

## **A SIMPLE GLANCING ANGLE ATTACHMENT FOR A POWDER DIFFRACTOMETER**

**Jerrold A. Carsello**  
**J.B. Cohen X-Ray Diffraction Facility, Northwestern University**  
**Evanston, Illinois, 60208**

Powder diffraction patterns were obtained from a thin coating of polycrystalline silicon on a glass substrate. This was achieved using glancing angle diffraction in conjunction with parallel beam optics. The optical system in this case was built using a salvaged Soller slit from a x-ray fluorescence machine. Commercially available glancing angle attachments can cost upwards \$10k. This device was built for about \$1k.