Pharmaceutical Technology 3.

Topic list 2022/2023 autumn semester (B and C exams)

- 1. Definition of crystals, classification, crystal habits
- 2. Operation of crystallization
- 3. Kinetics of crystallization, preparation preparation of spherical crystals
- 4. Equipments for crystallization, examination of crystals
- 5. Theory of drying
- 6. Moisture types in solid dosage forms
- 7. Characteristic functions of drying process
- 8. Equipments for drying
- 9. Special drying equipments (microwave and vacuum)
- **10.** Theory of liophilisation
- 11. Equipments for freeze drying
- **12.** Drying with fluidization
- **13.** Spray drying
- 14. Theory of grinding
- 15. Grinding methods, equipments
- 16. Theory of micronization, equipments
- 17. Operation of sieving
- 18. Mathematical characterization of sieving, particle size distribution
- 19. Theory of fluidization, equipments
- **20.** Fluidization disorders
- 21. Theory of granulation, operation of granulation
- 22. Mechanisms of granule formation, granulation excipients
- **23.** Equipments for granulation
- 24. Granules as dosage forms, examination of granules
- 25. Pharmaceutical technological aspects of tablet compression
- **26.** Characterization of tablet compression process, important mathematical functions

- 27. Tableting machines, operation of tablet compression
- 28. Excipients of granulation and tablet compression
- 29. Tableting disorders
- **30.** Examination of tablets
- **31.** Operation of capsule filling, capsule types
- **32.** Soft gelatin capsules and their manufacture
- **33.** Hard gelatin capsules and their filling
- 34. Pharmaceutical technological aspects of coated dosage forms
- **35.** Methods of coating
- **36.** Operation of sugar coating
- **37.** Operation of film coating and its excipients
- **38.** Equipments for coating

Materials:

Lecture slides, notes

The Theory and Practice of Pharmaceutical Technology (Dr. Dévay Attila) – e-book (https://gytk.pte.hu/dokumentum/16632)