

ICANS-XIV
14th Meeting of the International Collaboration on
Advanced Neutron Sources
June 14-19, 1998
Utica, IL USA

Working Group: Spectroscopy in Future Neutron Sources

C.-K. Loong

- I. Direct Geometry: Chopper Spectrometers
 1. A scattering flight-path built "around" the key components such as:
 - polarizers for incident and scattered beams
 - high magnetic field for samples
 - high pressure cells
 - high temperature furnaces
 2. Full flexibility in detector configuration, consider movable detector module
 3. Employment of large solid-angle position sensitive detector arrays

- II. Inverse Geometry: Crystal-Analyzer Spectrometers
 1. Exploration of the transmitted beams after the analyzers (stacked multiple analyzers)
 2. Concurrent diffraction and inelastic scattering measurements
 3. Useful for high-pressure and high-temperature sample environment

- III. Pulsed-Source Spin Echo Spectrometers
Advantages: wide-Q overage, manipulation of pulsed magnetic fields
Need to develop a user-friendly machine