

Message from the Chairs

It is our honor to welcome you to The 2012 International Conference on Advanced Technologies for Communications (ATC 2012) co-organized by The IEEE Communications Society, The Radio-Electronics Association of Vietnam, and Le Quy Don Technical University. This is the 5th in the series of conferences about which there are several special points. After 4 years traveling from Hanoi to Hai Phong, Ho Chi Minh City and Da Nang the Conference is now back again to Hanoi, where the first one was held in 2008. The Conference will run from October 10th to 12th in parallel with the liberation anniversary of Hanoi. In October 10th 58 years ago, Hanoi was liberated from the French colony, opening a new era for Vietnam. You will have a good opportunity to enjoy the glorious atmosphere of the 1002 year-old city with a lot of cultural and sport activities. The Conference is also marked as an activity to celebrate the 46th anniversary of Le Quy Don Technical University on the 28th October.

This year the Conference received 139 submissions from 12 countries. This submission number is increased compared to the last year reflecting the growing popularity of the conference. From these submissions, the technical committee has carefully selected 79 papers for oral presentation at 17 technical sessions. The acceptance rate of 57% is 4% lower than that of the last year to maintain the conference quality. The conference is also honored to receive 4 experts to deliver keynote speeches. The first two speeches focus on information theoretical aspects of communications. In the first talk titled *Chaotic Communications: The Past, The Present and The Future*, Prof. Francis C.M. Lau of The Hong Kong Polytechnic University, will provide a review on chaotic phenomenon with applications to communications and will discuss the future research direction of chaotic communications. Next, a co-founder of Network Coding Theory, Prof. Raymond Yeung from The Chinese University of Hong Kong will offer a speech with the title *Network Coding: An Overview*, introducing recent developments in network coding and their evolution to a new information infrastructure. The next two keynote speeches address important implementation issues of communication systems and integrated circuit design. In his talk *Development of Space-Domain Signal Processing for Wireless Communications*, Prof. Yasutaka Ogawa from Hokkaido University, Japan, presents key theory on spatial signal processing and its application to a space-division multiple access (SDMA) design for the Personal Handy-phone System in Japan. The last speech by Prof. Suzanne Lesecq from CEA-LETI, MINATEC Campus, France, with the title *Local (V,T) Estimation in Integrated Circuits Using a Set of Statistical Tests* introduces an important problem of estimating the supply voltage and the temperature in integrated circuits in order to achieve increased computational performance at low power consumption. It is unfortunate that Prof. Mérouane Debbah of SUPELEC, France, accepted our invitation to deliver a keynote speech on wireless security, but could not come in the last minute due to a personal reason.

This year, a part from the main program, the Conference also features a special session on the emerging topic of Network Coding co-organized by Prof. Nguyen Linh-Trung of Vietnam National University, Hanoi and Prof. Pierre Duhamel of SUPELEC, France. There is also another *REV workshop* gathering policy makers and researchers to discuss different aspects of information security. The Conference is also honored to host the COMSOC East Asia Sister Society Summit organized by Dr. Roberto Saracco. The ATC conference is proud to be an important example of the successful cooperation between the IEEE Communications Society and its Sister Societies.

In order to make the Conference a sustained success, there has been a great effort from the Organizing Committee. We would like to thank the members for their time and devotement. Finally, we would like to thank all the authors and conference attendees for their participation. We hope that all of you will find your time with the Conference a valuable experience.

ATC 2012 conference co-Chairs,



Prof. Nguyen Hong Vu
*The Radio Electronics Association of
Vietnam*



Dr. Saracco Roberto
Telecom Italia, Italy



Prof. Xuan Nam Tran
Le Quy Don Technical University