

Abstract

This bachelor thesis is focused on growth and characterization of graphene from SiC powder at different conditions. In the introduction graphene properties are briefly described. Afterwards three methods of graphene growth are discussed, with particular emphasis on thermal decomposition of SiC. Further, the characterization methods which were used by us are explained. In experimental part, three sets of graphene samples prepared by thermal decomposition of SiC will be described, each will differ in one of the factors: temperature, time and ambient atmosphere. Growth samples will be subsequently used in an experiment on yeast. The effect of graphene prepared at different conditions on membrane potential will be determined for possible application in biophysics.