Honey is a natural food product made by honeybee (*Apis melifera)* from plant nectar, honeydew or both. Due to its unique properties (taste, nutritional and therapeutic value) it is used not only as food but also as a popular product in the cosmetic as well as medical industry. Furthermore, consumer interest in this product is constantly increasing. The evidence of that are murals paintings discovered on the walls in different region of the world. Its healing properties were used by Hippocrates (about 460 – 370 BC), who used honeys for healings wounds or recommended its consumption in the case of fevers, illnesses or upon weakening of the body. Valuable nutritional and therapeutic properties of honeys are resulting from presence of rich cocktail of organic compounds derived from flower nectar or honeydew

Unfortunately, it is very disturbing that honey is one of the most common falsified food products. This dealing is done by admix honeys with glucose-fructose syrup or by mixing honey with cheaper and inferior quality honey imported from China or India. All this leads to a significant decrease of the unique qualities of honey; moreover, methods commonly used to control its quality are not sufficient. Therefore, worldwide research is focused on the development of new and better methods for quality control and determination of honey botanical origin. One of the means is the analysis of chemical composition of honeys.

The aim of the project is the identification and further isolation of specific fluorescent chemical compounds present in Polish honey of various botanical origins. Thus, profiles of fluorescent compounds as well as individual markers will be determined and used for determination of honey origin. Also the use of fluorescent spectroscopy to differentiate the botanical and/or geographical origin of Polish honey will be applied. Obtained results may have a significant contribution to the development of methods useful for determination of the quality and origin of this valuable food product.