

Biophysics Group Research

- 1- Study the effect of the intensity of different low-frequency magnetic fields on the activity of microorganisms (such as bacteria harmful to human health (e.g. H.pylori and methicillin-resistant Staphylococcus aureus (MRSA))
- 2- Study the synthesis of nanoparticles of different mineral salts using advanced green methods placed inside a matrix of natural polymers and used for the safe disposal of industrial waste and soil toxic materials.
- 3- Study the effect of nanoparticles generated in biological arrays in different physical and biologic ways, and their use in modern medical technology in drug delivery, as well as treatment of cancer, in addition to studying their effect on microorganisms (such as bacteria, fungi and algae) that have an effect negative on human, animal and plant health.
- 4- Study how to adjust and improve the efficiency of medical images (Image Quality Enhancement) resulted from medical imaging devices (such as fundus camera examination, CT scan images, etc.).
- 5- Use the modern artificial intelligence system to improve the medical appliance softwares that used in the imaging apparatus in the hospitals.
- 6- Study the effect of nano-scale oxygen bubbles on preventing and treating tissue hypoxia.
- 7- Biophysical study of proteins and DNA with nanopore technology.
- 8- Study of synthetic and natural membranes using a bilayer of droplet interface.
- 9- Using a nano-material encapsulated by the liposome to deliver medicine to treat human diseases, an "internal study".

Research Group Staff

NO.	Name	Specialization	Occupation
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