

Experience of UWJ – South Africa

Wide experience in the field of project of South Africa young coordinator (36 years old) – Tutu Hlanganani and implicitly of his team results from annexed CVs:

- 10 research projects
- 50 papers presented in ISI quoted journals
- 50 papers presented to scientific events

We mention the most representative papers (2000-2008):

1. H. Tutu, E.M. Cukrowska*, T S McCarthy: Uranium toxicity due to gold mining effluents in South Africa. *Risk Management, Vol. 1, no.2, Sept.(2005) 18-19.*
2. E. Cukrowska, H. Tutu: Computer modelling of solution equilibria and chemometric data evaluation as tools for developing predictive models for uranium speciation, transport and fate in gold mine polluted land. Proceedings of SWEMP 2004, Antalya, Turkey, 17-20 May 2004, pp 475-480.
- 3.E. Cukrowska*, K. Naicker, M. Viljoen: Modelling and assessment of mobility of toxic elements in industrially contaminated land based on column leaching of South African gold mine tailings dump. *Chemosphere, 56 (2004) 39-50.*
- 4.E. Cukrowska, K. Naicker and M. Viljoen: The mobility of toxic elements in gold mine polluted land – column soil leaching and computer modeling, Detecting Environmental Change, An International Conference, 16-20 July 2001, London , UK
5. E. Cukrowska, L. Chimuka, L. Soko: SLM extraction for speciation study of heavy metals in biological fluids. *Analitika 2002, Stellenbosch, 2,3 December 2002,*

Research projects (2000-2008):

- 1.A WITS-Anglogold Program: Containment of Pollution from Gold and Uranium tailings dams. Sustainable vegetation on tailings to contain dust, water infiltration and seepage. *A multidisciplinary research project for Anglogold SA, June 2002- 2012.*
- 2.Remediation of soil and water contaminated by heavy metals and hydrocarbons using silica encapsulation. *Project for SAFIC (2004-2005)*
- 3.Quantitative chemical characterisation of water, sediments and soils in the vicinity of the Hex and Klipfontein rivers; modeling of chemical speciation, transport and fate in the environment; chemometric data evaluation. *Project for Anglo Platinum Rustenburg, January 2002- March 2003.*

4. Sources of Mining Related Environmental Pollution – Analytical Procedures, Characterisation, Modelling, and Proposed Remediation Technologies. *Project for Anglo American Research Laboratories (2007-2009)*