

Tissue Engineering and Artificial Organs

The living body maintains homeostasis by becoming a system, and it is very complicated and delicate but functional. Based on the chemical engineering foundation, we will build a new artificial system that fits or complements this biological system, and design and build a device system for researching and industrial use of the characteristics and responses of the biological system. Lectures will be given. Specific examples include the construction of human tissue / organ equivalents for regenerative medicine, various artificial organs, the development of cultured organ models as drug efficacy and toxicity test methods, and the development of drug delivery systems are introduced.