

## **Abstract**

It has been widely acknowledged that the ability to learn, to apply outcomes of R&D and to innovate are key-factors of contemporary economic competitiveness. These aspects are of increasing importance in conditions of the Czech republic as well. Therefore, ambition of this diploma thesis is to deepen current insufficient knowledge in this field in our country. The thesis describes interactions of knowledge-intensive biotechnology companies with the innovation milieu of the Czech republic by analyzing the process of scientific knowledge transfer. It aims at identification of the ways in which knowledge is transferred in applied R&D and at rating the importance of different sources of knowledge for biotech firms. At the same time it identifies actors and institutions of czech biotechnology sector and their relations. In order to display linkages between different subjects in biotechnology, the concept of National Innovation System is used. Further, the importance of different spatial levels for knowledge transfer is analyzed and major institutional and social barriers for development of biotechnology sector are discussed.

The thesis concludes by making a distinction between formal (joint research activities) and non-formal types (spare-time meetings) of knowledge transfer. Universities, research institutes and scientific journals are found as the most important sources of new knowledge for firms' R&D. Further, universities and research institutes are identified as key partners for biotechnology firms. This holds particularly true for co-operation on research projects but these actors also serve as sources of qualified working force. In terms of spatial levels importance, the international level is of higher importance for most of the companies. It provides them with the last scientific findings determining the lines of further research. However, most of the R&D co-operation proceeds on the regional level. The lack of appropriately qualified working force was identified as being the major barrier for development of knowledge-intensive biotechnological activities in the Czech republic. Moreover, there is also negative attitude to the process of knowledge commercialization on the part of researchers and academic institutions.