

INGEO 2004
11-13 November 2004, Bratislava, Slovakia

Technical Programme

Thursday, 11 November 2004
10.00 – 10.45

Opening Ceremony

Schäfer, M., Niemeier, W., Nerkamp, K.H. and Petersen, M. (Germany): CCES – „*Competence Centre for Engineering Surveying*“ – A knowledge basis for the surveying engineering profession

Thursday, 11 November 2004
11.00-13.00

TS 1 – Data Processing

Chair:

Vice-Chair:

Pytharouli, S.I., Psimoulis, P.A., Kontogianni, V.A. and Stiros, S.C. (Greece)
Spectral Analysis Techniques in Deformation Analysis Studies

Schwieger, V. (Germany)
Variance-based Sensitivity Analysis for Model Evaluation in Engineering Surveys

Korbašová, M. (Slovakia) and **Marek, J.** (Czech Republic)
Connecting Measurements in Surveying and its Problems

Erol, S., Erol, B. and Ayan, T. (Turkey) and **Tait, M.** (Canada)
1D and 3D Analyses of Deformations in Engineering Structures Using GPS and Terrestrial Data

Bacigál, T., Korbašová, M., Villim, A. and Ždímalová, M. (Slovakia)
Variance Components Estimate in 2D Geodetic Network

Bacigál, T. and Komorníková, M. (Slovakia)
Modelling Point's Position Time Series in the Light of Cointegration

Parsopoulos, K., Kontogianni, V., Pytharouli, S., Psimoulis, P., Stiros, S. and Vrahatis, M. (Greece)
Optimal Fitting of Curves in Monitoring Data Using the L-1, L-2 and L-∞ Norms

Posters

Tait, M. and Hunter, A. (Canada)

Modeling of Anticipated Subsidence due to Gas Extraction Using Kriging on Sparse Data Sets

Kováč, M. and Hefty, J. (Slovakia)

Universal Software for Modeling, Processing and Adjustment of Heterogeneous Multi Epoch and Permanent Geodetic Observations

Thursday, 11 November 2004

14.30-16.30

TS 2 – Terrestrial Laser Scanning

Chair:

Vice-Chair:

Schulz, Th. and Ingensand, H. (Switzerland)

Influencing Variables, Precision and Accuracy of Terrestrial Laser Scanners

Rietdorf, A., Gielsdorf, F. and Gruendig, L. (Germany)

A Concept for the Calibration of Terrestrial Laser Scanners

Koska, B., Křemen, T., Štroner, M., Pospíšil, J. and Kašpar, M. (Czech Republic)

Development of Rotation Scanner, Testing of Laser Scanners

Scherer, M. (Germany)

Intelligent Tacheometry with Integrated Image Processing Instead of 3D Laser Scanning?

Stanek, H. (Austria)

Terrestrial Laserscanning – Universal Method or a Specialist's Tool ?

Schäfer, Th. and Weber, Th. (Germany), **Kyrinovič, P.** and **Zámečnicková, M.** (Slovakia)

Deformation Measurement Using Terrestrial Laser Scanning at the Hydropower Station of Gabčíkovo

Posters

Korbašová, M. and Kopáček, A. (Slovakia)

Optimal Configuration of Standpoints by Application of Laser Terrestrial Scanners

Zámečnicková and M., Kopáček, A. (Slovakia)

Testing of Terrestrial Laser Systems

Friday, 12. November 2004

8:30-10:00

TS 3 – Information Systems and Facility Management

Chair:

Vice-Chair:

Gielsdorf F., Rietdorf A. and Gründig, L. (Germany)

Geometrical and Topological Modelling of Buildings

Matijević, H., Roić, M. and Ivić, S. M. (Croatia)

SDBMS Based Data Model for CAFM Systems

Milev, I. and Gruendig, L. (Germany)

Rail Track Data Base of German Rail – the Future of Automated Maintenance

Poljanac, I., Paar, R. and Cetl, V. (Croatia)

The Role of Geodesy in Modernization of Croatian Railways

Friday, 12. November 2004

10:30-13:00

TS 5 – Control Measurement, Industry Survey and Applications

Tait, M., Fox, R. and W.F. Teskey (Canada)

A Comparison and Full Error Budget Analysis for Close Range Photogrammetry and 3D Terrestrial Laser Scanning with Rigorous Ground Control in an Industrial Setting

Neuner, J., Coșarcă, C., Sărăcin, A. and Țurcanu, R. (Romania)

Special Topographical Assistance to the Raising of the Cernavoda Bridge over the Danube – Black Sea Channel

Ágfalvi, M. and Gyenes, R. (Hungary)

Control Measurement of Industrial Machinery

Bureš, J. (Czech Republic)

Setting Up of Robot Welding Line for Car Bodies at BMW Factory in Oxford UK

Švábenský, O. and Zvěřina, P. (Czech Republic)

Deformation Measurement of Railway Bridge Abutment Pier

Ižvoltová, J. (Slovakia)

Evaluation of GPS Measurements of Railway Track Geometric Position

Mentes, Gy. (Hungary): Health Monitoring of Structures Using Natural Effects as Excitation Signal

Friday, 12. November 2004

14:30-16:00

TS 4 – Total Stations in Kinematic Mode

Chair:

Vice-Chair:

Wunderlich, Th.A. (Germany)

Geodetic Monitoring with Prismless Polar Method

Santala, J. (Finland)

On the Accuracy of the Kinematic Measuring Mode of a Total Station Leica TCA2003

Kadlečíková, V. and Kyrinovič, P. (Slovakia)

Automatic Total Station Testing

Depenthal, C. (Germany)

Twists and Tilts of Tripods Using Robot Tacheometers

Möhlenbrink, W. (Germany)

High-Speed-Track Köln-Rhein-Main Robot Tacheometers for semi-automatic Construction Processes

Friday, 12. November 2004

16:30-18:00

TS 6 – GPS Measurement and Application

Chair:

Vice-Chair:

Hefty, J. and Hřčka, M. (Slovakia)

Experiences from GPS Antenna and Receiver Field Calibrations

Bubeník, F. and Hánek, P. jr. (Czech Republic)

Testing of GPS Equipment Trimble 5700 and Trimble GeoExplorer CE in the Czech National Trigonometric Network

Tait, M., Sheng, L. and E. Cannon (Canada)

The Feasibility of Replacing Precise Levelling with GPS for Permafrost Deformation Monitoring

Pikridas C., K. Tokmakidis, S. Spatalas and D.Tsoulis (Greece)

Terrain Creation and Analysis Using Information from GPS and Classical Techniques

Andritsanos, V.D., Fotopoulos, G., Fotiou, A., Pikridas, C., Rossikopoulos and D., Tziavos, I.N. (Greece)

New Local Geoid Model for Northern Greece