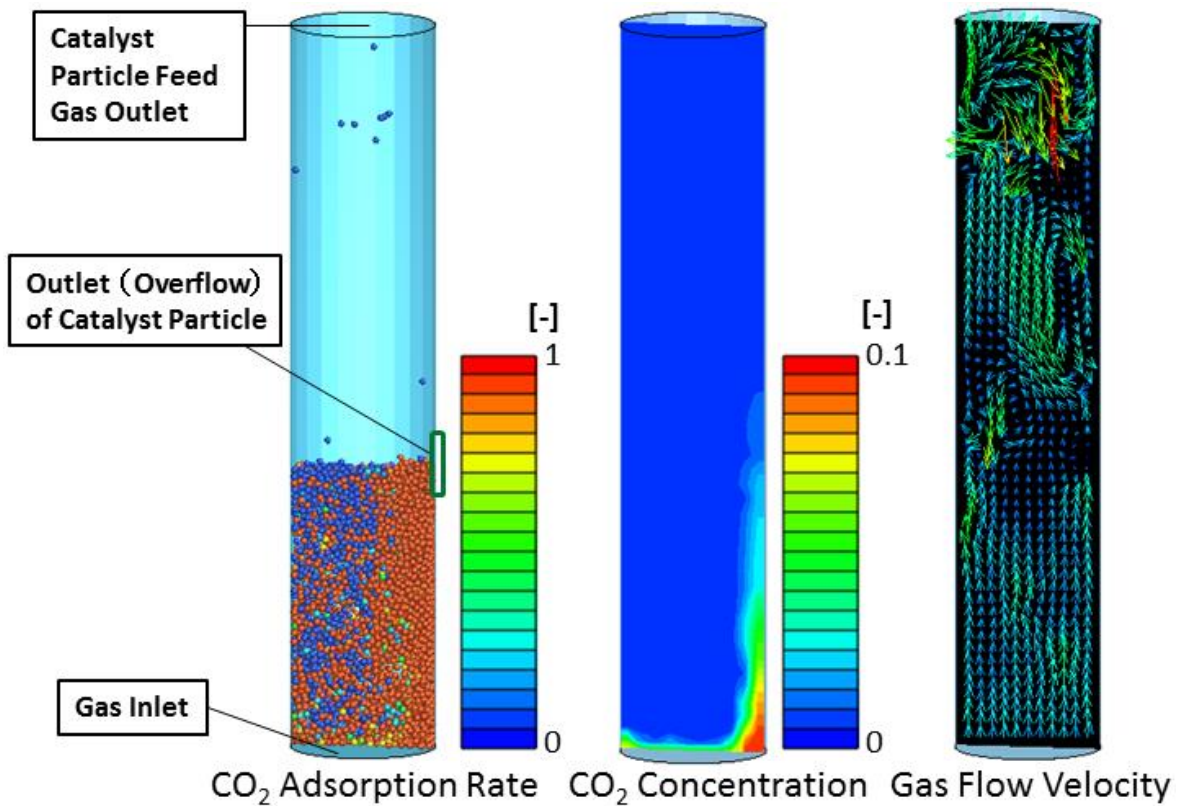


CO₂ Adsorption Simulation in Fluidized Bed Reactor

The reaction process in which carbon dioxide (CO₂) contained in the gas is adsorbed onto the catalyst particles is numerically simulated by feeding the gas into a fluidized bed filled with catalyst (Na₂O) particles.



From left to right: carbon dioxide (CO₂) adsorption rate of the catalyst (Na₂O) particles, carbon dioxide (CO₂) concentration in the gas and gas flow velocity distribution. The CO₂ adsorption rate when the catalyst particles are fed is 0.