

17th International Superconductive Electronics Conference, ISEC 2019
July 28 – August 1, 2019, Riverside, California

September 8, 2019 (HE116). The 17th meeting of the International Superconductive Electronics Conference (ISEC 2019) was held in Riverside, California, a community in the Inland Empire of Southern California, and home to the University of California Riverside.

This four-day conference brought together leading researchers from the academic, government and industrial research communities from 16 different countries to discuss progress and challenges in the field of superconductive electronics. The ISEC 2019 program focused on the newest results, trends, and ideas in superconductive electronics. The conference covered many rapidly developing areas such as Quantum Computing, SQUIDs and SQUID-array circuits and systems, energy-efficient mixed signal circuits, digital and memory circuits, detectors, novel superconducting devices, and other new topical research results. The sessions were organized in a single, non-parallel track featuring 185 presentations that included keynote, distinguished, invited and contributed talks, and posters from the 275 attendees.



Monday evening reception at the March Air Reserve Museum

Keynote speakers Eric Ladazinsky (d-wave systems), Nobuyuki Yoshikawa (YNU), Sae Woo Nam (NIST), Ronny Stolz (IPHT Jena) and John Martinis (Google) highlighted the contributions of superconductive electronics to the areas of Quantum Information Science, Advanced Unconventional Computing, and Quantum Sensing. Distinguished speakers with several decades of service to the engineering of superconducting electronics: Dr. Arnold Silver, Dr. Keichi Tanabe and Dr. Oleg



Conference Banquet at the Historic Mission Inn

Mukhanov provided historical context and future directions in superconductive electronics. Our program also featured 27 invited speakers, who were selected both by nominations from the program committee and from the pool of contributed abstracts.

Many authors will publish their ISEC extended abstracts as part of a peer-reviewed proceedings available via IEEE Xplore and indexed by Scopus, Google Scholar and Thomson Reuter. Furthermore, a special issue of the IEEE Transactions on Applied Superconductivity is being prepared to highlight some of the work presented at ISEC.

In addition, immediately preceding ISEC, the University of California, Riverside organized a two-day Summer School on the fundamentals of superconductive electronics and its applications. This was made possible with help from a generous donation from Out of the Fog Research. A diverse group of over 70 students attended lectures by Professor Jason Robinson, Professor John Clarke, Dr. Oleg Mukhanov, Professor Nobuyuki Yoshikawa, Dr. Paul Dresselhaus, Dr. Emile Hoskinson, Professor Siyuan Han, Professor Alexander Korotkov and Professor Karl Berggren.



Superconductive Electronics Summer School



On behalf of the organizing and program committees, I thank all of those who contributed to making ISEC 2019 a memorable event.

Shane Cybart, Program Chair of ISEC 2019