Progress of IEEE-IEC Joint Standardization on Superconducting Electronics Devices: Report on the Standardization Session at IWSSD2016

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Abstract – The report on the Standardization Session at the IWSSD 2016 Workshop is prepared as a technical paper. At the session covered were:

- Organization of the IEC-IEEE standardization effort in superconducting electronics, responsibilities and appointments.
- Registered graphical symbols in superconducting electronics, including explanation of Josephson junction symbol design logic in analogy to semiconductor symbols.
- Round robin tests on HTS and LTS Josephson junctions, junction arrays and SQUIDs.
- A proposal for standardization of superconducting strip type photon detectors (SSPD).
- A road map for standardization of superconducting electronics.

Keywords (Index Terms) — Superconducting electronics, standardization, superconducting sensor, superconducting detector, IEC, IEEE, graphical symbols, round robin test, Josephson junction, JJ, Josephson junction array, superconducting quantum interference device, SQUID.

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