

List of Dissertation Abstract (Environment and System Sciences)

Name	Supervisor	Title	Abstract
Seitaro MORITA	Motoyuki IIJIMA	Control of particle assembled structure in nonaqueous concentrated slurries and application to ceramic processing	Precisely designed concentrated slurries composed of multicomponent inorganic powders and nonaqueous solvents are indispensable in ceramic manufacturing processing to improve properties and reliability of ceramic components. This thesis introduces a new strategy of wet powder processing to achieve the control of particle assembled structure in slurries and to improve their flowability. The key technology was the development of simple particle surface modification process using a newly designed polymer dispersant for nonaqueous system. This thesis successfully demonstrated the application of newly developed wet powder processing technique to a ceramic manufacturing processing.