Nitrogen cryostat

The nitrogen cryostat is applicated for optical and mossbauer investigations in the long no nitrogen refill regime. Sample cooling is realized by means of heat exchange between working cell and cryogenic reservoir. Temperature regulation and control are made by using the chain consisting of a heater and a temperature sensor. Horizontal windows are setted in the bottom of the cryostat. For mossbauer measurements, the cryostat can be provided with mylar windows. For optical measurements, windows are made from a transparent to necessary wavelength material.

Construction of nitrogen cryostat Y A Sample rod with electrical feedthrough Upper flange assembly. Can be removed. together with sample rod and replaced Clamp for rapid with blind flange. A sample change Lock nut for attaching Evacuation valve Input/output for then lower flange exchange gas of assembly to the centgral tube cryostat body. Lower flange assembly Nitrogen input φ9 (ID Covers \$299 Central tube (exchange gas) 1-1 (2:1) Liquid nitrogen 64 reservoir Outer vacuum case. Shield Nitrogen heat screen Cold window \$255 Warm window Cold finger 154 Nitrogen screen Sample holder with temperature sensor and heater.

Specifications:

- volume of the nitrogen reservoir, dm ³	18
- working temperature range, K	78-300
duration of continuous work of the cryostat in the temperature	
range 78-80 K with once nitrogen flooding, days	15
- internal section of the working cell, mm	18x38
- warm windows diameter, mm	18
- cool windows diameter, mm	16

Prof. Georgii Levchenko Tel:+38 044 524 04 80

Fax: 38 044 524 04 80 mailto: g-levch@ukr.net