

**Diploma Work Topics**  
**Department of Pharmaceutics**  
**2024**

1. Artificial intelligence and pharmaceutical manufacturing  
Supervisor: Prof. István Antal
2. Rheological evaluation of pharmaceutical dosage forms  
Supervisor: Dr. Lívia Budai
3. Advantages of Microfluidics in Pharmaceutical Drug Delivery Systems  
Supervisor: Dr. Miléna Lengyel
4. Advances of Microfluidic Devices in Pharmaceutical Basic Operations and Nanotechnology  
Supervisor: Dr. Miléna Lengyel
5. Microfluidics in the formulation and testing of liquid and semisolid dermal preparations  
Supervisor: Dr. Miléna Lengyel
6. Analytical challenges of investigating extractables and leachables of plastics related to pharmaceutical practice  
Supervisor: Dr. Borbála Dalmadi-Kiss
7. Influence of required HLB-value of oils on the stability of emulsion systems  
Supervisor: Dr. Noémi Anna Niczinger
8. Development of a chromatographic method for the examination and comparison of diclofenac containing gels  
Supervisor: Dr. Márton Király  
Dr. Dóra Farkas
9. Optimization of the freeze-drying process parameters  
Supervisor: Dr. Emese Bertalan-Balogh
10. Issues Arising from the Administration of Oral Medications  
Supervisor: Dr. Nikolett Kállai-Szabó
11. Application of deep learning methods in proteomics  
Supervisor: Dr. Krisztina Ludányi  
Dr. László Drahos HUN-REN
12. Single cell proteomics in medicinal research  
Supervisor: Dr. Krisztina Ludányi