

Abstract Submitted
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Experimental Investigation of Flow in a Cavity with a Porous Opening¹ M. KOOCHEFAHANI, S. RAYEPALLI, R. GUPTA, Michigan State University — The velocity field within a nominally two-dimensional cavity is investigated in a water channel. The Reynolds number based on cavity depth and freestream speed is about 300. The purpose of the study is to characterize the changes in the recirculation flow pattern inside the cavity caused by a porous surface covering the cavity opening. Both flow visualization and quantitative results for the mean and fluctuating velocity field will be discussed for various surfaces of different porosity.

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