Abstract
Extreme habitats lie outside the range of conditions in which most of organisms live. 'Extreme' includes physical extremes, e.g. temperature, radiation, pressure, and geochemical extreme, for example desiccation, salinity, pH, depletion of oxygen or extreme redox potential. Investigations of these environments are important for the study of evolution relationships, emergence of new species and various ecological relations among organisms which compensate certain environmental externalities. From such habitats new metabolites and metabolic pathways of organisms can be expected, which indicate bioremediation potential, discovery of new antibiotics, etc. Extreme habitats are populated by highly specialized organisms - extremophiles, which must - in a contrast to other species - bridge different stresses conditions. Liquid water is the sine qua non of life on Earth, but regarding the physical and geochemical extremes, life is present even in habitats with obvious lack of water, e.g. deserts. In such habitats environmental parameters allow existence to only specially adapted organisms live. All these facts support the idea of sustainable management with these natural features, their protection, preserving their genetic pool and popularisation in the society.

Keywords
Extreme habitats, extremophiles, physical extremes, threats.