

## W0280

**Time-Resolved Studies at the Wide Angle Neutron Diffractometer\***. J. A. Fernandez-Baca<sup>1</sup>, Y. Ishii<sup>2</sup>, <sup>1</sup>Center for Neutron Scattering, Oak Ridge National Laboratory\*\*, Oak Ridge, TN 37831-6393, USA, <sup>2</sup>Japan Atomic Energy Agency, Tokai, Ibaraki 319-1195, Japan.

The Wide Angle Neutron Diffractometer (WAND) at the High Flux Isotope Reactor in Oak Ridge is a high-intensity, medium-resolution powder instrument, well suited to perform time-resolved experiments of structural transformations having short time-constants. Fast data collection is achieved with the combination of an intense neutron beam ( $10^7$  n/cm<sup>2</sup>.s) and a curved one-dimensional <sup>3</sup>He position sensitive detector covering 125° of scattering angle. The detector is a multi-anode type (624 anodes and a 0.2° pitch) <sup>3</sup>He gas counter specially designed and built for this instrument by ORDELA. Each of the anodes has an amplifier, a shaping amplifier, and a discriminator. In this talk we will present recent examples of time-resolved studies at the WAND, including the study of the kinetics of the nucleation and growth of Ice XI.<sup>§</sup>

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