

Engineering Development of Superconducting RF Linac for High-Power Applications*,
K.C. DOMINIC CHAN, Los Alamos National Laboratory, Los Alamos, NM 87544, USA - High-power proton linacs are a promising source of neutrons for material processing and research applications. Superconducting (SC) RF linac technology is preferred for such applications because of power efficiency. A multi-year engineering development program is underway at Los Alamos National Laboratory to demonstrate the SCRF technology required. The program consists of development of SC cavities, power couplers, and cryomodule integration. Prototypes will be built and operated to obtain performance and integration information, and for design improvement. This paper describes the scope and present status of the development program.

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