

## 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

Position Description	First Name	Last Name
Chair	Xiao-Hu	Yu
Educational Activities	Wu	Zhenyang
Fellows	Da	Fang
Membership Development	ZHENG	BAOYU
Professional Activities	Jinlong	Wang
	Wei	Hong
Secretary	Zhiwen	Pan
Treasurer	Bao-Yun	Wang
Vice Chair	Xiqi	Gao
	Yuhui	Shi
	Zhi-Hua	Zhou

- Section Highlights
- Major Events (International, National)
  - ◆ Developments of flux-switching brushless machines in EV/HEV drives - NANJING IA34/PE31 CHAPTER 05-December-2014
  - ◆ Performance Limits of Massive MIMO Systems - NANJING SP01 CHAPTER 11-December-2014
  - ◆ Reconfigurable Water Antennas - NANJING AP03/MTT17/EMC27 CHAPTER 24-December-2014
  - ◆ CS-Nanjing Chapter Technical Seminar 10 - NANJING C16 CHAPTER 25-December-2014
  - ◆ CS-Nanjing Chapter Technical Seminar 11 - NANJING C16 CHAPTER 30-December-2014
  - ◆ Wireless Power Transmission: History, Technologies, and Future - NANJING AP03/MTT17/EMC27 CHAPTER 30-December-2014
  - ◆ Distinguished lecture presented by Robert Gao - NANJING IM09 (JT. NANJING/SHANGHAI/WUHAN) CHAPTER 22-July-2014
  - ◆ Short-Open Calibration (SOC) Technique for Numerical De-embedding of Planar Microwave Circuits - NAN 30-July-2014
  - ◆ Challenges of the Integration of Millimeter Wave Power Amplifier Using Nanometer Silicon Technologies 25-August-2014
  - ◆ Research on fly-wheel based powertrain system in hybrid electric vehicles - NANJING IA34/PE31 CHAPTER 26-August-2014
  - ◆ CS-Nanjing Chapter Technical Seminar 5 - NANJING C16 CHAPTER 18-September-2014
  - ◆ CS-Nanjing Chapter Technical Seminar 6 - NANJING C16 CHAPTER 19-September-2014
  - ◆ Invited talk given by Prof. Ruqiang Yan - NANJING IM09 (JT. NANJING/SHANGHAI/WUHAN) CHAPTER 26-September-2014
  - ◆ an optimization algorithm based on brainstorming process - NANJING CIS11 CHAPTER 13-October-2014
  - ◆ Classifier Ensembles for Invariant Image Identification Using Pareto Optimal Features - NANJING CIS11 17-October-2014
  - ◆ Defining the next level of Design - NANJING AP03/MTT17/EMC27 CHAPTER 18-October-2014

- ◆ brain storm optimization algorithm and developmental learning - NANJING CIS11 CHAPTER 21-October-2014
- ◆ an introduction to brain storm optimization algorithm - NANJING CIS11 CHAPTER 22-October-2014
- ◆ Disruptive Changes in the Paradigms for Electrical Machines and Electrical Drives - NANJING IA34/PE31 21-October-2014
- ◆ Joint Baseband and RF Design for Millimeter-Wave Communication Systems - NANJING AP03/MTT17/EMC27 CHA 03-January-2014
- ◆ CS-Nanjing Chapter Technical Seminar 1 - NANJING C16 CHAPTER 04-January-2014
- ◆ CS-Nanjing Chapter Technical Seminar 2 - NANJING C16 CHAPTER 09-January-2014
- ◆ quantum effect in nanophotonics - NANJING AP03/MTT17/EMC27 CHAPTER 24-February-2014
- ◆ How to write the scientific article - NANJING AP03/MTT17/EMC27 CHAPTER 26-February-2014
- ◆ Impact of renewable energy resources on protection - NANJING IA34/PE31 CHAPTER 27-February-2014
- ◆ Actual situation & strategy of renewable in Germany - NANJING IA34/PE31 CHAPTER 27-February-2014
- ◆ Actual situation & strategy of renewable in Germany Resulting changes in the transmission system & i 27-February-2014
- ◆ System considerations / Decoupling of renewable in case of faults - NANJING IA34/PE31 CHAPTER 27-February-2014
- ◆ Low-cost smart antennas for advanced wireless systems - NANJING AP03/MTT17/EMC27 CHAPTER 08-April-2014
- ◆ THz electronics and Field Theory - NANJING AP03/MTT17/EMC27 CHAPTER 22-April-2014
- ◆ Advances in EM Optimization - NANJING AP03/MTT17/EMC27 CHAPTER 22-April-2014
- ◆ Rethink to Metamaterial-based Antennas: from concepts to designs - NANJING AP03/MTT17/EMC27 CHAPTER 22-April-2014
- ◆ Challenges and Opportunities of RF Wireless Power Transmission - NANJING AP03/MTT17/EMC27 CHAPTER 23-April-2014
- ◆ Research on Si CMOS RF/mmWave IC - NANJING AP03/MTT17/EMC27 CHAPTER 29-April-2014
- ◆ Introduction of R&D activities on Terahertz technologies at NICT - NANJING AP03/MTT17/EMC27 CHAPTER 09-May-2014
- ◆ Theoretical Overview and Practical Examples of the Electromagnetic Field Simulation Package FEKO - NA 13-May-2014
- ◆ CS-Nanjing Chapter Technical Seminar 3 - NANJING C16 CHAPTER 22-May-2014
- ◆ 2014 National Young Scholar Forum on Machinery Fault Diagnosis - NANJING IM09 (JT. NANJING/SHANGHAI 23-May-2014
- ◆ Advances in Modeling and Optimization Techniques for High-Frequency Electronic Design - NANJING AP03/ 23-May-2014
- ◆ Antenna technology extends capacity in future wireless communication & Talking about the antenna tech 30-May-2014
- ◆ CS-Nanjing Chapter Technical Seminar 4 - NANJING C16 CHAPTER 05-June-2014
- ◆ A Compact Dual-Band Array Design Using Printed Dipoles - NANJING AP03/MTT17/EMC27 CHAPTER 12-June-2014
- ◆ Battery capacity estimation and Battery charging in electric vehicle applications - NANJING IA34/PE31 16-June-2014
- ◆ Workshop on Wind Turbine Condition Monitoring - NANJING IM09 (JT. NANJING/SHANGHAI/WUHAN) CHAPTER 21-June-2014
- ◆ CURENT's Reconfigurable Grid Emulator and Power Electronics Research at The University of Tennessee 25-June-2014
- ◆ The development trend and the technical challenges of RFIC - NANJING AP03/MTT17/EMC27 CHAPTER 26-June-2014
- ◆ Advanced Off-Shore Wind Generator Technology - NANJING IA34/PE31 CHAPTER 27-June-2014
- ◆ Development of Electronically Tunable Filters for Modern Wireless Communications - NANJING AP03/MTT1 02-July-2014
- ◆ Inaugural Chinese Workshop on Evolutionary Computation and Learning (ECOLE'14) - NANJING CIS11 (HEF 04-July-2014
- ◆ 3D microwave: The breakthrough in output power of semi-conductor power amplifier for 3 dimension comb 23-October-2014
- ◆ CS-Nanjing Chapter Technical Seminar 7 - NANJING C16 CHAPTER 27-October-2014
- ◆ CS-Nanjing Chapter Technical Seminar 8 - NANJING C16 CHAPTER 28-October-2014

- ◆ Talk on Learning Tools for Big Data Analytics - NANJING SP01 CHAPTER 28-October-2014
- ◆ Technically supported 2014 Annual meeting of Jiangsu Instrument & Control Society - NANJING IM09 (JT. 31-October-2014
- ◆ The 2014 International Workshop on Nature Inspired Computation and Applications - NANJING CIS11 (HEFE 03-November-2014
- ◆ Nature Inspired Optimization Techniques and Their Application to Antenna Design - NANJING AP03/MTT17/ 03-November-2014
- ◆ Surface Plasmon Resonant Scattering in Metal-Coated Dielectric Nanocylinder Systems - NANJING AP03/MT 03-November-2014
- ◆ Talk on Designing LDPC Decoders with High Throughput and Excellent Error Performance - NANJING SP01 C 13-November-2014
- ◆ Reconfigurable Antennas for Digital Data Communication Systems - NANJING AP03/MTT17/EMC27 CHAPTER 13-November-2014
- ◆ Transformation Electromagnetics and Metamaterials for Antenna Engineering - NANJING AP03/MTT17/EMC27 23-November-2014
- ◆ CS-Nanjing Chapter Technical Seminar 9 - NANJING C16 CHAPTER 24-November-2014 Show
- ◆ Techniques for Synthesizing Artificial Dielectrics for Lens and Reflectarray Designs - NANJING AP03/M 27-November-2014
- ◆ High-power Power Electronic Converter Technology - NANJING IA34/PE31 CHAPTER 01-December-2014
- ◆ Talk on 5G Wireless Channel Models - NANJING SP01 CHAPTER 03-December-2014
- ◆ IMS student branch chapter with Southeast university kick-off meeting - NANJING IM09 (JT. NANJING/SHA 05-December-2014
- ◆ Smart antennas for space-borne synthetic aperture radars - NANJING AP03/MTT17/EMC27 CHAPTER 05-December-2014

- Major Chapter Activities
- Major Student and Affinity Group Activities
- Awards

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

- Summary (as per submitted L50)
- Any other financial activities

## **PART B - ORGANIZATIONAL ACTIVITIES**

### **B.1 Membership Development Activities**

- Total number of active members in the past 3 years.  
Total number of active members in 2012, 1768  
Total number of active members in 2013, 2034  
Total number of active members in 2014, 2248
- 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  
There are two sub-sections and 19 chapters in Nanjing Section.
- Number of Chapters formed in the current year  
One chapters formed
- 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)  
19 active chapters

### **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

## **B.4 Students Activities**

- Total number of Student Branches in the Section  
There are 9 student branches in Nanjing Section.
- Number of Student Branches formed in the current year  
One student branch formed
- 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)  
9 active student branches
- 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

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

- Award constituted by the Section
- Award(s) received from R10
- Award(s) received from IEEE HQ

## **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

## **B.8 Industry Relations**

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

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

## **B.10 Community Activities**

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

## **PART C - OTHERS**

### **C.1 Special Events**

### **C.2 Relationship with National Societies**

### **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**

### **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**

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