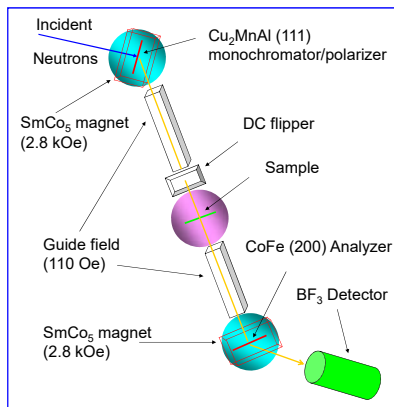


Polarized Neutron Spectrometer

Study of Magnetic Correlations

Line diagram



Depolarization mode

Instrumental parameters

Wavelength	1.201 Å
Incident polarization	98.83%
Flux at sample	3.6×10^5 n/cm ² /sec
Scattering angle	$0^\circ < 2\theta < 120^\circ$
Temperature range	2.8 – 310 K
Magnetic field range	≤ 1.2 kOe

References:

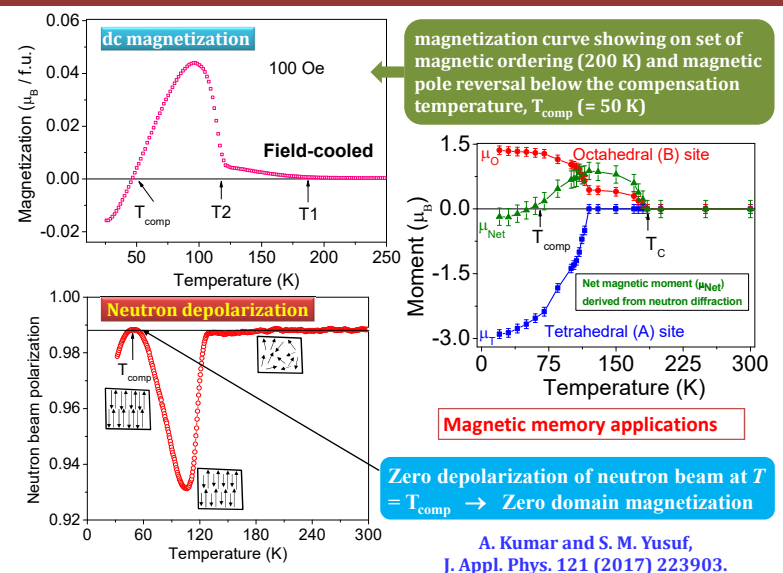
- L. M. Rao, S. M. Yusuf, and R. S. Kothare, *Indian J. Pure Appl. Phys.* **30**, 276 (1992).
- S. M. Yusuf and L. M. Rao, *Pramana, J. Phys.* **47**, 171 (1996).
- S. M. Yusuf and L. M. Rao, *Neutron News* **8**, 12 (1997).

Picture of instrument

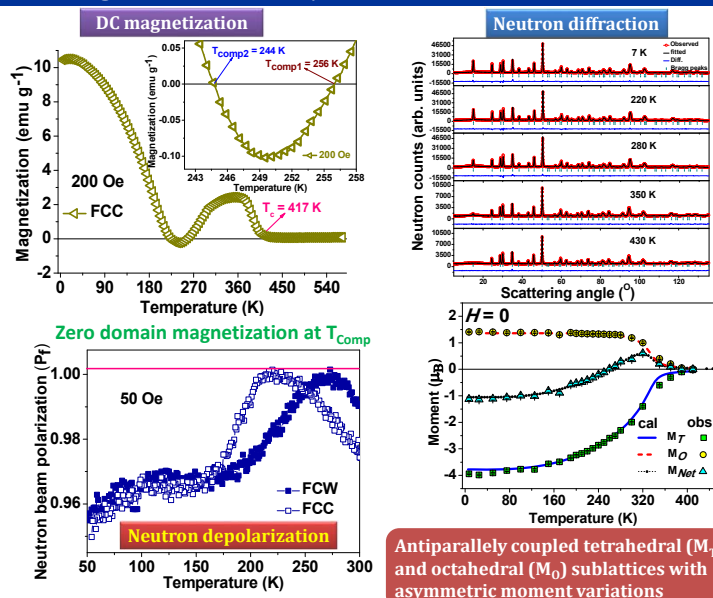


Few selected examples:

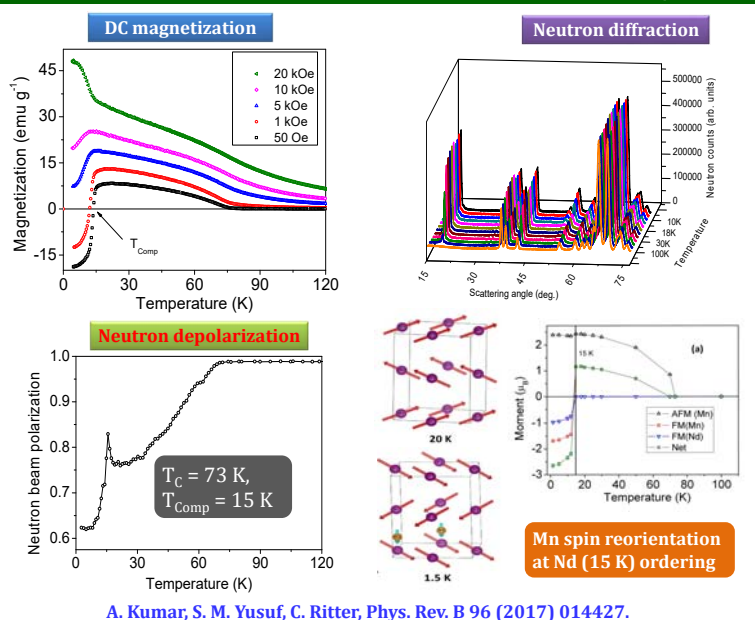
Magnetization reversal in spinel ferrite, $\text{CoCr}_{1.85}\text{Fe}_{0.15}\text{O}_4$



Magnetization compensation in Lithium Ferrite



Nd ordering driven Spin reorientation in NdMnO_3



Magnetic proximity effect in core-shell based magnetic system

