



CONSTANTINE THE PHILOSOPHER UNIVERSITY IN NITRA
FACULTY OF NATURAL SCIENCES

14TH INTERNATIONAL SCIENTIFIC CONFERENCE
OF PhD. STUDENTS,
YOUNG SCIENTISTS AND PEDAGOGUES

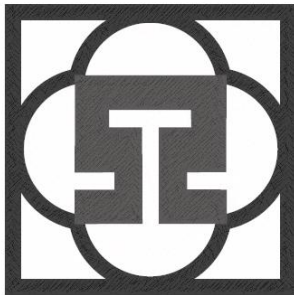
PROGRAM



SOLVE SCIENCE!

SEPTEMBER 25, 2013
NITRA SLOVAK REPUBLIC
<http://conferences.ukf.sk/phdconf2013>

THE CONFERENCE IS ORGANIZED BY

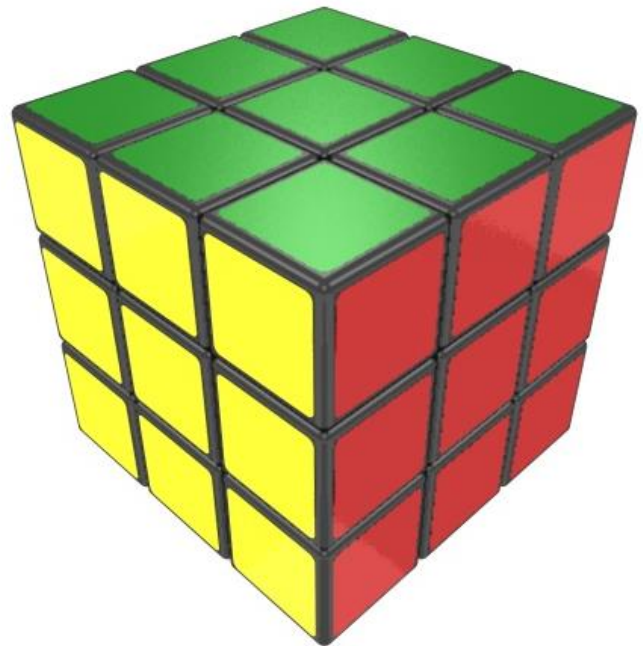


Faculty of Natural Sciences

Constantine the Philosopher University in Nitra

Academic Club Faculty of Natural Sciences

Constantine the Philosopher University in Nitra



SESSIONS



1 Biology



2 Ecology



3 Geography and Environmental Sciences



4 Mathematics and Informatics



5 Physics and Chemistry

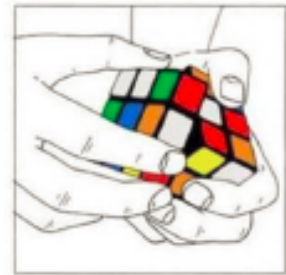


6 Project Comenius DynaMAT

CONFERENCE PROGRAM

Wednesday, September 25, 2013

8:00 – 8:50	Registration of Participants
9:00 – 9:10	Opening Ceremony (P-2)
9:15 – 10:30	Parallel Sessions
10:30 – 10:45	Coffee Break
10:45 – 12:00	Parallel Sessions
12:00 – 13:30	Lunch Break
13:30 – 15:00	Parallel Sessions
15:00 – 15:15	Coffee Break



Presentation Length: There is time limit 10 minutes for each presentation and 5 minutes for discussion.

Conference Language: English, Slovak, Czech

Participants have a **laptop** with a **data projector** available. File (in pptx format) with the presentation will be copied on the laptop before the session. Presentations must be written in English.

Wednesday, September 25, 2013



Session 1: Biology

Room: P-2 (Ground Floor)

**Session Chairs: doc. Ing. Ida Petrovičová, PhD.
doc. RNDr. Roman Kuna, PhD.**

9:15 – 9:30 Dušan Paál, Ján Kopernický, Jaroslav Gasper, Dušan Vašíček , Katarína Vašíčková, Mária Bauerová, Miroslav Bauer
Selection of Suitable Microsatellite Markers for Origin Verification of the Slovak Carniolan Honeybee

9:30 – 9:45 Richard Alexa, Attila Kádasi, Aneta Štochmaľová, Alexander V. Sirotkin
Effect of dbcAMP on Proliferation and Apoptosis of Porcine Granulosa Cells Isolated from Cycling Ovaries

9:45 – 10:00 Ivana Boboňová, Martina Kováčiková, Martin Vozár, Monika Martiniaková
A Teaching Aid from Microscopic Anatomy of Skeletal, Muscular and Digestive Systems in Animals and Human

10:00 – 10:15 Aneta Štochmaľová, Attila Kádasi, Richard Alexa, Alexander Sirotkin
The Effect of Resveratrol and FSH on Proliferation and Apoptosis of Porcine Ovarian Granulosa Cells

10:15 – 10:30 Csilla Patasi, Marian Farkašovský
Structure of Septin Filaments under Influence of Protein Kinases

10:30 – 10:45 Coffee Break

10:45 – 11:00 Tomáš Pilka, Ida Petrovičová, Branislav Kolena
Human Biomonitoring of Dibutyl Phthalate in General Population in Slovakia

11:00 – 11:15 Barbora Kulíková, Elena Kubovičová, Peter Chrenek
Effect of Ficoll on the Post-Thaw Motility of Cryopreserved Rabbit Semen

11:15 – 11:30 Jana Španková, Vladimíra Krajčovičová, Jana Ďurišová, Radoslav Omelka
Association of the Leu432Val Polymorphism in Cyp1b1 Gene with Bone Mineral Density (BMD) in Slovak Postmenopausal Women

11:30 – 11:45 Veronika Csákyová, Melinda Nagy, Mária Bauerová
Human Mitochondrial DNA in ArchAeological Research

11:45 – 12:00 Adela Kišacová, Marek Živčák, Ľuba Ďurišová, Ľudmila Galuščáková, Tibor Baranec
Representation of Assimilatory Pigments of Hybrids *Prunus* L. from the Selected Sites

12:00 – 13:30 Lunch Break

13:30 – 13:45 Michal Miškeje, Tomáš Slanina, Ida Petrovičová, Peter Massányi
The Effect of Different Concentrations of Carbohydrates (Trehalose and Fructose) on Turkey Spermatozoa In Vitro.

13:45 – 14:00 Konrad Celiński, Veronika Zbránková, Aleksandra Wojnicka-Póltorak, Kamila Głowczewska, Bartosz Hornik, Wiesław Prus-Głowacki
Application of ISSR and SSR Combined Data to Assess Genetic Diversity in Dwarf Mountain Pine (*Pinus mugo* Turra)

14:00 – 14:15 Adriána Péntzesová, Ľudmila Illášová
Mineralization as a process leading to the preservation of plant material

14:15 – 14:30 Branislav Kolena, Mária Tonková, Mária Vondráková
Morphological Analysis of The Skeletal Remains from Archaeological Locality Nitra-Drážovce

14:30 – 14:45 Zuzana Gregorová, Terézia Gáľusová, Pavol Hauptvogel, Marína Maglovski, Patrik Mészáros, Roman Kuna, Ildikó Matušiková
Drought Effect on Different Varieties of Wheat



Session 2: Ecology

Room: C - 305 (3. Floor, Block C)

**Session Chairs: RNDr. Zuzana Krumpálová, PhD.
doc. PaedDr. Stanislav David, PhD.**

9:15 – 9:30 Katarína Bahnová, Zdenka Rózová
Theoretical Base for Evaluation of the Influence of Vegetation Areas on Microclimatic Factors

9:30 – 9:45 Marek Gális
Invasive Plants Along the Dispersal Corridors in Urban Areas

9:45 – 10:00 Zuzana Krumpálová, Pavel Žila
Succession of Ground Living Spiders (Araneae) in Antropogenous Landscape Formations - Coal Mine Dumps

10:00 – 10:15 Alexandra Tóthová
Floristic Research of the Catchment of Hodrušský Potok Creek in Štiavnické Vrchy Mountains

10:15 – 10:30 Gabriela Augustiničová

The Changes of Small Mammal Community in Forest Ecosystem of Tatra Mts.

10:30 – 10:45 Coffee Break

10:45 – 11:00 Ľuboš Vadel

Rare Flora and High Species Diversity of Kopanec Meadows in National Park Slovak Paradise

11:00 – 11:15 Michal Hudec, Zuzana Hanzlíková, Melánia Feszterová

Seasonal Dynamics of Inorganic Nitrogen in Andosols Soil Type on the Meadow Ecosystems

11:15 – 11:30 Ivana Pilková

Comparison of the Onset and Course of Spring Phenological Phases of the Báb Forest Woody Plants

11:30 – 11:45 Barbora Kabinová, Miriam Vlachovičová

The Diversity of Vascular Plants of the Surrounding of the Spring of Hron River and Besník Saddle

11:45 – 12:00 Martina Babálová

Contribution to the Knowledge of the Butterflies (Lycaenidae) Distribution in Grasslands of Village from Vlkolínec (Veľká Fatra)

12:00 – 13:30 Lunch Break

13:30 – 13:45 Peter Klimant, Michal Ambros, Andrej Štollmann

Acari (Mesostigmata) of Small Mammals of some Wetland Biotopes in Podunajská Rovina Lowland

13:45 – 14:00 Matúš Kováč

Bats' Preference of Different Construction Types of Block of Flats



Session 3: Geography and Environmental Sciences

Room: B - 212 (2. Floor, Block B)

Session Chairs: doc. RNDr. František Petrovič, PhD.

doc. PhDr. RNDr. Martin Boltžiar, PhD.

9:15 – 9:30 Mária Bystrianska, Alfréd Krogmann

Religious Tourism in the Village Dolná Strehová

9:30 – 9:45 Jana Oláhová, Matej Vojtek, Martin Boltížiar

Assessment of Landscape Stability Using Variation Curves

9:45 – 10:00 Matej Vojtek, Jana Oláhová, Martin Boltížiar

Vertical Accuracy Assessment of Digital Terrain Models Derived from Topographic Maps

10:00 – 10:15 Ljubov Kohutnicka

Comparative Analysis of Components of Social Vulnerability Index and Indicators of Social Dimension of Sustainable Development

10:15 – 10:30 Marek Civáň, Alfred Krogmann

Impacts of Tourism on Landscape

10:30 – 10:45 Coffee Break

10:45 – 11:00 Daniel Kubinský, Karol Weis

The Retention Volume Changes of Evička Reservoir

11:00 – 11:15 Katarína Kysucká, Martin Boltížiar

Function on Non-Forest Wood and Shrub Vegetation in the Concept of Multifunctionality of Agricultural Landscape

11:15 – 11:30 Ivana Haladová

Evaluation of Changes of Eco-Stabilizing Elements and Land Use Intensity Around the Water Reservoir Nitrianske Rudno

11:30 – 11:45 Monika Krčmárová, Zuzana Zacharová

Analysis and Evaluation of the Situation and Development of the Acreage of Arable Land in Selected Area of District Komárno

11:45 – 12:00 Drábová Monika, Šatalová Barbora

Human Impact on Hydric Potential of Landscape in the National Park

12:00 – 13:30 Lunch Break

13:30 – 13:45 Jozef Gallik

Frequency of Snow Avalanches in 2008 – 2012 in Area of Zadne Medodoly Valley

13:45 – 14:00 Anton Sedlák

Morphodynamic Processes of Mountain Landscape of the High Tatra Mts. – Javorová Dolina Valley



Session 4: Mathematics and Informatics

Room: C - 212 (2. Floor, Block C)

Session Chairs: RNDr. Dušan Vallo, PhD.

PaedDr. Lucia Rumanová, PhD.

9:15 – 9:30 Vladimír Bradáč

Adaptive E-Learning System for Language Learning

9:30 – 9:45 Jaroslav Reichel

Stages of Optimization of Electronic Course Computer Data Analysis

9:45 – 10:00 Zuzana Mezuliániková

Students' Attitudes in Terms of Satisfaction with Web-Based Homework at the Primary School Level

10:00 – 10:15 Edita Szabová

The Chi-Square Goodness-of-Fit Test

10:15 – 10:30 Lukáš Lednický, Zuzana Vítězová

Comparison of Inquiry-Based Learning and Experiential Education

10:30 – 10:45 Coffee Break

10:45 – 11:00 Eva Uhrinová

Some Tips for Making a Questionnaire

11:00 – 11:15 Anna Hrešková

Inductive Reasoning in Mathematics

11:15 – 11:30 Eva Mokrářová, Miroslava Sovičová

Flight With a Hot Air Balloon as an Open Problem in Mathematics Teaching

11:30 – 11:45 Neli Dimitrová

Extremum Seeking in a Chemostat Model of Plasmid-Bearing Plasmid-Free Competition

11:45 – 12:00 Antal Csáky

Interesting Graphs and Diagrams in the Teaching of Mathematics

12:00 – 13:30 Lunch Break

13:30 – 13:45 Kristína Cafíková, Andrea Jakubcová

The Utilisation of the Educational Method Drawing Card on Universities

13:45 – 14:00 Gabriela Galliková

Chosen Samples and Analysis of Student Tasks on the Topic Symmetry and Asymmetry

14:00 – 14:15 Mária Kóšová

Tasks Which Develop Mathematical Literacy of Pupils of 8th Grade of Primary School in the Area of Randomness

14:15 – 14:30 Eva Barčíková

Using Paper Folding to Develop Basic Geometric Knowledge

14:30 – 14:45 Magdalena Tomanová
Golden Ratio and One-Dimensional Optimization

14:45 – 15:00 Gabriela Szendy
Necessity of Reading Ability in Mathematics Lesson



Session 5: Physics and Chemistry

Room: C - 11 (Ground Floor, Block C)

**Session Chairs: prof. RNDr. Arpád Kecskés, CSc.
doc. Ing. Melánia Feszterová, PhD.**

9:15 – 9:30 Andrea Čongrádyová, Klaudia Jomová
Copper Phenanthroline Complexes

9:30 – 9:45 Zuzana Hanzlíková, Michal Hudec, Melánia Feszterová
Environmental Contamination by Heavy Metals

9:45 – 10:00 Michal Hudec, Melánia Feszterová
Comparison of Titration and Colorimetric Methods with the Different Modifications for the Determination of Total Organic Carbon in the Soil

10:00 – 10:15 Michaela Reichelová, Aba Teleki
Pros and Cons of Fermi Problems in Teaching Physics

10:15 – 10:30 Stanislav Šimkovič, Aba Teleki
Some Properties of the Tidal Forces

10:30 – 10:45 Coffee Break

10:45 – 11:00 Ondrej Fečo
Experimental Tasks as a Tool of the Motivation Towards Learning Physics in Terms of Optional Activities in the Interest Group

11:00 – 11:15 Tomáš Húlan, Igor Štubňa, Anton Trník
Determination of the Logarithmic Decrement of Poor Quality Samples

11:15 – 11:30 Tomáš Ondro, Anton Trník, Ľubomíra Valovičová
The Dependence of Thermophysical Properties of Soil on its Granularity

11:30 – 11:45 Ľuboš Podobník
On Negative Thermodynamic Temperatures

11:45 – 12:00 Mária Bystrianska, Peter Čerňanský
The Misconception Associated with the Term Density

12:00 – 13:30 Lunch Break

13:30 – 13:45 Alexandra Letko Adamíková, Lubomír Zelenický

The Importance of Illustrations in Textbooks of Physics Based on Eye Tracking Research Method

13:45 – 14:00 Peter Krupa, Svetozár Malinarič

Determining the Temperature Coefficient of Resistance of the Heat Disk in the EDPS Method

14:00 – 14:15 Michal Benko, Boris Lacsny, Rudolf Podoba, Aba Teleki

Role of Certain Features Observed in Knowledge Increase Testing

14:15 – 14:30 Martin Štubňa

From Motion to Derivation and Integral – Implementation Calculus in Learning Process at Secondary Education Level



Session 6: Project Comenius DynaMAT

Room: C - 219 (2. Floor, Block C)

Session Chairs: doc. PaedDr. Soňa Čeretková, PhD.

9:15 – 9:30 Toni Chehlarova, Evgenia Sendova

Finding Geometric Patterns as a Game of Dynamic Explorations

9:30 – 9:45 Evgenia Sendova, Toni Chehlarova

Studying Fine-Art Compositions by Means of Dynamic Geometry Constructions

9:45 – 10:00 Andreas Ulovec

Fieldwork as a Teaching Method - a Case Study Using GPS

10:00 – 10:15 Marco Ferrigo

Problem Posing in Mathematical Education: Diophantine Equations and a Problem in Geogebra

10:15 – 10:30 Ján Šunderlík, Eva Barčíková

Investigation with Circles

10:30 – 10:45 Coffee Break

10:45 – 11:00 Freyja Hreinsdóttir

Some Examples on Using GeoGebra to Teach Calculus

12:00 – 13:30 Lunch Break