# Message from the General Chair

On behalf of the MSE organizing committee, we are very pleased to welcome you to Banff, Canada for the 2017 IEEE International Conference on Microelectronic Systems Education (MSE '17) on May 11-12, 2017. Since 1997, MSE has aimed to provide a venue for university educators and industry partners to share ideas and experiences in the design, implementation, and testing of microelectronic systems from a teaching perspective. While MSE is held during odd years, our European partner conference, the European Workshop on Microelectronics Education (EWME), is held in even years.

Similar to the previous edition, MSE is co-organizing with the Great Lakes Symposium on VLSI (GLSVLSI). It is our hope that some of the attendants of the educational conference can spark conversations through the technical discussions and hopefully inspire new teaching techniques in classrooms.

MSE is the premier international forum for the presentation of teaching and education practices in microelectronics systems. This year is no different thanks to the organizing committee, reviewers, contributing authors, and particularly the program committee and the chair, Tina Hudson. The program committee selected an extremely interesting program. Several exciting events such as Innovation Workshop and Challenge will also be part of the conference. We would like to thank all members of the organizing committee and steering committee as well as the technical program committee. I would particularly like to thank our Steering Committee Chair Don Bouldin for his continued guidance of MSE.

We would also like to thank the corporate supporters of MSE who have provided generous financial support: Xilinx, Intel, and IEEE Computer Chapter of the Southern Alberta Section (SAS). Our thanks also goes to IEEE, IEEE Computer Society, and IEEE CS Technical Committee on VLSI for sponsoring the event and ACM SIGDA for their cooperation.

We hope you enjoy the conference and find the program exciting with 17 technical papers, a panel, Innovation Challenge, Industry University Relations Workshop, and three keynotes. We hope this provides a stimulating platform and you enjoy staying in Banff.

**General Chair**

**Ozcan Ozturk**
Bilkent University

# Message from the Program Chair

Welcome to the 2017 IEEE International Conference on Microelectronic Systems Education (MSE'17). Our conference program includes papers contributed by microelectronics educators and industry from around the world. These papers were selected from submitted manuscripts after rigorous review by our Program Committee. Papers were accepted either as four page full papers or two page "work in progress" papers that describe new ideas and emerging work.

The theme of this year's conference is "Inspiring Innovation in Microelectronics Education". I hope that you see this theme apparent throughout the conference program. There are two sessions filled with oral presentations from a wide variety of domains within the microelectronics area. Additionally, there is a poster session where authors have been encouraged to have some kind of hands-on content or demonstration of their work. I hope that this will be a very interactive conference.

One unique feature of MSE'17 is the tight co-ordination with GLSVLSI. It is our hope that authors will have many opportunities to interact between the two conferences, yielding interesting discussions between authors performing both educational and scientific research. We have several exciting keynote speakers addressing both conferences jointly showing innovative uses for microelectronic technology. Dr. Niraj K. Jha will talk about "Internet-of-Medical-Things." Dr. Andrew Putnam will discuss "FPGAs in the Datacenter – Combining the Worlds of Hardware and Software Development." Dr. Alex Jones will present "Green Computing: New Challenges and Opportunities". Participants are welcome to attend any session for either conference during the days both conferences are in session.

Additionally, there are two joint workshops in the conference. The Industry University Relations Workshop will focus on building stronger connections between education and industry. The Innovation Workshop and Challenge will focus on innovation and the entrepreneurial mindset. More details about these workshops can be found in later pages.

I would like to conclude by thanking our Program Committee for their efforts to rigorously review papers and ensure the high quality of our technical program, and the Organizing Committee for their efforts in putting together the entire conference. In particular, I would like to thank the Steering Committee members Don Bouldin and John Nestor who have given so much sage advice for this conference, Web Chair Matt Guthaus for constantly updating the website, Poster Chair Mark Johnson for helping with the Innovation Challenge, and Proceedings Chair Chris Miller for taking the program to its final form. Finally, I would like to thank General Chair Ozcan Ozturk for leading us on this endeavor and Laleh Bejat, Chair of GLSVLSI, for all of her hard work and wonderful ideas for this program.

I hope you enjoy the program!

**Program Chair**

**Tina Hudson**
Rose-Hulman Institute of Technology