

## *1<sup>st</sup> Lecture*

### **0. Introduction**

Optics in organic material research – motivation; organization of the lecture; history of optics

### **1. Character of light**

Light as electromagnetic waves

- electric and magnetic fields
- basic laws of electromagnetic theory: Faraday's induction law, Ampere's circuital law, Gauss's electric and magnetic laws
- Maxwell's equations in integral and differential forms
- wave equations for E and B