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Bert Brockhouse and the Early History of Canadian Neutron Scattering - a personal view

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Neutron scattering in Canada began when Brockhouse, Myer Bloom and D. G. Hurst measured neutron scattering in highly absorbing Materials (Cd, Sm, Gd) by transmission measurements at the NRX reactor in Chalk River. Following this, the goal was to study differential scattering cross-sections, and work began in earnest in 1954, using a “primitive” triple-axis spectrometer at NRX. This began the tremendous spurt of results, with improved monochromators and later the more powerful NRU reactor becoming available. Many people contributed over the next 10 years, and Brockhouse left AECL and Chalk River for McMaster University in 1962. The Canadian neutron scattering program continued to set the standards worldwide, although the opening of the Institut Laue Langevin in France rapidly became the foremost center in the world. These developments will be explored in the light of Bert’s leadership and instrument development, but the emphasis throughout will remain people.

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