

Phys. Rev. 76, 1256–1257 (1949)
Detection of Antiferromagnetism by Neutron Diffraction

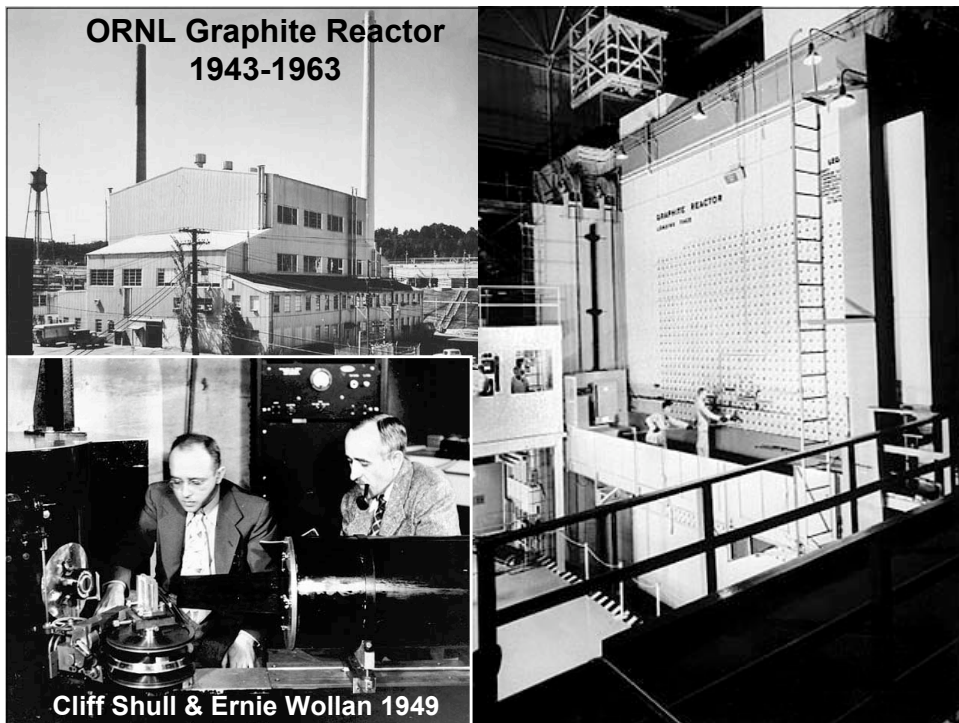
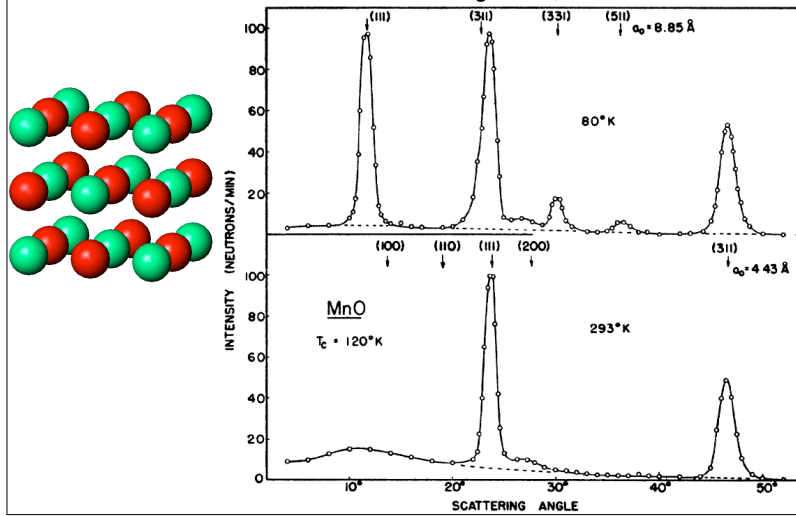
C. G. Shull

Oak Ridge National Laboratory, Oak Ridge, Tennessee

J. Samuel Smart

Naval Ordnance Laboratory, White Oak, Silver Spring, Maryland

August 29, 1949

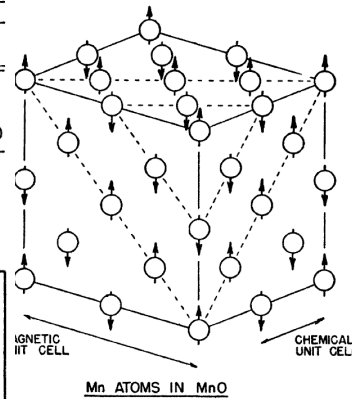
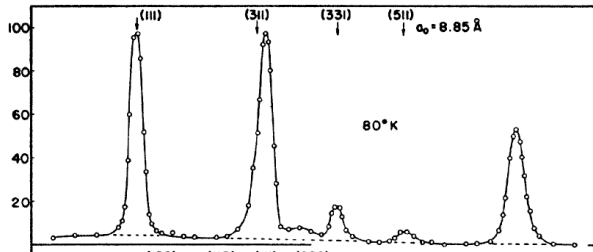


Neutron Diffraction by Paramagnetic and Antiferromagnetic Substances

C. G. SHULL, W. A. STRAUSSER, AND E. O. WOLLAN
 Oak Ridge National Laboratory, Oak Ridge, Tennessee
 (Received March 2, 1951)

TABLE II. Comparison between observed MnO antiferromagnetic intensities and those calculated for various models of magnetic orientation with respect to crystallographic axes.

	(100)	(111)	$\perp[111]$	Observed
	(a)	(b)	(c)	(neutrons/min)
(111)	1038	0	1560	1072
(311)	460	675	...	308
(331)	129	109	...	132
(511)	54	24	...	70
(333)				



H. Shaked, J. Faber, Jr., R.L. Hitterman, Low-temperature magnetic structure of MnO: A high-resolution neutron-diffraction study. Phys. Rev. B, 38, 11901-11903.

