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Welcome message from the Technical Chairs

Dear Colleagues,

On behalf of members of the Scientific and Technical Program Committees, Omsk State Technical University it is an honor and pleasure to invite you to participate in the 2015 International Siberian Conference on Control and Communications. We believe the SIBCON is so special for Siberia among these premier-class international conferences, because it is biannually providing opportunities for exchanging information and ideas in control and communications.

This year the Conference has new venue – Omsk. We welcome all of you to Omsk and to Siberia. Omsk was the capital of Siberia for some years and it is proud of its traditional art and cultural heritage. It has some of the *most* interesting cultural sites in Siberia. We are sure you will enjoy visiting in Omsk as well as attending the Conference.

Tomsk IEEE Joint Chapter, been established in 2000, has proposed SIBCON conference with the support of the IEEE Electron Devices Society to address interconnect issues from both fundamental materials viewpoints as well as system-level perspectives.

This SIBCON we received a record number of 672 paper submissions among which 508 papers will be presented in oral form in 11 sessions. This year's program is the culmination of a rigorous selection procedure: the acceptance ratio is 32 %. Thus we believe the quality of the papers is high. At the first time, technical Program Committee consists of a balanced mix of both of industry and academia, and as a result, the technical program should interest both industry and academia.

Along with the exciting conventional conference programs, we have prepared the great quality plenary talks, panel discussions, tutorials, normal technical papers, student design contest, an event called an industry program. It is our firm belief that SIBCON will play an important role in establishing a milestone and a new direction in our effort to push forth the design industry. More than 15% of the submissions came from the industry, which indicates their interest in the conference. The unique industry program prepared by National Instruments R&D is intended to have attendees share an industry trend and information on cutting-edge product chips. The presentations in the program will include demos of the actual products. So, the motto of our Conference is "Renaissance of academy and industry during dark day season". Some of the sessions will include tutorials and invited papers on topics of current interest to our audience.

The selected papers are organized in three parallel tracks of Sessions made of 15 papers grouped around the traditional topics of SIBCON, namely: The Fundamental Problems of Communication and Control Theory; Radiophysics; Radar, Microwaves, and Antennas; Control of the Large-Scale Systems; Control of the Electro-Mechanical Systems; Nanotechnology; Semiconductor Materials, Sensors, and Electron Devices; National Instruments for Education, Science, and Industry. There are 3 invited speakers who will deliver plenary talks. In addition to these plenary invited papers, there are 3 additional invited speakers who are part of the SIBCON program and who will address NI and AWR seminars, and seminar on the joint grant programs with USA and Canada. The conference program is completed with a post-conference day including several sessions and social program. To complement the formal talks, we have arranged evening rump sessions on interesting and provocative subjects to give you an opportunity to participate in the discussions with international participants.

The excellent program owes very much to the outstanding efforts of the Technical Program Committees, under the excellent leadership of the General Chairman, Prof. Anatoly V. Kosykh, and Chair of Steering Committee, Olga I. Babenko. The Committees, Tomsk-Krasnoyarsk participants, reviewers, constituted of leaders in the topics of interests, have achieved outstanding work to solicit strong papers, and to select and organize the attractive technical sessions. We especially thank the members of our Technical Program Committee for their diligent efforts, the authors of the technical papers for their high-quality submissions. We would like to express our deep appreciation to all the contributors who help make this Conference successful and keep the event up to a premier international standard. We hope you will fully enjoy this international Conference particularly and the friendships among top experts, and hope you keep Proceedings in your library, which may be of use for you and your colleagues on future researches. The official website of SIBCON has been operational since the year of 2000. You may visit this site to obtain more information including the event.

Finally, we hope that this meeting provides a stepping stone for the universal realization of high level knowledge society which is contributing to a better life for people, and an opportunity for all of us to cooperate as a friend to achieve that goal.

Next year, the Conference will be held in Moscow, together with the National Instruments Days. We hope you will attend.

Oleg V. Stukach Tomsk Polytechnic University

Vasily S. Panko Siberian Federal University