

## **Sekcia I: Aplikovaná biológia / Applied Biology**

**Forgáčová, J., Janeček, Š.**

In silico analysis of alpha-amylase family GH126 with focus on prokaryotic sources outside Firmicutes

5

**Krajčiová, D., Seman, M.**

Staphylococci in the environment

7

**Matušíková, M., Ūrgeová, E.**

Effects of plant extracts on *Staphylococcus* sp.

9

**Pokorná, N., Vešelényiová, D., Gerši, Z.**

Optimization of methodology for the study of transcription of selected genes for calpains in *Euglena gracilis* grown in different conditions

11

**Sedláčková, M., Ūrgeová, E.**

Biological effects of selected plant extracts

13

**Strmanská, S., Janeček, Š.**

Unique sequence-structural features and evolution of polyspecific bacterial alpha-amylases

15

**Šaradinová, D., Uváčková, L.**

Comparison of 2-DE protein profiles of barley grown at two different localities

17

**Tabačková, R., Janeček, Š.**

Structure, function and evolution of archaeal hyperthermophilic alpha-amylases

19

**Veselovská, V., Hutárová, L.**

Cyanobacteria of Icelandic thermal habitats

21

## **Sekcia II: Aplikovaná chémia / Applied Chemistry**

**Bizoň, P., Gašparová, M., Tokárová, Z.**

Chemical structure analysis of organic compounds by  $^1\text{H}$  NMR with benchtop-type NMR spectrometer

25

**Holienková, M., Nemeček, P.**

Determination of selected polyphenolic compounds in different soya tissues by HPLC

27

**Michálek, N., Maliar, T.**

The study of therapeutic potential of L-carnosine and its components on *in silico* and *in vitro* level

**29**

### **Sekcia III: Aplikovaná informatika / Applied Informatics**

**Baričič, R., Jurinová, J.**

Application refactoring using design patterns

**33**

**Minčák, M., Ölvecký, M.**

Analytical data as forms of feedback for optimization of UX/UI web applications

**35**

**Navrátil, M., Beňo, M.**

Analysis and comparison of SQL code for optimisation

**37**

**Žec, J., Ölvecký, M.**

The comparison of modern reactive JavaScript frameworks

**39**

### **Sekcia IV: Biotechnológie / Biotechnology**

**Balajová, I., Gavurníková, S., Havrlentová, M.**

Enrichment of wheat flour with food raw materials based on oats in terms of protein content

**43**

**Čičová, I., Zetochová, M.**

*Perilla frutescens* L. - morphological and chemical characterization

**45**

**Otiepková, M., Chmelová, D.**

Production of polyhydroxyalkanoates by *Cupriavidus necator*

**47**