

FIG.1 (a) Sch

The first TEM precession interfaces have been developed by University teams in Oslo [5,6], Bologna [7,8]

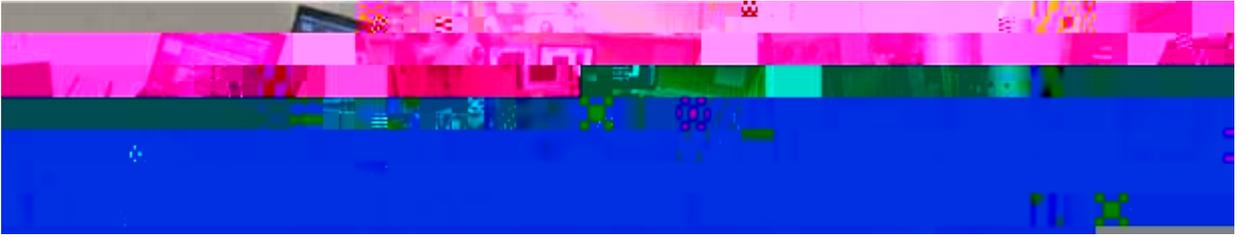


FIG. 4

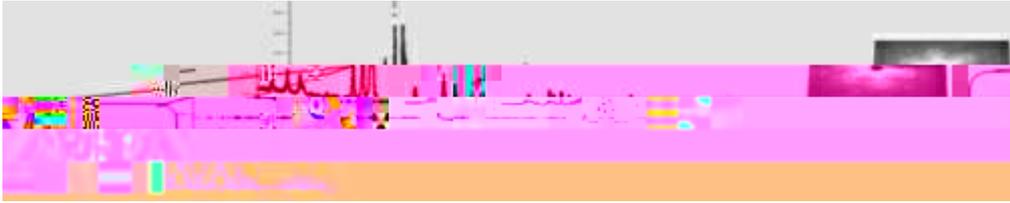


FIG. 8 Typical Synchrotron X-Ray powder diffraction pattern where reflection overlapping occurs in many reflection peaks. Information coming from TEM-

In order to proceed with nanocrystal orientation and phase identification of each experimental PED spot pattern, thousands of simulated ED spot patterns (so called templates) are utilized for each crystallographic phase in the sample (**FIG.11**). Local crystal orientations are obtained by comparing individually obtained PED spot patterns via cross-





FIG.14 (a) mayenite crystallite virtual bright field image (b) orientation map created with ASTAR without using precession (c) accurate orientation map of the same area using a precession angle of 0.35° . Colours correspond to inverse pole figure in FIG.14d.



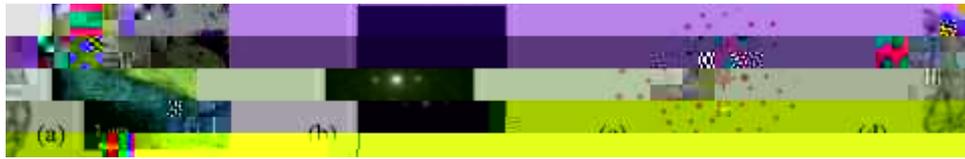


FIG.18