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**Synthesis and Electrical Characterization of Polymer based SiC Nanofibers** SAIMA KHAN, AURANGZEB KHAN, MARTIN KORDESCH, Department of Physics and Astronomy and CMSS program, Ohio University — Silicon carbide nanofibers have been synthesized from a precursor solution of Polyethyleneoxide (PEO) using the electrospinning technique. The morphology of the fibers was investigated using the scanning electron microscope (SEM) and Transmission electron microscope (TEM). The electrospun fibers were annealed at various high temperatures and their electrical conductivity was measured using the four point probe method. The effect of the annealing temperature on the electrical conductivity of the fibers was investigated.

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