

GEOLOGICAL SOCIETY SPECIAL PUBLICATION NO. 323

# Palaeoproterozoic Supercontinents and Global Evolution

EDITED BY

S. M. REDDY

Curtin University of Technology, Australia

R. MAZUMDER

Indian Statistical Institute, Kolkata, India

D. A. D. EVANS

Yale University, USA

and

A. S. COLLINS

Adelaide University, Australia

2009

Published by  
The Geological Society  
London

# Contents

REDDY, S. M. & EVANS, D. A. D. Palaeoproterozoic supercontinents and global evolution: correlations from core to atmosphere	1
EGLINGTON, B. M., REDDY, S. M. & EVANS, D. A. D. The IGCP 509 database system: design and application of a tool to capture and illustrate litho- and chrono-stratigraphic information for Palaeoproterozoic tectonic domains, large igneous provinces and ore deposits; with examples from southern Africa	27
KUSKY, T. M. & SANTOSH, M. The Columbia connection in North China	49
WAN, Y., LIU, D., DONG, C., XU, Z., WANG, Z., WILDE, S. A., YANG, Y., LIU, Z. & ZHOU, H. The Precambrian Khondalite Belt in the Daqingshan area, North China Craton: evidence for multiple metamorphic events in the Palaeoproterozoic era	73
TRAP, P., FAURE, M., LIN, W. & MEFFRE, S. The Lüliang Massif: a key area for the understanding of the Palaeoproterozoic Trans-North China Belt, North China Craton	99
GLADKOCHUB, D. P., DONSKAYA, T. V., REDDY, S. M., POLLER, U., BAYANOVA, T. B., MAZUKABZOV, A. M., DRIL, S., TODT, W. & PISAREVSKY, S. A. Palaeoproterozoic to Eoarchaean crustal growth in southern Siberia: a Nd-isotope synthesis	127
DIDENKO, A. N., VODOVOZOV, V. Y., PISAREVSKY, S. A., GLADKOCHUB, D. P., DONSKAYA, T. V., MAZUKABZOV, A. M., STANEVICH, A. M., BIBIKOVA, E. V. & KIRNOZOVA, T. I. Palaeomagnetism and U–Pb dates of the Palaeoproterozoic Akitkan Group (South Siberia) and implications for pre-Neoproterozoic tectonics	145
BAYANOVA, T., LUDDEN, J. & MITROFANOV, F. Timing and duration of Palaeoproterozoic events producing ore-bearing layered intrusions of the Baltic Shield: metallogenic, petrological and geodynamic implications	165
SALMINEN, J., PESONEN, L. J., MERTANEN, S., VUOLLO, J. & AIRO, M.-L. Palaeomagnetism of the Salla Diabase Dyke, northeastern Finland, and its implication for the Baltica–Laurentia entity during the Mesoproterozoic	199
PETTERSSON, Å., CORNELL, D. H., YUHARA, M. & HIRAHARA, Y. Sm–Nd data for granitoids across the Namaqua sector of the Namaqua–Natal Province, South Africa	219
LOMPO, M. Geodynamic evolution of the 2.25–2.0 Ga Palaeoproterozoic magmatic rocks in the Man-Leo Shield of the West African Craton. A model of subsidence of an oceanic plateau	231
GIUSTINA, M. E. S. D., DE OLIVEIRA, C. G., PIMENTEL, M. M., DE MELO, L. V., FUCK, R. A., DANTAS, E. L. & BUHN, B. U–Pb and Sm–Nd constraints on the nature of the Campinorte sequence and related Palaeoproterozoic juvenile orthogneisses, Tocantins Province, central Brazil	255
DOS SANTOS, T. J. S., FETTER, A. H., RANDALL VAN SCHMUS, W. & HACKSPACHER, P. C. Evidence for 2.35 to 2.30 Ga juvenile crustal growth in the northwest Borborema Province, NE Brazil	271
SINGH, S., JAIN, A. K. & BARLEY, M. E. SHRIMP U–Pb c. 1860 Ma anorogenic magmatic signatures from the NW Himalaya: implications for Palaeoproterozoic assembly of the Columbia Supercontinent	283
MAZUMDER, R., RODRÍGUEZ-LÓPEZ, J. P., ARIMA, M. & VAN LOON, A. J. Palaeoproterozoic seismites (fine-grained facies of the Chaibasa Formation, east India) and their soft-sediment deformation structures	301
PAYNE, J. L., HAND, M., BAROVICH, K. M., REID, A. & EVANS, D. A. D. Correlations and reconstruction models for the 2500–1500 Ma evolution of the Mawson Continent	319
Index	357