



Cooperative Research Centre for Landscape Environments and Mineral Exploration

Masters shortcourse

# Regolith Geology and Mineral Exploration

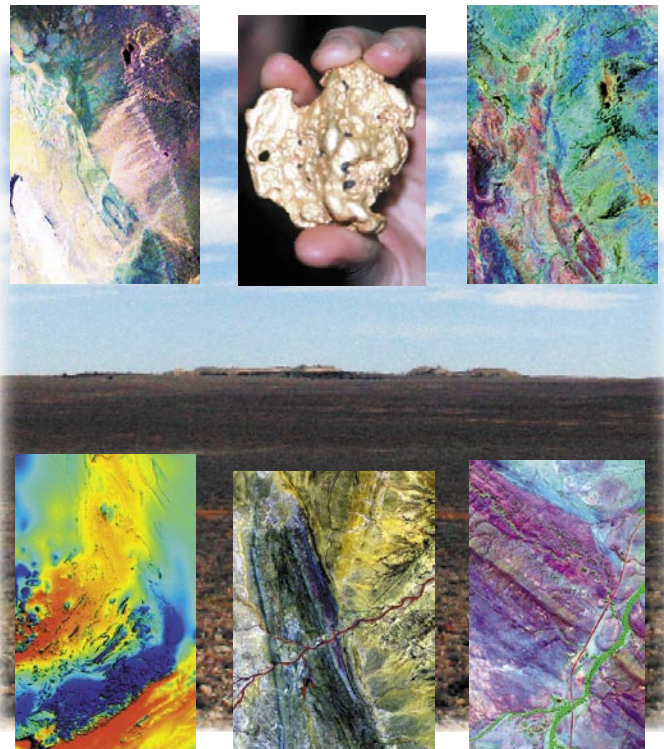
3-14 April 2006

An essential 11-day course introducing the fundamentals of regolith geology for mineral explorers and natural resource managers. Topics covered include:

- Regolith terminology, materials and their geneses;
- Landscape evolution models for mineral exploration (what happens to deposits when they weather, where do the products go? Economic mineral deposits in the regolith);
- Regolith mapping and remote sensing (introductory regolith-landform mapping to understand surface processes and path-finder element or pollution dispersion);
- Rock and mineral weathering in the regolith (how DO rocks and minerals weather?);
- Regolith of Australia (where is it? What are the exploration problems associated with it?);
- Exploration geochemistry in regolith-dominated terrains (how to make sense of non-hard rock geochemical data);
- Exploration Hydrogeochemistry (putting groundwater to work finding your next deposit);
- Exploration strategies in regolith-dominated terrains (recognising transported from *in situ*. Choosing your sampling materials successfully. Alternative sampling materials);
- Regolith mineral exploration case studies across Australia;
- Regolith sampling media, data handling, basic statistics and QA/QC (are the data you received meaningful? How to characterise anomalies).

The course runs over an intensive 11 days including integrated lectures at Fowlers Gap (100 km north of Broken Hill) and field site visits around the highly prospective Broken Hill, Curnamona and northwest NSW areas. The second week will be combined with an intensive regolith-landform mapping Honours field class.

The course can be used as credit towards the MCA-G3 Masters in Economic Geology or as a Masters degree unit at one of the CRC LEME core party universities (ANU, Adelaide, Curtin).



Tuition fees: \$2000 plus \$550 full board for the 11 days at Fowlers Gap plus incidental accommodation and meals in Broken Hill (depending on flight schedules). Masters students enrolled in the G3 Masters degree are offered a transport subsidy to attend with flights direct to Broken Hill.

To reserve your place, or for more information, please contact:

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