

# Pharmaceutical technology (Nano technological approach)

**Iraj Alipourfard, MD, PhD**

Email: [ialipourfard@ichf.edu.pl](mailto:ialipourfard@ichf.edu.pl)

Course: Online (in case of interest possible by attendance)

Date: Beginning in March- Registration deadline: 8<sup>th</sup> march 2024.

Assessment: Optional to a topic presentation OR a multiple choice exam

Principal of pharmaceutical sciences

Physiological basics: pharmacokinetics, pharmacodynamics and mechanistic calculations

Drug delivery systems, Nano carriers and phages

Nanotechnology-enabled Theranostics

Systematic pharmacology:

- Cardiorespiratory drugs: Chemistry and medical application review
- Opioids and neurological drugs: Chemistry and medical application review
- Inflammatory and immunological drugs: Chemistry and medical application review
- Hormonal and diabetic drugs: Chemistry and medical application review
- Cancer therapies: chemistry and medical aspects
- Antibiotics: chemistry, clinical applications, antibiotic resistances

Herbals: chemistry, therapeutics and pharmacological industry

Biotechnology drugs, recombinants, biosimilar and biological structured drugs

Nano toxicology assessment

Industrial formulation

Legislation and marketing