Division of Natural System	Research field	Biochemical Engineering	Lab. ID
			NS23

Laboratory web site	

Research subjects

Master/Doctor course: Education policy, curriculum, typical activity in the laboratory

Daily life in the laboratory, etc.

Message or comments by the laboratory faculty staffs

Recent Master theses in these 3 years (+ more if appropriate)

year.month	Thesis title (including English translation of Japanese thesis title)
2021.3	Effect of temperature on production of primary metabolites in Streptomycetes
2021.3	Targetted and ultrasound-triggered cancer cell injury using perfluorocarbon-loaded nano emulsion
2021.3	Zwitterionic solvents for platinating agents
2021.3	Fabrication and culture of three dimensional tissue for cultured meat without using animal-derived serum and scaffold protein
2021.3	Re-evaluation of a synthetic procedure for carboxylate-type zwitterions and development of novel zwitterions for one-pot ethanol production
2021.3	Development of a new metabolic switch induced by directional protein degradation in Corynebacterium glutamicum
2021.3	Expression analysis of metabolic genes in response to modulation of glucose consumption rate
2020.3	Direct preparation of herbal medicinal gels using low toxic liquid zwitteirons
2020.3	Metabolic alteration in Corynebacterium glutamicum under non-proliferating elevated temperature
2020.3	Bioprinting of 3D tissues using multicellular sheroids containing cancer cells
2020.3	Biorefinery of lignocellulosic biomass toward liquid fuel
2020.3	Changes of intracellular metabolite profile affected by split ratio of central metabolic pathway in Corynebacterium glutamicum
2019.9	Fabrication of 3D tissue using adipose-derived mesenchymal stem cells, and its application to neural dif
2019.9	Refinery of polysaccharides and lignins in lignocellulosic biomass
2019.3	Fabrication of 3D tissue using vascularized multicellular spheroids, and its internal structure analysis
2019.3	Ionic liquid-assisted pretreatment for biorefinery of polysaccharides and lignins in lignocellulosic biomass
2019.3	Microbial cell inactivation by ultrasound irradiation in the presence of ultrafine bubbles
2019.3	Molecular mechanism of acceleration of anaerobic glucose consumption at elevated temperature in Corynebacterium glutamicum

Recent Doctoral theses in these 3 years (+ more if appropriate)

year.month	Thesis title (including English translation of Japanese thesis title)

Laboratory mail address	