Erratum

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CFD simulation of bubble column flows: Investigations on turbulence models in RANS approach

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The color code of the figures captions follow:

FIGURE CAPTIONS

Fig. 1. Radial profiles of the liquid axial velocity in the case of the Dispersed Standard k-ε model for grid #1, using 1st order Upwind (♦), 2nd order Upwind (♦) and 3rd order MUSCL schemes (♦). Comparison with CARPT data (♦) given by Chen (2004).

Fig. 2. Radial profiles of the gas holdup in the case of the Dispersed Standard k-ε model for grid #1, using 1st order Upwind (♦), 2nd order Upwind (♦) and 3rd order MUSCL schemes (♦). Comparison with CT data (♦) given by Chen (2004).

Fig. 3. Radial profiles of the liquid axial velocity in the case of the Dispersed RNG k-ε model for grid #1 (♦), grid #2 (♦), grid #3 (♦), grid #4 (♦), grid #5 (♦), grid #6 (♦) and grid #7 (♦).

Fig. 4. Radial profiles of the gas holdup in the case of the Dispersed RNG k-ε model for grid #1 (♦), grid #2 (♦), grid #3 (♦), grid #4 (♦), grid #5 (♦), grid #6 (♦) and grid #7 (♦).

Fig. 5: Radial profiles of the liquid axial velocity in the case of the Standard k-ε model for the Dispersed (♦), Dispersed + BIT (♦), and Per-phase (♦) options. Comparison with CARPT data (♦) given by Chen (2004).

Fig. 6. Radial profiles of the gas holdup in the case of the Standard k-ε model for the Dispersed (♦), Dispersed + BIT (♦), and Per-phase (♦) options. Comparison with CT data (♦) given by Chen (2004).

Fig. 7. Radial profiles of the liquid axial velocity in the case of the Realizable k-ε model for the Dispersed (♦), Dispersed + BIT (♦), and Per-phase (♦) options. Comparison with CARPT data (♦) given by Chen (2004).

Fig. 8. Radial profiles of the gas holdup in the case of the Realizable k-ε model for the Dispersed (♦), Dispersed + BIT (♦), and Per-phase (♦) options. Comparison with CT data (♦) given by Chen (2004).

Fig. 9. Radial profiles of the liquid axial velocity in the case of the RNG k-ε model for the Dispersed (♦), Dispersed + BIT (♦), and Per-phase (♦) options. Comparison with CARPT data (♦) given by Chen (2004).

Fig. 10. Radial profiles of the gas holdup in the case of the RNG k-ε model for the Dispersed (♦), Dispersed + BIT (♦), and Per-phase (♦) options. Comparison with CT data (♦) given by Chen (2004).

Fig. 11. Radial profiles of instantaneous, circum- and axially-averaged turbulent kinetic energy for the Standard k-ε model Dispersed (♦), Standard k-ε model Per-phase (♦), Realizable k-ε model Dispersed (♦), Realizable k-ε model Per-phase (♦), RNG k-ε model Dispersed (♦), RNG k-ε model Per-phase (♦).

Fig. 12. Radial profiles of instantaneous, circum- and axially-averaged turbulent dissipation rate for the Standard k-ε model Dispersed (♦), Standard k-ε model Per-phase

($\blacklozenge$), Realizable k-ε model Dispersed ($\blacklozenge$), Realizable k-ε model Per-phase ($\blacklozenge$), RNG k-ε model Dispersed ($\blacklozenge$), RNG k-ε model Per-phase ($\blacklozenge$).