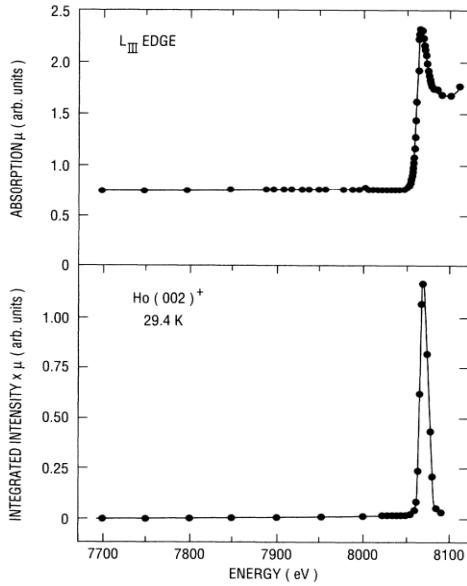
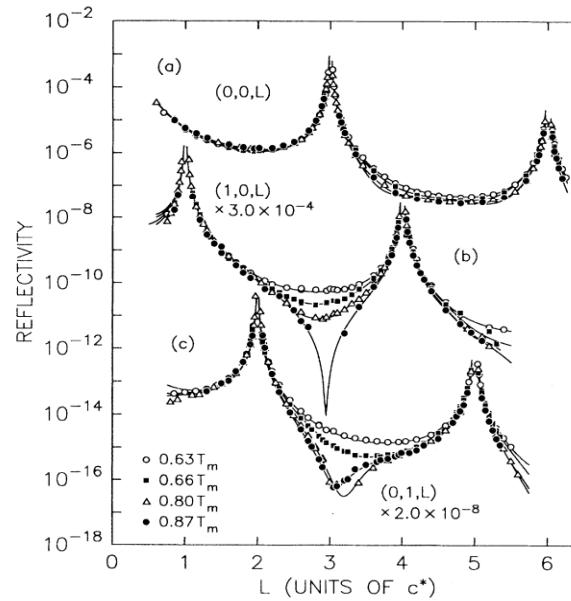


# X22C: Surface and Resonant Scattering Beamlne



Magnetic scattering  
measurements from  
Ho metal

D. Gibbs *et al.*, PRB **43**  
5663 (1991)



Surface scattering  
measurements from  
the Pt(111) surface

G. Grubel *et al.*, PRB **48**  
18119 (1993)

- Energy range: 3 keV → 14 keV
- Ideal for:
  - 3d transition metal K-edges and rare earth L edges (transitions involving:  $1s \rightarrow 4p$  &  $2p \rightarrow 5d$  levels)
  - **Element-specific** scattering from magnetic, charge and orbital order
  - Surface structure investigations
- Scattering:
  - X-ray resonant scattering (XRS)
  - Surface scattering – UHV chamber, horizontal and vertical scattering modes
  - Surface and interface roughness measurements, surface structure measurements, electronic order investigations