Superconductivity at Westinghouse

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Abstract - We present personal reminiscences and a few highlights of activities in superconductivity at the Westinghouse Electric Corporation. These activities started in early 1950s and continued until the end of the company's involvement in manufacturing of electrical and electronic equipment. The initial fundamental studies gave way gradually to R&D into materials, conductors, electric machinery, fusion magnets and superconducting digital and analog electronics. Of many achievements we highlight here only some of the fundamental contributions, the synthesis of then highest critical temperature (T_c) material, Nb_3Ge, the R&D into electric power generators, the fusion large coil project and the successes in digital electronics, low- and high critical temperature, T_c. We acknowledge the guiding role and contributions of the late eminent Westinghouse scientist, John K. Hulm.

Keywords – Superconductivity, specific heat, energy gap, upper field limit, transition metal alloys, superconducting thin films, Nb_3Ge, superconducting alternator, superconducting magnets for fusion, superconducting digital electronics

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