

MINERALS BRIEF

Regolith Science in Mineral Exploration

May 2008 Edition No 17



LEME is fast approaching the fulfilment of its Research Objectives, set some seven years ago and reiterated in our Strategic Plan 2002 to 2008. <http://crcleme.org.au/About/objectives.html>

Projects are now reaching their conclusion and LEME staff are disseminating the significant regolith geoscience advances via their publications and presentations, the media and our web site.

Therefore, rather than provide any more interim findings, I will in this and a subsequent Minerals Brief, refer you to our 'technology transfer' activities where these final outputs can be accessed.

Steve Rogers
Chief Executive Officer

CRCL LEME DELIVERABLES

LATEST OPEN FILE (TECHNICAL) REPORTS

Downloadable as PDF files -

<http://crcleme.org.au/Pubs/OFRSindex.html>

Some hard copies are available on request. As well as current project findings, reports from sponsored projects, now out of confidentiality, are being released.

- OFR 117. 2007. Chinese CHIM Electrogeochemical method: field trials 2005, South Australia. Fabris A, Keeling J, Fidler R, Hou B, Luo X and Zeng N.
- OFR 145. 2007. Thomson Region Geochemical Survey, Northwestern New South Wales. de Caritat P and Lech ME.
- OFR 151. 2007. SPECIAL VOLUME Macphail M. AUSTRALIAN PALAEOCLIMATES: CRETACEOUS TO TERTIARY. A review of palaeobotanical and related evidence to the year 2000.
- OFR 181. 2008. Interpretation of soil geochemical data from Rainbow Prospect, Nifty, WA. Cornelius M.
- OFR 182. 2007. A bibliographic index for natural resource management in the Upper Burdekin and Fitzroy Catchments. Reilly NS and Lech ME.
- OFR 197. 2008. Trace element-mineral associations in the regolith, Scuddles Massive Cu-Zn sulphide deposit, Western Australia. Le Gleuher M.
- OFR 198. 2008. Mineral hosts for gold and trace elements in the regolith, Boddington and Mt Percy gold deposits, Western Australia. Le Gleuher M.
- OFR 206. 2007. Environmental Mineralogy - Honours Shortcourse. Aspandiar M, Eggleton RA and Troitzsch, Presenters.

OFR 213. 2008. The mineralogy and geochemistry of New Cobar Au-Cu mineralisation in the oxidate and supergene zones, Cobar District, western NSW. Scott KM and McQueen KG.

OFR 229. 2007. Protocol for sampling in regional geochemical surveys: lessons from pilot projects. Lech ME and de Caritat P

OFR 230. 2007. Estimation of the isotopic composition of evaporated water at Loveday Disposal Basin using a constant-volume evaporation pan experiment. Corriveau J.

OFR 232 / PIRSA Mineral Resources Report Book RN 2007/14. 2007. Regolith characterisation as an aid to mineral exploration in the Wudinna North area, central Gawler Province, South Australia. Volume 1 Volume II Sheard MJ.

OFR 233. 2007. Tomingley 1:25,000 regolith-landforms map, central western New South Wales. Roach IC.

OFR 234. 2007. Riverina region geochemical survey, southern New South Wales and northern Victoria. de Caritat P, Lech ME, Jaireth S, Pyke J and Fisher A.

OFR 236. 2008. Fowlers Gap Regolith Field Class, National Undergraduate Regolith Geology School: Lecture notes and reading material. Hill S. and Roach IC.

UPCOMING LEME PRESENTATIONS

- 4 June 2008 - Last LEME WA Minex Seminar, ARRC, Kensington (Perth) - Program and Registration Form available. Convenor LEME Program 2 leader, Ravi Anand <http://crcleme.org.au/index.html>
- 25 June 2008 - LEME Minex Seminar, GA, Canberra. Convenor LEME Program 1 Leader, Lisa Worrall. Preliminary Program will be posted on LEME web site as soon as available.
- 27 June 2008 - PIRSA Mineral Exploration through Cover Conference, University of Adelaide. Convenor Andreas Schmidt-Mumm. Details will be posted on LEME web site as soon as available. Session 3 CRC LEME and Beyond. Chair John Keeling
Presenters:
 - Steve Rogers - LEME outputs for mineral exploration and life beyond LEME
 - Adrian Fabris - Release of the Explorers Guide to the Regolith of the Curnamona Province

- Steve Hill - Biogeochemistry for mineral exploration in Australia
- Michael Neimanis - Regolith approach to uranium exploration, Mt Painter region

20-24 July 2008 - Australian Earth Sciences Convention, Perth. Over 25 presenters delivering findings from LEME collaborative projects.

<http://crclleme.org.au/index.html>

Visit the LEME booth at this event for free technical reports, volumes, CDs, maps, explorers' guides, etc.

REGOLITH LANDFORM MAPS

Two new Maps released from the Fowlers Gap, NSW area, available as PDF documents.

<http://crclleme.org.au/Pubs/regmaps.html>

Roach IC & Hill SM. 2007. South Sandstone Paddock 1:12,500 Regolith-Landform map

Hill SM & Roach IC. 2007. Sandstone and Sandstone Ridge Paddocks 1:12,500 Regolith-Landform map

Digital Atlas of LEME Regolith-Landform Maps. Pain C. A compilation of maps in GIS format will be available on the LEME web site

EXPLORERS GUIDE SERIES

A guide for mineral exploration through the regolith in the Cobar Region, Lachlan Orogen, NSW. McQueen KG. Released March 2008, PDF available from LEME web site.

<http://crclleme.org.au/Pubs/index.html>

Hard copies available from LEME HO.

Hard copies will also be available at the "Exploration in the House", NSW DPI event, Wed 2 July, Parliament House, Sydney.

A guide to mineral exploration through regolith in the Central Gawler Craton. Keeling J. Pre-release at the SA Resources and Energy Investment Conference, 2 May 2008. Publication June 2008.

A guide to mineral exploration through regolith in the Yilgarn, Western Australia. Anand RR. Pre-release at LEME Minex Seminar, 4th June 2008, Perth. Publication June 2008.

A guide to mineral exploration through regolith in the Curnamona. Fabris A, et al. To be published/released at the PIRSA Mineral Exploration through Cover Conference, 27 June 2008.

A guide to mineral exploration through regolith in the Thomson Orogen. Hill S. Publication tba

A guide to mineral exploration through regolith in the Tanami. Worrall L. Publication tba

THEMATIC VOLUMES

Close to completion:

Inland Acid Sulfate Soil Systems Across Australia. Fitzpatrick RW and Shand P.

Covering: distribution, properties, significance and biogeochemical processes of inland ASS across Australia and overseas. Thirty Australian two overseas (Iraq and Brunei) case histories.

More details at <http://crclleme.org.au/Pubs/index.html>

A reminder about the two popular Thematic Volumes - Hard Copies are available from LEME HO, and individual case studies are downloadable from our Web site.

Regolith Expression of Australian Ore Systems

A compilation of geochemical case histories and conceptual models. Edited and compiled by: CRM Butt, M Cornelius, KM Scott and IDM Robertson.

<http://crclleme.org.au/Pubs/monographs.html>

Regolith-Landscape Evolution Across Australia

A compilation of regolith-landscape case studies and landscape evolution models. Edited and compiled by: RR Anand and P de Broekert.

<http://crclleme.org.au/Pubs/monographs.html>

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CRC LEME is the cooperative research centre for regolith geoscience with some 130 contributing researchers from eight Core Parties around Australia. We generate and apply regolith knowledge for mineral exploration and environmental management.



Your organisation can benefit from CRC LEME expertise.
<http://crclleme.org.au>