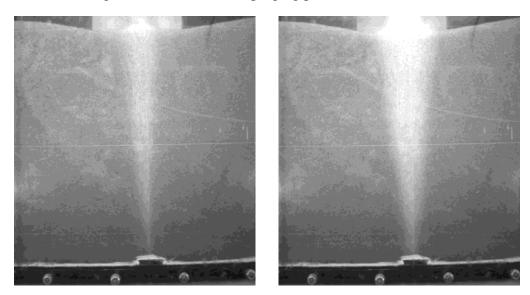
We have included a video of air bubble stream development during centrifuge test and pictures for different sparging pressures as supplementary information.

Supplementary Information 1: BubbleMovement2.5s.avi It is a video of air bubble entry and bubble stream development under a certain sparging pressure during centrifuge test.

Supplementary Information 2:



Pictures for obtaining ZOI under different sparging pressures

(a) Low sparging pressure

(b) High parging pressure

FIGURE 1. Zone of Influence under different sparging pressure in 40-g level centrifuge test