

**Annotation of Doctoral Thesis Topics for Degree Programme: Material Sciences and Engineering, course in „Biomaterials and Biocomposites“ for the Academic Year 2019/2020**

**Topic:** Hydrogels for technical applications

**Supervisor:** prof. Ing. Vladimír Sedlařík, Ph.D.

**Consultant:** Ing. Martina Pummerová, Ph.D.

**E-mail:** sedlarik@utb.cz

**Annotation:**

The PhD project is aimed at development of novel types of hydrogels for agro-applications. This multidisciplinary topic connects fields of material engineering, chemistry and ecology. An involvement of the student into an implementation of projects with close connection to practice is planned.

**Requirements:**

Knowledge of inorganic and organic chemistry and physics at the university level. Knowledge of the English language and/or potential to improvement. Basic manual and laboratory work skills. Ability to work independently.