

Table- Conditions of experimental data of Fig. 10 (for base fluid and nanofluid, the numbers 1 to 7 respectively show the conditions of experimental data from the left to the right of Fig. 10.)

| Base fluid | Q _{org} (ml/min) | Q _{aq} (ml/min) | Relative error between calculated and experimental overall mass transfer coefficient (%) |
|------------------------|---------------------------|--------------------------|--|
| 1 | 0.22 | 0.13 | 4.7 |
| 2 | 0.07 | 0.22 | -5.62 |
| 3 | 0.11 | 0.22 | -5.02 |
| 4 | 0.22 | 0.22 | -5.64 |
| 5 | 0.36 | 0.22 | -13.77 |
| 6 | 0.22 | 0.44 | -14.76 |
| 7 | 0.22 | 0.66 | -30.76 |
| Nanofluid (0.001 vol%) | | | |
| 1 | 0.07 | 0.22 | -12.97 |
| 2 | 0.11 | 0.22 | -7.08 |
| 3 | 0.22 | 0.13 | -8.75 |
| 4 | 0.36 | 0.22 | -0.26 |
| 5 | 0.22 | 0.22 | -7.41 |
| 6 | 0.22 | 0.66 | -2.73 |
| 7 | 0.22 | 0.44 | -8.44 |
| Nanofluid (0.01 vol%) | | | |
| 1 | 0.07 | 0.22 | 1.90 |
| 2 | 0.11 | 0.22 | 0.97 |
| 3 | 0.22 | 0.13 | 5.75 |
| 4 | 0.36 | 0.22 | 5.80 |
| 5 | 0.22 | 0.66 | 4.98 |
| 6 | 0.22 | 0.44 | 1.26 |
| 7 | 0.22 | 0.22 | -4.73 |
| Nanofluid (0.1 vol%) | | | |
| 1 | 0.07 | 0.22 | 9.14 |
| 2 | 0.11 | 0.22 | 8.13 |
| 3 | 0.22 | 0.13 | 0.32 |
| 4 | 0.36 | 0.22 | 7.33 |
| 5 | 0.22 | 0.22 | 0.69 |
| 6 | 0.22 | 0.66 | 6.42 |
| 7 | 0.22 | 0.44 | 3.04 |