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## **NUMERICAL SIMULATION OF POLLUTION WITH ANION SO<sub>4</sub><sup>2-</sup> FOR THE AQUIFER INSIDE A METALLURGICAL WASTE HALL**

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### **Abstract**

The current paper describes the concept and the mathematical models axed upon flow transport and transport of pollutants in the aquifer inside a metallurgical waste hall. Then, using a complex of basic data related to a representative case study – several information being achieved by systematic measurements, for long period, throughout ten drillings – and the pack of FEFLOW 5.1 programmes, the dispersion of an uppermost pollutant (the anion SO<sub>4</sub>) has been numerically simulated, for the entire observing period. Therefore, it was emphasized the pollutant flow rate led through by the phreatic aquifer exploited by the subsurface exhausters water.

**Key words:** case study, chemical pollution, mathematical model, numerical simulation, waste hall

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