11-CROSS BORDER TRANS	
-0.11	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M972866080-09-OCT-23--0.85-CROSS BORDER TRANS	
-0.85	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M972870281-09-OCT-23--6.27-NEG 0406 MESTRE	
-6.27	CORSO DE-VENEZIA--301720000-Grocery Stores Supermarkets-----0.00	Cost
	CB Card Transaction 8371-M972866081-09-OCT-23--10.71-INTERSPAR 6-VENEZIA-	
-10.71	-301740000-Grocery Stores Supermarkets-----0.00	Cost
	CB Card Transaction 8371-M972870282-09-OCT-23--85.18-FLB MESTRE VENEZIA-	
-85.18	VENEZIA--000000000-Eating Places Restaurants-----0.00	Cost
	CB Card Transaction 8371-M972981952-10-OCT-23--0.91-CROSS BORDER TRANS	
-0.91	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M972981953-10-OCT-23--91.48-CAFFE FLORIAN SACR-	
-91.48	VENEZIA--301240000-Bars Cocktail Lounges Discotheques etc.-----0.00	Cost
	CB Card Transaction 8371-M973073030-11-OCT-23--0.07-CROSS BORDER TRANS	
-0.07	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M973009647-11-OCT-23--0.40-CROSS BORDER TRANS	
-0.4	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M973073031-11-OCT-23--7.33-AUTOGRILL 7179-	
-7.33	NOVENTA DI PI--300200000-Eating Places Restaurants-----0.00	Cost
	CB Card Transaction 8371-M973009648-11-OCT-23--40.15-AUTOGRILL 7179-	
-40.15	NOVENTA DI PI--300200000-Eating Places Restaurants-----0.00	Cost
	CB Card Transaction 8371-M973353338-13-OCT-23--0.13-CROSS BORDER TRANS	
-0.13	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M973218775-13-OCT-23--0.15-CROSS BORDER TRANS	
-0.15	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M973218776-13-OCT-23--0.15-CROSS BORDER TRANS	
-0.15	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M973353339-14-OCT-23--0.15-CROSS BORDER TRANS	
-0.15	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M973218777-13-OCT-23--0.17-CROSS BORDER TRANS	
-0.17	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M973353340-14-OCT-23--0.30-CROSS BORDER TRANS	
-0.3	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M973354593-13-OCT-23--1.15-CROSS BORDER TRANS	
-1.15	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M973212283-13-OCT-23--12.91-CONAD-ROMA--	
-12.91	001850000-Grocery Stores Supermarkets-----0.00	Cost
	CB Card Transaction 8371-M973212282-13-OCT-23--14.90-EMPORIO DEL GRANO-	
-14.9	VENEZIA--301730000-Duty Free Stores-----0.00	Cost
	CB Card Transaction 8371-M973354592-13-OCT-23--14.90-R056 DECANTO	
-14.9	CAFFETTE..-VENEZIA--301730000-Duty Free Stores-----0.00	Cost
	CB Card Transaction 8371-M973353341-14-OCT-23--15.31-BINARIO ZERO-ROMA--	
-15.31	001850000-Fast Food Restaurants-----0.00	Cost
	CB Card Transaction 8371-M973218778-13-OCT-23--17.13-EMPORIO DEL GRANO-	
-17.13	VENEZIA--301730000-Duty Free Stores-----0.00	Cost
	CB Card Transaction 8371-M973212281-14-OCT-23--29.57-RISTORANTE JING-	
-29.57	ROMA--001850000-Eating Places Restaurants-----0.00	Cost
	CB Card Transaction 8371-M973353342-13-OCT-23--115.47-BINARIO ZERO-ROMA-	
-115.47	-001850000-Fast Food Restaurants-----0.00	Cost
	CB Card Transaction 8371-M974017788-24-OCT-23--0.81-CROSS BORDER TRANS	
-0.81	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M974017789-24-OCT-23--81.24-NORTH LATITUEDS	
-81.24	40HOTEL-BEIJING--000000000-Lodging Hotels Motels Resorts-----0.00	Cost
248.17	Interest Paid Interest Calculation: 10/1/2023 - 10/31/2023 @ 3.97	Revenue
	CB Card Transaction 8371-M974603618-01-NOV-23--0.49-CROSS BORDER TRANS	
-0.49	FEE---000000000-Bank Fee-----0.00	Cost
	CB Card Transaction 8371-M974583888-01-NOV-23--48.67-NORTH LATITUEDS	
-48.67	40HOTEL-BEIJING--000000000-Lodging Hotels Motels Resorts-----0.00	Cost
	CB Card Transaction 8371-M975891666-21-NOV-23--2.93-CROSS BORDER TRANS	
-2.93	FEE---000000000-Bank Fee-----0.00	Cost

• ART B - ORGANIZATIONAL ACTIVITIES

- Supporting to form new chapters and student branches

B.1 Membership Development Activities

- Total number of active members in the past 3 years. More than 1500
- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members
 - ✧ Invited many scholars, Young Professional professors and Women in Engineering from many university (Dalian Maritime University, Northeast University, Harbin Engineering University, Heilongjiang University and Harbin University of Science and Technology, etc) to attend the virtual meetings, the topic of meetings are listed as below:
 1. About IEEE and IEEE policies (July 2023; Hosted by IEEE Harbin Section Secretary Prof. Guohui Yang)
 2. IEEE Scope boundaries (September 2023; Hosted by IEEE Harbin Section Secretary Prof. Guohui Yang)
 3. About IEEE Virtual & Hybrid Events (October 2023; Hosted by IEEE Harbin Section Vice President Prof. Qun Wu)
 4. How to join IEEE (October 2023; Hosted by IEEE Harbin Section Vice President Prof. Qun Wu)
 5. How to write high quality paper (November 2023; Hosted by IEEE Harbin Section Prof. Kuang Zhang)

B.2 Chapter Activities

- Total number of Chapters in the Section
 - ✧ Up to now, the Harbin Section has 15 chapters including the joint chapter.
- Number of Chapters formed in the current year
- Number of active Chapters (Chapters who have reported required number of meetings during the year)
 - ✧ There are 15 chapters are active.
- Summary of Chapter activities (Chapter wise with attachment table/information)
 - ✧ Organized several technical activities
 - ✧ Help to organize the international conference
 - ✧ Organized several lectures and tutorials.
 - ✧ Organized members to serve as review for some conferences and journals
 - ✧ Organized members to serve as editors for some journals
 - ✧ Organized the technical activity title: Recent advances in magnetoelectric dipole antenna technologies for microwave and millimeter-wave applications
 - ✧ Organized the technical activity title: Metasurface antennas and their applications

In addition, for 2023, some fund has been used for

- (1) We will hold academic lectures periodically and release relevant information on social media and our website.
- (2) We desire to jointly hold international conferences and increase the opportunities for scholarly communication.
- (3) Our recruitment and lecture advertisement needs to be printed on posters and put up in the universities to attract students and graduate members.
- (4) We plan to design a new logo and souvenir T-shirts for our present and new members. Also, those long-term members are encouraged to apply for Senior Member or Fellow.
- (5) To motivate the teachers and students, we want to send gifts to our invited speakers and the groups with many new members.
- (6) We support students to organize activities independently. We hope the graduate students can exchange their ideas face-to-face.
- (7) Will organize academic event together with IEEE ComSoc IoT-AHSN TC in 2023.
- (8) Will sponsor the activities held by Young Scholar Associations in the School of Electronics and Information Engineering of Harbin Institute of Technology.

We held series of lectures and invited 14 recognized scholars to give talk, like Dusit Niyato, Shiwen Mao, Sumei Sun, Yonghui Li. (600 USD)

We co-hosted Balong Academic Forum with Huawei Hisilicon, which attracted many graduate students to participate. (400 USD)

We sponsored some PhD candidates to attend international conferences, like ICC and Globecom. (300 USD)

We support the graduate students to organize academic activities. (200 USD)

On February 23, 2023, chapter held the second online seminar. Professor Yong-liang Zhang is invited to give the speech, who is from the Inner Mongolia University. Professor Zhang introduced an AI optimization algorithm, which will be applied to search the geometric parameters that meet the design specifications of microwave filter. Compared to traditional design method, the use of AI to optimize filters saves time and improves efficiency. Through this academic seminar, a good relationship is established between our chapter and the team of Professor Zhang, and further promote the development of the APS chapter.

On March 28, 2023, chapter held the first academic seminar. Professor Cong Wang is invited to give the speech, who is from the Harbin Institute of Technology. Professor Wang introduced the microwave RF TFIPD chip that integrate filtering, harmonic suppression, phase regulation and impedance conversion, which based on the optimized high-performance capacitors and inductors. Through this seminar, a closer cooperation between the chapter members and the team of Professor Wang are set up, and effectively promote the development of the APS chapter.

On July 14, 2023, chapter held the second in-person academic seminar. Professor Kun Li is invited to give the speech, who is from the University of Electro-Communications, Japan. Dr. Li introduced the traditional over the-air (OTA) evaluation methods for wearable antennas, and then illustrate test schemes for MIMO antenna channel capacity and signal bit error rate, taking into account both the dynamic effects of the human body and multipath propagation effects. Through the seminar, a cooperative intention is established between the chapter members and Dr. Li, and effectively promote the development of the APS chapter.

On November 25, 2023, chapter held the third in-person academic seminar. Professor Yong-liang Zhang is invited to give the speech, who is from the Inner Mongolia University. Professor Zhang introduced the research on novel device design of wireless communication front-end and optimization algorithm, which effectively improve the efficiency and accuracy of electromagnetic simulation. This is the second lecture given by Professor Zhang, and the cooperation between our chapter and the team of Professor Zhang is enhanced, and further promote the development of the APS chapter.

On December 16, 2023, chapter held the forth in-person academic seminar. Professor Qing-sheng Zeng is invited to give the speech, who is from the Nanjing University of Aeronautics and Astronautics. Professor Zeng introduced the design of low frequency terahertz antenna reflection array that based on scaling theory, which can effectively improve the gain. Through this seminar, a cooperation between the chapter members and the team of Professor Zeng is established, and effectively promote the development of the APS 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

- ✧ Workshop on LaTeX
- ✧ Workshop on Matlab
- ✧ Membership Development Boot Camp
- ✧ Distinguished lecture 1: Multifunctional electromagnetic metasurface and metagrating
- ✧ Distinguished lecture 2: Theory and Applications of Measurement-Computation Integration
- ✧ Distinguished lecture 3: Advances in Computational Electromagnetics: Theory, Design, and Applications
- ✧ Distinguished lecture 4: Machine learning for Electromagnetic modeling and optimization

B.4 Students Activities

- Total number of Student Branches in the Section 4
- Number of Student Branches formed in the current year 1
- Section level student activities (student congress, paper and other contests, awards etc) :
- ✧ 4 students excellent paper award
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year) 4

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

Title	Date
IEEE Student Branch organized a seminar on discussion -Decoupling for MIMO antennas	April 2023
How to use Latex to format the conference paper	May 2023
Discussion on avoid the plagiarism problems of paper	May 2023
Organized a tutorial on introduction Matlab	July 2023
Workshop on Academic journal paper writing and journal submission skills	September 2023
Sharing of scientific research learning experience	October 2023
Webinar on LaTeX Skills Training	October 2023
Lecture on to design the oral session PPT and poster	November 2023
Training on to be volunteer in international conference	November 2023
Conducted the contest on Electronic Design Competition	December 2023

B.5 Affinity Group Activities

- Young Professional (YP):
- Organized the workshop in school to encourage women and young scholars in engineering
- Co-sponsored to iWEN2023
- Women in Engineering (WIE)
 - ✧ Please find B.1 in this file. Some Promotional lectures or virtual meetings about IEEE were held.
- Life Member no

B.6 Awards & Recognition Activities

- Award constituted by the Section:
 - ✧ IEEE Harbin Section sponsored or technical supported several international conferences, in some conferences best paper awards, best oral paper awards, best poster awards were constituted.
 - ✧ Electronic design contest was held; the rankings were constituted.
 - ✧ Outstanding Section Membership award.
 - ✧ Outstanding Chapter award
- Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year
 - ✧ IEEE Harbin Section team received a Gold award for membership development in 2021.
 - ✧ Prof. Kuang Zhang, the chair for Young Professional Affinity Group, Harbin section won an award from IEEE for notable services and contributions towards the advancement of IEEE and the engineering profession during the 2016-2018.
 - ✧ Prof. Jiahui Fu, won an award for outstanding achievement in member recruitment for the Harbin section during the 2018 membership year, which is recognized by the IEEE member recruitment and recovery committee.

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):
- Other means of contacts with Section members including social media

B.8 Industry Relations

- Membership growth and retention
- Activities for/with industrial members
 - ✧ CETC Key Laboratory of Data Link Technology
 - ✧ Afford the exhibition opportunities to the industries.

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs. No
- SIGHT Activities No

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)” No
 - ✧ IEEE Member luncheon was organized (August, 2023)
 - ✧ IEEE Harbin Section Establishment day celebration (September 20, 2023)

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.)
 - ✧ Invited member as conference peer reviewer.
 - ✧ Afford the fee concession when member publish papers on IEEE conference
 - ✧ Introduce the opportunities for member to deliver invited speeches and keynote speeches on international conference.
 - ✧ Attend the international conference as listeners for free.
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)
 - ✧ Help to recruit new member.
 - ✧ Help to organize the activities
 - ✧ Give the lecture to member or student branch
 - ✧ Afford technical support
 - ✧ Serve as volunteer in activities

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections:
 - ✧ Worked with Beijing Section and Nanjing Section
 - ✧ Intend to work with Xi'an Section in 2024.
- Joint activities with any other Section:

- ◇ Held an international conference with IEEE Beijing Section and signed cross endorsement for Beijing Section; afford technical support to other sections;

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)

- ◇ Regular organization of technical activities
- ◇ Establish the new chapters
- ◇ Maintaining active student branches
- ◇ Held international conferences

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

- ◇ Recruit more membership
- ◇ Organize more technical activities
- ◇ Sponsor international conferences
- ◇ Increasing training to members

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.

- ◇ Search for Golden/ Silver sponsors to afford the financial sponsorship to conference
- ◇ Organize membership bootcamps