

## Formation of a biogenic gemstone – opal – in plants

Some plant species take up the molecules of silica acid from the environment and form shape-, size- and tissue-specific aggregates – opals – termed silica phytoliths. These aggregates possess various functions, mostly in plant protection against abiotic and biotic stressors. Although the phytoliths research has started already in 19<sup>th</sup> century, the cellular processes involved in their formation are unknown yet. The lecture reveals an assumption about the silica phytoliths formation in plants and their industrial potential.

Michal Martinka

Department of Plant Physiology

Faculty of Natural Sciences

Comenius University in Bratislava

Mlynska dolina B2

842 15 Bratislava

Slovak Republic