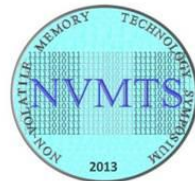


Welcome to the 2013 Non-Volatile Memory Technology Symposium Conference!



We are proud to host the 13th Non-Volatile Memory Technology Symposium (NVMTS 2013) at the University of Minnesota, USA. NVMTS 2013 is sponsored by the Center for Spintronic Materials, Interfaces, and Novel Architectures (C-SPIN) and technically co-sponsored by the University of Minnesota and IEEE Electron Devices Society. NVMTS is the world's eminent forum for exchanging information on state-of-the-art technological advances in non-volatile memory among researchers and engineers from academia and industry.

This symposium focuses on both emerging and existing non-volatile memory technologies instead of a singular technology, so as to encourage the cross-pollination of ideas. The aim of NVMTS 2013 is to gather top researchers in academia and industry as well as stakeholders and technologists to foster a free exchange of knowledge and achievements on a myriad of technologies.

The NVMTS 2013 organizing committee put together an impressive technical program with 3 keynote speakers, 41 invited talks and 29 posters from leading research groups in both academia and industry. These excellent talks and posters will cover a wide variety of topics including a variety of non-volatile memory technologies and materials ranging from emerging STT-MRAM to RRAM, FeRAM, PCRAM and new memory concepts and materials such as memory in logic. The NVMTS has attracted nearly 100 participants from three continents and 10 countries.

We would like to thank the entire NVMTS 2013 committee for their nomination of speakers and support. We would especially like to thank the technical program chairs, Prof. Rong Zhao and Dr. Ilya Karpov who have done a great job assembling a world class technical program. We also appreciate the innovative and dedicated efforts of Ms. Marie Rahne, secretary of the conference who oversaw the entire organization process of this symposium, Mr. James Lupino, the local committee member who help outreach for the conference industry sponsorship, and Ms. Anastasia Press and Ms. Allie Ochoa who have contributed greatly to the success of the conference.

We aim to create a dynamic environment for discussing various significant aspects of advanced memory technologies and believe your participation will make this happen. We sincerely hope you enjoy the exciting technical presentation and stimulating discussions during the conference.

Lu-Ping Shi, Conference Co-Chair, NVMTS 2013
Tsinghua University, Beijing

Jian-Ping Wang, Conference Co-Chair, NVMTS 2013
C-SPIN, University of Minnesota, Minneapolis



Welcome to the 2013 Non-Volatile Memory Technology Symposium Conference!



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