Abstract

On the basis of previous experimental results in a torus reactor, micromixing time is determined using the incorporation model. Obtained results allowed the characterisation of the performances of this new configuration of reactor in comparison to other reactors, such as the stirred tank reactor. In addition, a correlation is proposed for each incorporation law, in order to determine the micromixing time from the experimental micromixedness ratio (α). Finally, in terms of Kolmogorov's turbulence theory, a relationship between micromixing time and the local energy dissipation rate is obtained and compared to those previously published