

October 23rd, 2020.

Friday

14:30-15:30

TS7

Geodesy in construction

Chairman: Rinaldo Paar

1. **Branko Milovanović, Slavko Vasiljević, Jovan Popović, P. Vranić:** *Influence of Given Parameter Errors on Accuracy of Tunnel Breakthrough by Height*

2. **Radovan Đurović, Zoran Sušić, Mehmed Batilović, Gojko Nikolić, Miloš Pejaković, Željko Kanović:** *Design and implementation of special-purpose geodetic networks for the infrastructure facilities of the highway*

3. **Zrinjski M., Tupek A., Barković Đ., Polović, A. Novosel, T. Vidoš M.:** *Determination and Analysis of Chimney Inclination*

15:30-16:00

BREAK

16:00-17:30

TS8

Software development and filter application

Chairman: Thomas Wunderlich

1. **Pejović M., Bursać P., Kilibarda M., Sekulić A. and Bajat B.:** *The R package surveyor for Engineering Surveying Computation*

2. **Marko Pejović, Milutin Pejović:** *Customize Road Design by Using Modular Subassemblies*

3. **Pavol Kajánek, Alojz Kopáček, Ján Erdélyi, Peter Kyrinovič:** *Adaptive Kalman filter for IMU and optical incremental sensor fusion*

4. **Miodrag Roić, Siniša Mastelić-Ivić, Thomas Wunderlich:** *Recent Applications of Kalman Filters in Structural Deformation Monitoring*

17:30-18:00

Closing ceremony

Chairman of the Scientific committee:

Full. prof. Alojz Kopáček, PhD., STU Bratislava, Slovakia

Chairman of the Organizing committee:

Assist. prof. Rinaldo Paar, PhD., UNIZG, Zagreb, Croatia

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Croatian Geodetic Society

University of Zagreb, Faculty of Geodesy

FIG Commission 6

8th INGEO International Conference on Engineering Surveying 4th SIG Symposium on Engineering Geodesy INGEO&SIG2020

PROGRAMME

virtual conference

October 22nd – 23rd, 2020.

October 22nd, 2020.
Thursday

09:00-09:30
OPENING CEREMONY

09:30-11:00
TS1
BIM, Engineering of large investments
Chairman: [Miodrag Roić](#)

1. **Thomas Wunderlich**: *Misalignment – Can 3D BIM Overrule Professional Setting-out According to Plane and Height?*
2. **Ján Erdélyi, Peter Kyrinovič, Alojz Kopáček, Richard Honti**: *Building Information Modelling of Industrial Plants*
3. **Richard Honti, Ján Erdélyi, Gabriela Bariczová, Alojz Kopáček, Peter Kyrinovič**: *Possibility of Use of BIM in Automated Geometry Check of Structures*
4. **Tomáš Funtík, Pavol Mayer**: *The Impact of User's Experience Handling the Non-Graphical Information to the Overall Reliability of Open Format IFC*

11:00-11:30
BREAK

11:30-13:00
TS2
Construction monitoring
Chairman: [Alojz Kopaček](#)

1. **Weinhuber A., Wiedemann W., Wasmeier P., Wunderlich T.**: *No second Chance – Monitoring destructive Bridge Load Tests*
2. **Boštjan Kovačič, Sebastian Toplak, Samo Lubej.**: *The execution of non-contact monitoring with the purpose of assessing potential bridge damages*
3. **Josip Peroš, Rinaldo Paar, Vladimir Divić.**: *Application of fused laser scans and image data – RGB+D for displacement monitoring*
4. **Pandžić J., Vranić P., Pejić M. and Popović J.**: *TLS-based 3D Deformation Monitoring of Church Bell Tower Geometry*

13:00-14:30
BREAK

October 22nd, 2020.
Thursday

14:30-15:30
TS3
Cultural heritage and land consolidation
Chairman: [Siniša Mastelić Ivić](#)

1. **Stojnović V., Virgej-Đurašević R., Kulić S., Mihaljević P., Ambroš F., Zahtila D., Kamin A.**: *Surveying of industrial heritage - Sitarjevec mine*
2. **Nikola Vučić**: *The role of 3D cadastre in the preservation of historical cultural heritage*
3. **Hrvoje Tomić, Siniša Mastelić Ivić, Rinaldo Paar, Ante Marendić**: *Preliminary Analysis of Criteria for Land Consolidation in Protected Areas*

15:30-16:00
BREAK

16:00-17:30
TS4
GNSS, Augmented reality, Laser trackers
Chairman: [Peter Kyrinovič](#)

1. **Marta Pokupić, Matej Varga, Zvonimir Nevistić, Marijan Grgić, Tomislav Bašić**: *CroCoord v1.0 – an Android application for nearly real-time 3D PPP multi-frequency multi-GNSS static surveying using smartphones*
2. **Iva Cibilić, Valentina Vuković and Vesna Poslončec-Petrić**: *Augmented Reality app – exploring and wayfinding around Faculty*
3. **Radoslav Choleva, Alojz Kopáček, Ján Erdélyi**: *Analysis of warm-up effect on laser tracker measurement performance*
4. **Carlos Ramon Moraila Valenzuela, Gilbert Ferhat**: *Using high-sensitivity receivers for differential GPS positioning*

17:30-19:00
INVITED LECTURE
Chairman: [Tomislav Bašić](#)
Borna Gradečak: *Construction of the Pelješac bridge – the role and the significance of geodesists*

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09:30-11:00
TS5
Deformation measurement I
Chairman: [Jan Erdelyi](#)

1. **Stathis Stiros**: *Deflections and modal frequencies of bridges: Constraints and limitations in results of geodetic monitoring*
2. **Schneid S., Berger P. and Zalovic L.**: *Automated deformation monitoring – Application of geodetic sensor networks and least squares adjustment in structural monitoring projects*
3. **Gospavić Z., Šušić V. and Pavlović S.**: *Capturing dam geometry by Lidar and multibeam technology for visualization of structural deformations – Case study Dam Bečej*
4. **Ferhat G., Rouillon H. and Malet J. P.**: *Analysis of atmospheric refraction on Electronic Distance Measurements applied to landslide monitoring*

11:00-11:30
BREAK - presentation of the company Arc Geo Ltd.

11:30-13:00
TS6
Deformation measurement II
Chairman: [Ante Marendić](#)

1. **Igor Grgac, Rinaldo Paar, Ante Marendić, Ivan Jakopc**: *Testing capabilities of Locata positioning system for displacement measurements*
2. **Lukas Raffl, Thomas Wunderlich**: *Challenges and Hybrid Approaches in Alpine Rockslide Prevention – An alarming Case Study*
3. **Ivan Jakopc, Ante Marendić, Rinaldo Paar, Igor Grgac, Hrvoje Tomić, Martin Krkač, Tomislav Letunić**: *Periodic Monitoring of the Kostanjek Landslide using UAV*
4. **Capitão R., Fortes C.J.E.M., Lemos R. and Henriques M. J.**: *The Use of a UAV to Improve the OSOM+ Monitoring Programme of Maritime Structures*

13:00-14:30
BREAK