



## Erratum

“Development of one-group interfacial  
area transport equation in bubbly flow systems”  
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The publishers regret that the following corrections were omitted in the published version. These corrections are printed below.

p. 2351 (Footnote) Corresponding author. Tel.: +1-765-494-4587; fax: +1-765-494-9570.

p. 2351 (Footnote) <sup>1</sup>Tel.: +81-724-51-2373; fax: +81-724-51-2461.

p. 2354 (Second column, line 11) The text should read “bubbly-to-slug”.

p. 2355 (First column, lines 27–35) The text should read as the following:

bubble-eddy collision rate [32]: (i) the turbulence is isotropic, (ii) the eddy size,  $D_e$ , of interest lies in the inertial subrange, (iii) the eddy with the size from  $cD_b$  ( $c \leq 1$ ) to  $D_b$  can break up the bubble with the size of  $D_b$ , since larger eddies have the tendency to transport the bubble rather than to break it and smaller eddies do not have enough energy to break it.

p. 2355 (Second column, lines 24–31) The text should read as the following:

The average value of the energy required for breakage may approximately be determined by averaging Eq. (10) from  $D_{b,max} = D_b/2^{1/3}$  ( $D_{b,min} = D_b/2^{1/3}$ ) to  $D_{b,max} = D_b$  ( $D_{b,min} = 0$ ) to be  $0.230\pi\sigma D_b^2$ . It should be noted here that the relative difference between  $\overline{E_B}$  ( $= 0.230\pi\sigma D_b^2$ ) obtained by averaging Eq. (10) and  $\overline{E_B}$  ( $= 0.260\pi\sigma D_b^2$ ) assuming the binary breakage into two equal-size bubbles is about 13%. Therefore, the assumption on the size of small and large daughter bubbles may not affect the estimation of  $\overline{E_B}$  significantly.

p. 2358 (Second column, line 3) The text ‘Weber number’ should read as the following:  
Weber number, which is defined as  $\varepsilon^{2/3}/(gLo^{1/3})$ .

p. 2360 (Second column, line 22) The text ‘terms’ should read as the following:  
term

p. 2360 (Second column, line 31) The text ‘deviation’ should read as the following:  
relative deviation

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p. 2367 (First column, line 18) The text ‘finely bubbly’ should read as the following:  
finely dispersed bubbly

p. 2370 (First column, line 15) The text ‘failed’ should read as the following:  
fails

p. 2370 (First column, line 21) The text ‘predicted’ should read as the following:  
predicts