## Joint CQSE and CASTS Seminar

## Weekly Seminar Dec. 22, 2017 (Friday)

TIME Dec. 22, 2017, 14:30 ~ 15:30
TITLE Instabilities and convective motion in particle-laden fluids: A computational fluid dynamics study
SPEAKER Prof. Yi-Ju Chou Institute of Applied Mechanics, National Taiwan University
PLACE Rm716, CCMS & New Physics Building, NTU

## <u>Abstract</u>

Due to settling of particles and their interactions with the carrier fluid, suspension of particles in liquid can cause significant flow instabilities and convection, which in turn enhance transport and sedimentation of individual particles. Such enhancement has important implications and applications to geophysical and industrial flow problems. In this talk, I will review the recent development of the computational approach of the problem. Then I will give a few examples to illustrate the flow physics behind the complex two-phase suspension problems.

