

Abstract Submitted  
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**Michigan Fabrication and Assembly Techniques for Thomson Scattering Targets** T.L. DONAJKOWSKI, K.L. KILLEBREW, R.P. DRAKE, A.B. REIGHARD, C.M. KRAULAND, University of Michigan, M.R. TAYLOR, D.C. MARION, D.J. KREMER, University of Michigan — Thomson scattering is an interesting physical phenomena. We show the design and build of experiments created to detect Thomson scattering off of a directly driven shock. The experiments are similar to past radiative, shock tube experiments with the addition of a secondary arm to allow a  $4\omega$  probe beam to enter and scattered light to exit the main shock tube. We will discuss the difficulties associated with the design, fabrication and assembly of these targets. This research was sponsored by the National Nuclear Security Administration under the Stewardship Science Academic Alliances program through DOE Research Grant DE-FG52-03NA00064, and through DE FG53 2005 NA26014 and other grants and contracts.

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