

NEUTRON SOURCE INVESTIGATIONS  
IN SUPPORT OF THE CROSS SECTION PROGRAM  
AT THE ARGONNE FAST-NEUTRON GENERATOR\*

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ABSTRACT

Experimental methods related to the production of neutrons for cross section studies at the Argonne Fast-Neutron Generator are reviewed. Target assemblies commonly employed in these measurements are described, and some of the relevant physical properties of the neutron source reactions are discussed. Various measurements have been performed to ascertain knowledge about these source reactions which is required for cross section data analysis purposes. Some results from these studies are presented and a few specific examples of neutron-source related corrections to cross section data are provided.