VENTILATION AND FIRE SAFETY IN TRANSPORT TUNNELS TALLERES ZITRÓN, GIJÓN

Wednesday 24th April 2013

10:00 – 10:10 Ceremonial Opening of the Conference conducted by Managing Director Mr. Antonio Fernandez-Escandon Ortiz
 10:10 – 10:20 Speech of the Professor Stanisław Nawrat – AGH UST
 10:20 – 10:30 Speech of the Jacek Sobczak - Tunnel Security Officer - General Directorate for National Roads and Motorways

Lecture part:

- 10:30 10:40 Optimization of fan's aerodynamic design using specialized Software (NUMECA)- S. Rodriguez -ZITRON
- 10:40 10:50 Fan's start up and site test- I. Velasco ZITRON
- **10:50 11:00** Designing good ventilation systems. Fan system effect M. Alcalde ZITRON
- **11:00 11:10** Design of Ventilation System of the triple tunnel under the airstrip of Madrid airport using CFD and its validation. A. B. Amado ZITRON

11:10 - 11:40 Coffee break

- 11:40 11:50 Air flow control for tunnel excavation through rock mass with methane emissions R. Rodriguez (Mining Engineer. University Oviedo)
- 11:50 12:00 Exposure to air pollution during construction and exploitation of road tunnels J. Madera (Mining Engineer. Head of Technical Department National Silicosis Institute)
- 12:00 12:10 Situation and prospects for communication tunnels in Poland N. Schmidt
- **12:10 12:20** Ventilation systems for transportation tunnels in the phase of construction S. Nawrat
- 12:20 12:30 Computer modeling of a fire hazard in transportation tunnels in the phase of construction N. Schmidt
- **12:30 12:40** Computer modeling of the evacuation of transportation tunnels in the phase of construction S. Napieraj
- 12:40 12:50 The application of the Ventgraph program for simulation fire hazard in two tube tunnel with transversial ventilation system P. Kamiński
- **12:50 13:00** Computer modeling of a fire hazard and evacuation of transportation tunnels with transversial ventilation system S. Napieraj
- 13:00 14:30 visiting Zitron company, visiting Zitron's Test Bench.