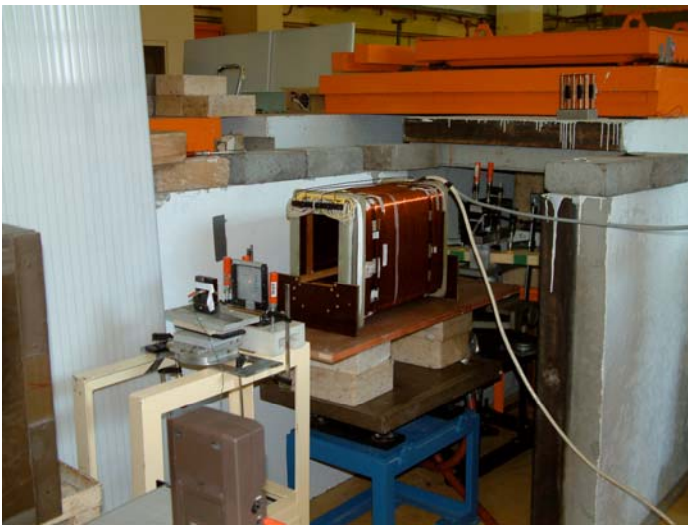


<h1 style="margin: 0;">B N C</h1> <p style="margin: 0;">Experimental Report</p>	<i>Experiment title</i> Measurement of an energy selective flipper (Drabkin-Resonator) for SNS	<i>Proposal No.</i> TEST-1/04 <i>Local contact</i> János Füzi
	<i>Principal proposer:</i> Frank Klose (ORNL USA) <i>Experimental team:</i> István Füzessy, János Füzi, André de Parizzi (ORNL) and Zsombor Sánta	<i>Date(s) of Exper.</i> July 2004 <i>Date of Report</i> August 2006

Objectives

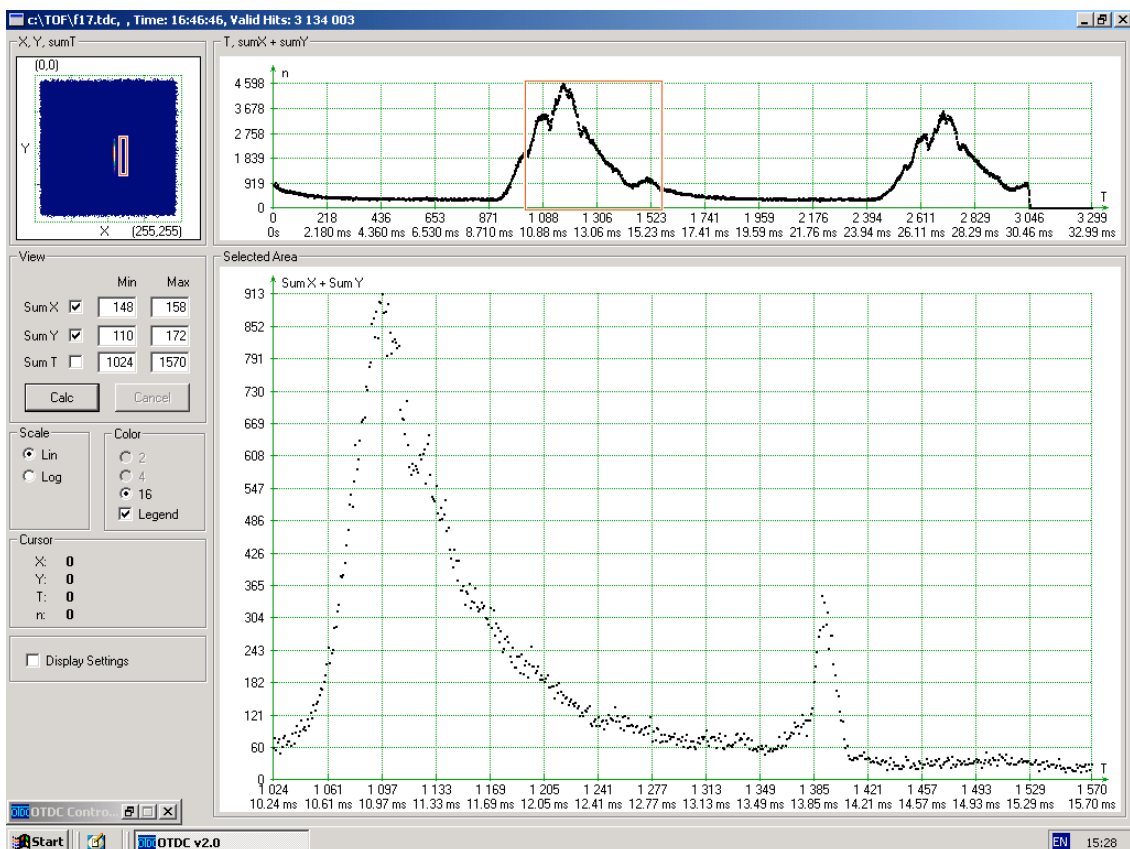
Neutron optical measurement of the energy selective flipper (Drabkin-Resonator) produced by Mirrotron Ltd for the Spallation Neutron Source, Oakridge, USA.

Results



View of the flipper in the experiment environment

Polarized neutron beam measurement has been performed using a narrow collimated beam, a transmission polarizer mirror and an analyzer polarizing supermirror. The emerging beam is measured by a 2D position sensitive detector in time-of-flight regime. The polarized neutrons pass through the analyzer, except for those whose spin state is reverted by the flipper, which are reflected. The energy spectrum of the reflected spot shows a peak around the wavelength for which the flipper is tuned.



The energy distribution in the spot reflected by the analyzer showing the peak of the flipped neutrons