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Regolith 2004

Editor: Ian C. Roach

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Front cover:

The magnificent scenery of Wilsons Promontory,
Victoria. Photograph is taken from Tidal
Overlook, looking southeast towards Tidal River
with Mount Oberon in the background. The photo
highlights the relationships between regolith,
landform, water and biota. Relationships include
Melaleuca thickets in the swampy plains and low
rises; *Casuarina* and *Leptospermum* heath on
aeolian sandsheets at the base of Mt Oberon;
mixed *Eucalyptus/Casuarina* low woodland on the
colluvial mid-slopes; and, tall *Eucalyptus*
woodland on the stony upper slopes of Mt.
Oberon. This site is used for part of CRC LEME's
teaching activities for the Minerals Council of
Australia's Advanced Minerals Education
Program.

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INTRODUCTION

Ian C. Roach

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This volume summarises papers that were delivered at the three national CRC LEME Regional Regolith Symposia, *Regolith 2004*. These occurred in Adelaide (10-12 November), Perth (18-19 November) and Canberra (24-26 November). The three symposia followed in the footsteps of the 2003 CRC LEME Regional Regolith Symposia, *Advances in Regolith* (Roach 2003), the first CRC LEME Regional Regolith Conference, *Regolith and Landscapes in Eastern Australia* (Roach 2002), earlier national conferences including *Regolith '98* (Kalgoorlie; Britt & Bettenay 1998), *Regolith '96* (Brisbane; Eggleton 1998), *Regolith '94* (Broken Hill; Pain *et al.* 1994) and the first ever *Australian Regolith Conference* in 1988 (Canberra). Each of the papers are fully peer-reviewed and written by prominent or up-and-coming regolith researchers and their supervisors from Australian universities, government research institutions and state geological surveys, or by retired (but still very active) researchers.

Of the 97 papers and 417 pages in this volume you'll find a diversity of the research and training being conducted by staff and students within CRC LEME and by like-minded individuals in universities and state and federal government research organizations across Australia. Special themes for the 2004 symposia include: the microbiology of the regolith; mineral exploration under regolith cover; the history of aridity in Australia; natural resource management and the regolith; the hydrogeochemistry of the regolith; and, mineral exploration in the regolith in eastern, central and western Australia

The CRC LEME Regional Regolith Symposia provide regolith researchers with a snapshot of how CRC LEME is performing on a yearly basis. It is precisely this kind of volume that is held up at reckoning time to gauge the success of any CRC. The abstract volume is also an important internal and external communication tool and an essential educational tool. Many of the papers published in these volumes (Roach 2002, Roach 2003) form the basis of on-going regolith education and training activities at the three CRC LEME core party universities: The Australian National University; The Curtin University of Technology; and, The University of Adelaide. Research published in these proceedings is ploughed back into the programs at each of these universities, enhancing the knowledge and skills of students and providing better graduates for the fields of natural resource management and mineral exploration. Dare I say, standing on the shoulders of giants?

I am very proud to be associated with the research contained within and congratulate all of the individuals who took the time to be a part of these proceedings.

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