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**Bogdan Nita\*** ([nitab@mail.montclair.edu](mailto:nitab@mail.montclair.edu)), 1 Normal Avenue, Montclair, NJ 07043. *The interaction between fibers and fluids through experimental and numerical models.*

Fluid structure interaction plays a major role in everyday life and in applications from engineering, military and medical fields. In this study we model the interaction between flexible fibers clamped to a sphere and a fluid flowing with speeds 0 and 50 cm/s. We look at initial fiber position with respect to the flow, and different fiber lengths in a 3D environment. Both experimental and numerical methods are used for the study. (Received February 02, 2016)