

### List of Dissertation Abstract (Department of Environment and System Sciences)

Name	Supervisor	Title	Abstract
Ikeda Naoaki	Aramaki kenji	Hydrogel formation by amino acid-based oil gelling agent using surfactant-mediated gelation method and effect of micelle shape on its viscoelastic behavior	Hydrogel formation by the surfactant mediated gelation (SMG) method using the glutamic acid-based organogelator LGD–EHGD was investigated. A hydrogel was obtained by the SMG method using glutamic-acid-based anionic surfactant and cationic surfactant. This study showed that the SMG method can be applied to organogelators other than 12-HOA, and it is clear that the micellar shape of the surfactant and the polarity of the solvent affect the structure and rheology of the final SMG hydrogel. Further control of the structure and physical properties of the SMG hydrogel is expected by selecting and combining surfactants and controlling the shape of the micelles.