Student's Thesis:

1. Expression of humanized monoclonal antibody Omalizumab against IgE in CHO cell line and evaluation of the effect of Ubiquitous Chromatin-Opening Elements (UCOEs) on expression level and on their clones.
2. A novel dual SUMO vector for Fab antibody fragments expression in E. coli cytoplasm via a fed-batch glucose slow release cultivation mode, evaluating the effect on expression level, proper folding and efficacy of the Fab fragment
3. Pharmacokinetic analysis of a novel chimeric-truncated t-PA in rats.
4. Investigating the changes in metabolic behavior of recombinant CHO DG44 cells exposed to Valproic acid expression inducing element and pepton supplementation.
5. Investigating the effect of peptone supplementation on cellular growth and protein production of CHO DG44 cellsand optimizing the best condition based on DOE predictions.
6. Optimization of TGE (Transient Gene Expression) for Recombinant Protein Production in mammalian cell culture: Bioprocess Scale-up
7. Optimization of Recombinant Protein Production in mammalian cells cultured in shaker incubator and investigating the production in E.coli