

Name **ROMY MATTHIES**
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EDUCATION AND TRAINING

Since September 2007

- Doctorate on **Environmental Geochemistry**
Newcastle upon Tyne University, England
Subject: Biogeochemical Processes in passive mine water treatment systems
- May 05-Sep 07 **Master of Science in Environmental Management and Ecoaudit**
University of Leon, Spain;
Specialization: Mining and Environment, Recovering of Contaminated Soils, Treatment of Industrial Waste Water
- Jun 06-Sep 07 **Thesis: Geochemical Assessment of Tailings proposed for Marine Tailings Disposal (MTD)**
(included: rock and tailings analysis; methods: ABA, NAG, whole rock digestion, grain size analysis, humidity cell tests and jar test using filtered seawater for kinetic testwork; aim: investigation of potential AMD of tailings sample by applying static and kinetic testwork, kinetic testwork amplified with the usage of filtered seawater to estimate geochemical reactivity in proposed disposal in Greenland fjord)
- Oct 98-Jan 05 Bachelor and Master of Science in **Geoecology**
Technical University, Mining Academy, Freiberg, Germany
- Oct 03-Jan 05 **Master Thesis**
Title: Geochemical and mineralogical changes in soils under prolonged sulfuric acid influences, El Teniente, Chile
(included: soil, surface water and AMD analysis, mineral and tailings analysis; methods: ICP-MS, flame-AAS, XRF, XRPD with special focus on clay minerals and sulfate salts, sequential extraction; principal sources of contamination: copper smelter Caletones, AMD deriving from tailings impoundment Barahona).
- Jan 01-Jul 01 **Bachelor Thesis**
Title: Geology and Deposits in Springs and Far East Regions, Witwatersrand, South Africa
- Oct 04 **Max Planck Institute, Mainz, Germany**
Geochemistry Short Course
(included: formation and development of silica melts, principles of trace element analysis and isotope composition, application of geochronology and petrology, rock treatment, ICP-MS, laser ablation ICP-MS, multicollector ICP-MS).
- Oct 01-Jul 02 Environmental Sciences.
Universidad Autónoma de Madrid, Spain.

MEMBERSHIPS

International Mine Water Association (member and graphics editor)
Geochemical Society (member)

WORKING EXPERIENCE

- Jan 06-Sep 07** **SRK Consulting**, Cardiff, United Kingdom
Geochemist
Geochemical Testwork (including static and kinetic methods), Water monitoring programs (including planning, sampling, data evaluation), ESIA and Baseline Studies with main focus on water related issues.
- Aug 05-Nov 05** **Econorte**, Chile; Pascua-Lama Gold Mine - **Barrick Gold**
Geochemist
Review of Geochemical and Infiltration Model of the Waste Rock Facility Nevada Norte and high density sludge AMD Treatment Plant, Organization of Meetings and Presentations.
- Apr 05- Jul 05** **SRK Consulting**, Chile
Geochemist
EIA and Baseline Studies - El Teniente Copper Mine.
- Jan 05-Mar 05** **Environment Agency (CONAMA)**, Chile
Internship
Territorial regulations, Environmental Law: 19.300, Environmental Impact Assessment, Environmental education, Implementation of a pilot project on battery recycling.
- Jun 03- Aug 03** **University of Granada**, Spain
Internship and Doctoral course
Nature risk in the Cordillera Bética (Spain), analysis of waste water.
- May 03-Jul 03** **Technical University, Mining Academy Freiberg**, Germany
Scientific Work
Rock preparation and mineral separation, monitoring of river systems and environmental impact research.
- Jun 00-Aug 00** **GKSS Research Institute**, Germany
Internship
Investigation at the wildlife at the German northern sea mud shore, erosion monitoring.
- Aug 98/ Sep 99** **Environment Agency**, Germany
Internship:
Application of the German environmental legislation, Environmental Impact Assessment.
- Mar 99** **Forestry State Agency**, Germany
Internship
Application of the German environmental legislation.

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE
OTHER LANGUAGES

GERMAN
SPANISH: FLUENT
ENGLISH: FLUENT
PORTUGUESE: GOOD
FRENCH: BASIC

TECHNICAL SKILLS AND COMPETENCES

Software: AquaChem, C++, SQL, Arc View, AutoCad, Simview, Idrisi, Corel Draw, Photoshop, SPSS, PhreeqC (basic), Surfer, EQWin, MiniTab, SigmaPlot, EndNote, Acrobat Professional 8.
Optical Microscopy (transmitted/ reflectant), X-Ray Powder Diffraction, Scattered Electron Microscopy ICP-OES, IC, Geochronology

SOFT SKILLS

Assistance editor of the International Mine Water Association
Member of the postgraduate committee of the Faculty of Science, Agriculture and Engineering, Newcastle University

PUBLICATIONS

Matthies, R. (2000). Geology and Deposits in Springs and Far East Regions, Witwatersrand, South Africa. Freiberg, Technical University and Mining Academy Freiberg. BSc.

Matthies, R. (2005). Geochemical and mineralogical changes in soils under prolonged sulfuric acid influences, El Teniente, Chile Technical University and Mining Academy Freiberg. MSc.

Matthies, R. (2007). Geochemical assessment of tailings proposed for Marine Tailings Disposal (MTD), University of Leon. MSc.

Matthies, R., R. Bowell, et al. (2007). Geochemical assessment of the reactivity of tailings proposed for marine tailings disposal (MTD). 23rd International Applied Geochemistry Symposium (IAGS), Oviedo, Departamento de Explotación y Prospección de Minas, University of Oviedo.