

Forum:Seminar papers/Biophysics/2. LF/2012-2013/Group 4

Group 4:

Optical microscopy

Subquestions

- Resolution of human eye
- Imaging principle of optical microscope
- Construction and function of optical microscope
- Abbe's theory
- Limit of resolution of optical microscope
- Magnification of optical microscope
- Depth of sharpness of optical microscope
- Contrast of optical microscope
- Microscopic techniques:
 - Transmitted light microscopy
 - Reflected light microscopy
 - Phase microscopy
 - Inverse microscope
 - Polarizing microscopy
 - Interference microscopy

X-rays in medicine

Subquestions

- X-rays characteristics (physical nature, spectral band, generation mechanism)
- Physical principle of imaging with X-rays
- X-rays imaging (classical methods)
- Computer tomography:
 - Hounsfield's units
- Angiography

Responsibility for the page content

Every subquestion should be developed by one or two students. First, type the subquestions and the name of students in the following table:

Subquestion (Link to the subquestion)	Developed by username (First_name Surname)
Resolution of human eye	User: mazen ab (Mazin Ali Badi Ali)
Imaging principle of optical microscope	User: lolanda (lolanda Carvalho)
Construction and function of optical microscope	User: Dhiren Brahmbhatt (Dhiren Brahmbhatt)
Abbe's theory	User:tmsouthwood (Theresa Southwood)
Limit of resolution of optical microscope	User:Anjali (Anjali Kumar)
Magnification of optical microscope	User:Varun (Varun Kakkar)
Depth of sharpness of optical microscope	User:Diogo2301 (Rui Martins)
Contrast of optical microscope	User:LeonorSR (Leonor Raposo)
Microscopic techniques	User:Vsanji23 (Vaishnav Potti)
Transmitted light microscopy	User:rutecastelhano (Rute Castelhana)
Reflected light microscopy	User:Carolinagomes (Carolina Gomes)
Phase microscopy	User:Diogo Simões (Diogo Simoes)
Inverse microscope	User:RosárioCalado (Maria do Rosário Calado)
Polarizing microscopy	User:InesdeSousaCorreia (Ines de Sousa Correia)
Interference microscopy	User:carlotadoreyvelasco (Carlota d'Orey Velasco)
X-rays characteristics	User:Adwantic (Mona Habari)
Physical principle of imaging with X-rays	User:Ihodeib (Ibrahim Hodeib)
X-rays imaging	User:Zeenat Khan (Zeenat Khan)
Computer tomography	User:Tengojo17 (Ohiowele 'Otis' Ojo)
Hounsfield's units	User:Olivia Strömblad (Olivia Strömblad)
Angiography	User:nahema rajabali (Nahema Rajabali)

Developing subquestions

Click on your red coloured subquestion on the table above. The appropriate edit window will be opened and you will start creating the content.