Abstract Submitted
for the MAR13 Meeting of
The American Physical Society

Characteriziation of Ni_2MnGa Ferromagnetic Shape Memory Alloy nanowires[1] P. GYAWALI, KESHAB R. SAPKOTA, B. DAHAL, R. DULAL, I. L. PEGG, J. PHILIP, The Catholic University of America — Heusler type Ni_2MnGa ferromagnetic shape memory alloy has been extensively studied in thin films and in bulk. The structural transition to martinsitic phase occurs thermodynamically reversibly within the ferromagnetic region.. For the technological application, magnetic field is used to induce the motion of twin boundaries in martinsite phase. Ni_2MnGa nanowires were grown for the first time using electrospinning method. Structrual characterization were done using XRD and EDX. Nanowires exhibit tetragonal structure with a = b = 5.85 Åand c/a = 0.96. Magnetic measurements show the pre- martinsite transformation. Curie temperature of nanowires is about 360 K.

[1]This work has been supported by funding from NSF under CAREER Grant No. ECCS-0845501 and NSF-MRI, DMR-0922997

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Date submitted: 09 Nov 2012 Electronic form version 1.4