

Preface

Since 1998, the student recruiting of the Chinese universities has been expanded greatly as the higher education in China has been developed rapidly. Now, the new undergraduate enrollment increases more than 20% each year, and the number of university students has hit the 20-million mark. China has become the world's number one educational power in terms of the numbers of students and teachers. With the dramatic increase in the enrollment of students, however, teachers and other resources in universities are still relatively under developed. The improvement of higher education quality becomes an increasingly important issue. For this purpose, since 2000, the Ministry of Education has formulated quite a lot of documents adopting a series of measures to fully implement the "quality engineering". In particular, two Teaching Steering Committees were set up, in 2001 and 2006 respectively, in order to provide guidance and implementation of "quality engineering" to universities. The undergraduate Teaching Steering Committee of 2006-2010 includes thirty-eight sub-Committees. Many of the sub-committees consist of several sub-subcommittees. The College Electronic and Electrical Basic-Course-Teaching Steering Sub-Committee of the Ministry of Education is one of six Sub-Committees of the College Electronic Information and Electrical Courses Teaching Steering Committee of the Ministry of Education.

In June 2010, the CPC Central Committee Political Bureau deliberated and passed a "national long-term education reform and development program (2010-2020)" (called the "development program"). The "development program" has explicitly set up the task and requirement for the China's high education reform, that is to enhance teaching quality, to improve the quality of personnel training, to raise the scientific level, and to strengthen social services capacity and optimization the structure for characterization. Obviously, for the National Education Workers, this is a great mission given by the Party Central Committee. And it provides an excellent historical opportunity for the development of China's high education.

Under the guidance of the College Electronic and Electrical Basic-Course-Teaching Steering Sub-Committee of the Ministry of Education, the Higher Education Institutions Electronic and Electrical Basic-Course-Teaching Association of the Ministry of Education of the People's Republic of China in Middle-south Area of China works hard and organizes an academic meeting every year. With the joint efforts of the key members of the association and all the teachers, the colleges and universities in Middle-South Area of China are making great progress in the reform of the teaching methods and experimental teaching. The association has become a powerful force in promoting our country's electrical and electronic basic-courses teaching reform, teaching materials, and laboratory construction.

From the 28th to 31st of July 2010, the Higher Education Institutions Electronic and Electrical Basic-Course-Teaching Association of the Ministry of Education of the People's Republic of China in Middle-south Area of China hold the 20th academic annual meeting in Zhenzhou University of Light Industry Henan province.

(Co-sponsored by College of Electric and Information Engineering in Zhenzhou University of Light Industry and the Department of Information Engineering in Huanghe Science and Technology College). On this academic annual meeting, participants listened to the invited speeches by several well-known academicians and national experts, and also the report of the electronic design contest that the association organized earlier. Opinions and ideas about the reform and development of Electronic and Electrical Basic-Course theory teaching and the practice teaching were fully exchanged. A large number of valuable suggestions about how to construct higher quality courses and compile better teaching materials also have been made. After careful preparation of many teachers of colleges and universities in Middle-south Area of China, a series high quality papers on the theoretical and experimental teaching reform and also on the electronic design contest were written, peer-reviewed, and are now published by Rinton Press in the two-volume proceedings. The results of the papers presented here are not only the latest achievements on the electronic information science and electrical information class-based teaching and practice, but also important references on how to improve the quality of basic ideas and important initiatives in higher education of China.

The proceedings also witnessed the interaction among colleges and universities in the Middle-south Area of China, enhanced the exchanges with the classroom teaching and the practices such as experiments and contents. Therefore, the proceedings played a positive role to improve and strengthen electrical and electronic basic courses teaching system, train innovative engineered talents and establish practical teaching system. It is not only conducive to further development of the electronic information science and electrical information class-based teaching-research in Middle-South Area of China, but also a good reference to teaching of the College Electronic and Electrical Basic-Course-Teaching Steering Sub-Committee of the Ministry of Education and colleges, universities nationwide.

Under the new historical situation and period background, the long-term unremitting efforts and solid work of the Higher Education Institutions Electronic and Electrical Basic-Course-Teaching Association of the Ministry of Education of the People's Republic of China in Middle-south Area of China will surely further promote the implementation of "national long-term education reform and development program (2010-2020)", and achieve the strategies and development goals proposed at national education conference, and play a remarkable active role.

Last but not the least, I would like to pay high tribute to the Higher Education Institutions Electronic and Electrical Basic-Course-Teaching Association of the Ministry of Education of the People's Republic of China in Middle-South Area of China. I would like to thank Professor GAN Liang Cai and his team for their excellent work in running the association and organizing the meeting in particular. I would like to offer my heartfelt congratulations to the success of the annual meeting, and the publication of the conference proceedings.

**The College Electronic and Electrical Basic-Course-Teaching Steering
Sub-Committee of the Ministry of Education, Chairman
Wang Zhi Gong
September 23 2010 in Nanjing**

