Summary

This thesis summarizes the basic general knowledge of geology and geological evolution of western Bohemia. But above all, deals with the occurrence of thermal water, its origin and development. Describes in detail the local springs on the earth's surface, water yield and temperatures. More characteristic is given the hottest spring in the Czech Republic and that is the Vřídlo in Karlovy Vary. This thesis also deals with the energy potential thermal waters and their possible applications. The conclusion includes a total reflection on the issue thermal water and their use in the future.