

Conference Program - updated

Important notes

- Presentations of the papers should be prepared in English, using software Power Point.
- **Maximum time for one presentation is 10 minutes including the discussion.**
- Excursion / tour to **Treetop walk Bachledka:**
13th of September, 14:00 - 18:00, transport will be provided from the hotel by buses,
For more information see <https://chodnikkorunamistromov.sk/en/>.



1234 m - total length of the trail
631 m - the length of the trail
603 m - the length of the tree top trail

32 m - the height of the observation tower
24 m - the highest point of the tree top trail
120 - the number of the abutments

12th of September 2018

- 14:00 - Accommodation, individually at the hotel reception desk
15:00 - 18:00 Registration of the participants
18:00 - Dinner

13th of September 2018

- 07:00 - 08:30 Breakfast
08:00 - 08:30 Registration of the participants
08:45 - 09:00 **Conference opening: Conference room A**



09:15 - 12:30 **Conference sessions: Conference room A**

09:15 - 10:45 Lectures session **A1**, Chairmen: *VATIN Nikolai, DEMCAK Stefan*

01 - *Boldizsár Cs. B., Bodnár I., Iski P., Koós D., Skribanek Á.*

Characteristic determination of solar cell by numeric simulation and laboratory measurement

02 - *Bodnár I., Iski P., Koós D., Skribanek Á.*

Examination of electricity production loss of a solar panel in case of different types and concentration of dust

03 - *Demcak S., Balintova M., Demcakova M., Kovacova Z. **

Using of wood sawdust for heavy metals removal from waters

04 - *Koós D., Iski P., Skribanek Á., Bodnár I.*

Solar simulator development for small size solar cell measurements

05 - *Poorova Z., Kapalo P., Vranayova Z. **

Effect of interior green wall on the environment in the classroom

06 - *Rakowska J. **

Impact of firefighting agents on diesel oil biodegradation in contaminated soil samples

07 - *Rakowska J., Tekieli M. **

Efficacy of protective facemasks in reducing exposure to particulate matter

08 - *Bílková A., Kocurová P., Zdařilová R.*

Universal design standards for housing stabilization

10:45 - 11:00 Coffee break

11:00 - 12:30 Lectures session **A2**, Chairmen: *VATIN Nikolai, POOROVA Zuzana*

01 - *Papesch R., Dvorsky T., Vaclavik V., Svoboda J., Klus L. **

Research of cement mixtures with added granulated and fluidized fly ashes

02 - *Pecník M., Panuška J., Borzovič V.*

Experimental testing of mechanical properties of polystyrene for means of passive earth pressure reduction

03 - *Rassokhin A. S., Ponomarev A. N. **

The high-strength fine grained nanostructured concrete from low-quality filling

04 - *Vatin N. I., Pestryakov I. I., Ogidan O. T., Sultanov Sh. T., et al. **

Water vapour by diffusion of PIR and mineral wool thermal insulation materials

05 - *Bolló B., Bencs P., Szabó Sz.*

Experimental and numerical study of low-Reynolds number flow around a heated circular cylinder

06 - *Cakyova K., Vranay F.*

Experimental verification of influence of flow rate to evaporation ability of water wall

07 - *Szaszák N., Bencs P., Szabó Sz.*

Enhancement of mixing in gas medium by means of active turbulence generator

08 - *Faltejsek M., Chudikova B.*

BIM and computer simulations

09:15 - 12:30 **Conference sessions: Conference room B**

09:15 - 10:45 Lectures session **B1**, Chairmen: *NIKOLIĆ Ružica, BAJZECEROVÁ Viktória*

01 - *Bajzecerová V., Kanócz J.*

Long-term bending test of timber-lightweight concrete composite with adhesive connection

02 - *Brodniansky Jr. J., Brodniansky J., Recký J., Magura M., Klas T., Botló M.*

Connections of conical towers subjected to bending and torsion - slip-joints



03 - Erdős A., Jármai K.

Optimization of a wall thickness of a pressure vessel

04 - Fíla J., Eliášová M., Sokol Z.

Experimental analysis of glass bricks and mortar used for glass bricks masonry

05 - Hanzel J., Bartók A., Halvonik J. *

An effect of the subsoil simulation on the punching resistance of the footings

06 - Janda M., Zich M. *

Experimental verification of properties of concrete mixtures for concrete prefabricate parts

07 - Jeleniewicz K., Gilewski W. *

Tensfoamity - a new concept of foam integrated beams

08 - Klun M., Zupan D., Kryžanowski A.

Identification of operational loads on the structural response of a concrete gravity dam

10:45 - 11:00 Coffee break

11:00 - 12:30 Lectures session **B2**, Chairmen: KRYŽANOWSKI Andrej, AL ALI Mohamad

01 - Borzovič V., Švachula R., Lániová D., Šarvaicová S.

Flexural testing of steel and GFRP reinforced beams

02 - Kawecki B., Podgórski J., Głowacka A. *

Methods for determining elastic modulus in natural plant stems

03 - Kozielová M., Mynarzová L. *

Deformation characteristics of masonry structure subjected to horizontal loads

04 - Lániová D., Borzovič V.

Shear capacity of GFRP reinforced concrete girders

05 - Lazič V., Arsić D., Nikolić R., Radović Lj., Ilić N., Hadzima B.

Determination of the cooling time in carbon steels welding - experiments vs analytical / empirical expressions

06 - Nazmeeva T. V., Laushkina E. I. *

Numerical research of reinforced concrete truss without diagonal members in buildings with roof-truss space

07 - Peker K., Taşkin K., Bölükbaşı E. *

Improved method for concrete filled composite column construction

08 - Sokol Z., Eliášová M., Hána T., Vokáč M., Machalická K. V.

Influence of loading rate on double laminated glass panels performance in four-point bending tests

09:15 - 12:30 **Conference sessions: Conference room C**

09:15 - 10:45 Lectures session **C1**, Chairmen: PLATKO Peter, AL ALI Mohamad

01 - Baláž I. J., Koleková Y.P., Moroczová L. O.

Analysis of internal forces in aluminium laced built-up column with bow imperfection under combination of actions

02 - Baláž I. J., Koleková Y.P., Moroczová L. O.

Analysis of internal forces in aluminium laced built-up column with sway imperfection under combination of actions

03 - Hokes F., Kala J., Trcala M., Nemeč I.

Implementation of the Drucker-Prager nonlinear material model and finite element benchmarks

04 - Sobek J., Klón J., Trčka T., Cifuentes H., Ríos J. D.

Study on the differences between surface fracture areas for different sizes of modCT specimens



05 - Vodička R., Krajníková K., Katreničová I.

An interface damage model under a cyclic shear load

06 - Kocurová P., Bílková A., Zdaňilová R.

Urban area and estimating of optimal barrier-free routes

07 - Žák J., Suda J.

Comparison of asphalt mixtures dissipating energy in brief

08 - Pacina J., Holá M.

GIS tools used for mapping and modelling of the forgotten stone crosses

10:45 - 11:00 Coffee break

11:00 - 12:30 Lectures session **C2**, Chairmen: **PLATKO Peter, BAJZECEROVÁ Viktória**

01 - Cajthaml J., Tobiáš P., Kratochvílová D.

Creating of 3D model of the historical landscape from contour lines displayed on old maps: Vltava River valley

02 - Faixová Chalachanová J., Ťapajnová K. *

Solar radiation analysis based on the mesh representation of point cloud data using the marching cubes algorithm

03 - Janata T., Cajthaml J., Krejčí J.

Time maps and their rendition within Esri environment

04 - Kuta D., Hurdalkova L.

Development issues in core municipalities of the bi-centric Hradec - Pardubice settlement agglomeration

12:30 - 13:30 Lunch

14:00 - 18:00 Excursion / tour to Treetop walk Bachledka

19:00 - 23:00 Social event

14th of September 2018

07:00 - 08:30 Breakfast

09:00 - 12:15 **Conference sessions: Conference room A**

09:00 - 10:30 Lectures session **A3**, Chairmen: **CHODASOVÁ Zuzana, MESÁROŠ Peter**

01 - Chodasová Z., Králik M.

Profitability in the corporate process

02 - Chodasová Z., Kucharčíková A., Ďurišová M.

Value management - modern management in the investment process

03 - Chudikova B., Faltejsek M., Skotnicova I.

Application of virtual reality, augmented reality and building information modeling on solar systems

04 - Kucharčíková A., Mičiak M., Ďurišová M., Chodasová Z.

The investment appraisal criteria with the focus on human capital in construction businesses

05 - Lešniak A., Górka M.

Aluminum and glass facades systems - cost analysis

06 - Mesároš P., Mandičák T.

Overview of knowledge technology in construction industry

07 - Mesároš P., Mandičák T., Krajníková K.



Innovations and business performance of construction companies in Slovakia

08 - Sprengel D. E., Petrochenko M. V., Romero M. A.

The main aspects of construction site safety management with implementation of lean production tools

10:30 - 10:45 Coffee break

10:45 - 12:15 Lectures session **A4**, Chairmen: *SPIŠÁKOVÁ Marcela, MESÁROŠ Peter*

*01 - Peker K., Bilgic E., Vatan M. **

Building cost models in decision making for resilience based design

02 - Struková Z., Bašková R., Tažiková A.

Multi-criteria comparison of prefab façade systems: A case study

*03 - Szer I., Szer J., Hoła B. **

Evaluation of climatic conditions affecting workers on scaffoldings

04 - Švajlenka J., Kozlovská M.

Assessment of modern methods of construction based on wood in terms of efficiency of procurement

*05 - Vatin N. I., Usanova K. Y. **

BIM end-to-end training: from school to graduate school

*06 - Zima K., Mitera-Kielbasa M. **

Proposal of Levels of Detail LOD in building projects with BIM implementation

07 - Radziszewska-Zielina E., Kania E., Śladowski G.

Problems in carrying out construction projects in large urban agglomerations on the example of the construction of the Varso building complex in Warsaw

09:00 - 12:15 **Conference sessions: Conference room B**

09:00 - 10:30 Lectures session **B3**, Chairmen: *JÁRMAI Károly, KVOČÁK Vincent*

01 - Brodniansky Jr. J., Brodniansky J., Magura M.

New approach in FEM modelling of gas pipeline components

02 - Deli A. A., Jarmai K., Kovacs G.

Small and full scale testing of container production for ships and airplanes, a review

03 - Jármái K., Petrik M.

Cost minimization of compressed I-section columns with different design rules

*04 - Kászonyi G., Jármái K. **

Optimization while designing portal frames

05 - Magura M., Brodniansky Jr. J., Brodniansky J.

FEM modeling of thin-walled sheeting of silos

06 - Nagy S., Jármái K.

Optimum design of overhead travelling crane

*07 - Taşkin K., Peker K. **

Resilience for seismic zone gravity column options of highrise buildings

*08 - Peker K., Taşkin K., Gökdaş H. **

Seismically non-prequalified connection behavior modeling

10:30 - 10:45 Coffee break

10:45 - 12:15 Lectures session **B4**, Chairmen: *JÁRMAI Károly, AL ALI Mohamad*

01 - Kitaeva D. A., Kodzhaspirov G. E., Rudaev Ya. I., Khokhlova Yu. A.

On task of thick-walled aluminum pipe deformation



02 - Zerdzicki K., Jacomini Y. M.

Mechanical properties of polyester reinforced PVC coated fabric subjected to biaxial loading of creep type

03 - Ghafil H. N., Jáрмаi K.

Trajectory planning of a robot arm using flower pollination algorithm

04 - Neuwirthova Z., Cajka R.

Dependence of boundary conditions to numerical analysis of soil-structure interaction

05 - Šabatka L., Kolaja D., Vild M., Wald F., Kabeláč J., Kuřiková M.

Joint stiffness and its influence on design of steel structural elements

06 - Vidaković A. , Halvonik J., Vida R., Augustín T.

Non-linear modeling of slab specimens tested for shear

07 - Gontarz J., Podgórski J.

Numerical analysis of crack propagation in a pull out test

12:15 - 13:15 Lunch

13:15 - Conference closing