April 29, 2016

Andrea Prosperetti

Editor in Chief, International Journal of Multiphase Flow

Department of Mechanical Engineering

Johns Hopkins University

Baltimore, MD 21218

Dear Professor Prosperetti:

We have submitted a paper entitled, “Evaluation of Stochastic Particle Dispersion Modeling in Turbulent Round Jets,” by Guangyuan Sun, John Hewson, and David Lignell. One-dimensional turbulence (ODT) has been applied to a wide range of reacting and nonreacting flows. A novel feature of ODT is its ability to model (in one dimension) a full range of turbulent length and time scales. Very few attempts have been made to apply ODT to multi-phase flows with inertial particles. The submitted paper presents an important model validation of particle dispersion in shear flow. Three variations of the model are evaluated for the first time. The successful particle implementation in ODT lends insight and confidence in future applications to other configurations and to reacting flows, which are currently under development.

We appreciate your consideration of this paper for publication in the *International Journal of Multiphase Flow*.

Sincerely,

David O. Lignell

Associate Professor, Associate Chair

Chemical Engineering Department

Brigham Young University