

## Partner search form

<b>Date:</b>	8 June 2009
<b>Valid until:</b>	31 December 2009

<b>Full name of organization:</b>	University of Fort Hare
<b>Organisation acronym (abbreviation):</b>	UFH
<b>Department / sector / faculty:</b>	Geology, School of Science and Agriculture
<b>Address:</b>	King William's Town Road
<b>Postal code:</b>	5700
<b>City:</b>	Alice
<b>Country:</b>	South Africa
<b>Website address:</b>	<a href="http://www.ufh.ac.za/geology">www.ufh.ac.za/geology</a>

<b>Full name of contact person:</b>	Baojin Zhao
<b>Title:</b>	Professor, Dr
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<b>Former participation in EU research projects as Co-ordinator:</b>	No
<b>If yes, please specify:</b>	

## Project idea

<b>Project title:</b>	Quantitative mineralogical and geochemical study of ores, wastes and mining affected rocks for estimation of potential acid mine drainage generation and neutralization potential in South African mines
<b>Acronym:</b>	Quantitative mineralogical and geochemical study of ores, wastes and mining affected rocks for estimation of potential acid mine drainage generation and neutralization potential in South African mines
<b>Project type:</b>	Mining environment and water quality management
<b>Short description of project idea:</b>	<p><b>Introduction</b> Fundamental geological study such as mineralogy, geochemistry, and even the forming environment of ore deposits is important for environmental impact assessment. However, the environmental assessment is largely done in the later stage by the environmentalists. However, in general it only focuses on an individual mine or project. The aims of this study are to 1) collect the data of mineralogy and geochemistry from the literature; 2) carry out further study to fill the gaps; 3) develop a database for environmental impact assessment; 4) predict the potentials of mine acid generation and neutralization in South Africa.</p> <p><b>Methodology</b> Carrying out extensive literature review and data collection and compilation of minerals and geochemistry in different ores, waste rocks and mine affected rocks; carry out field sampling and analyses of minerals and geochemistry; development of database of minerals and geochemistry for different ore fields; and carry out prediction for environmental impact assessment in mining development.</p> <p>Case studies</p> <p><b>Expected results</b> Generate a large database for environmental impact assessment; Develop a protocol for data collection from the early stage including mineral exploration. Understand of the capacity of mine acid drainage and neutralization for ore and waste rocks in a large scale and much predicted way.</p> <p>Time schedule and Budgets Five years from 2010 to 2012;</p> <p>Budget: A total of 1.5 million rands including travelling, accommodation, and analyses etc.</p> <p>Human Resource 6 PhDs or MSc students will be involved in the project and focus on individual commodities for individual students.</p>
<b>Expertise:</b>	Mineralogy, Geochemistry, environmental and water quality assessment, geochemical modeling.

## Profile of partner sought

<b>Type of partner:</b>	Collaboration
<b>Role to cover in the project:</b>	Researcher, post-doc, collaborator, supervisor for MSc and PhD students
<b>Country / Region:</b>	Any country
<b>Start of collaboration:</b>	Beginning of 2010
<b>Expertise required:</b>	One or more of specified areas in mineralogy, petrology, geochemistry, analytical geochemistry.