

JOURNAL OF THE GEOLOGICAL SOCIETY

EDITORIAL BOARD

Chief Editor: Andrew Carter (Birkbeck College, London, UK)

Editors

Bernard Bingen (Geological Survey of Norway)	Philip Donoghue (University of Bristol, UK)	Stephen Lokier (The Petroleum Institute, UAE)	Veerle Vandeginste (Imperial College London, UK)
Anna Bird (University of Hull, UK)	Yanni Gunnell (Universite de Lyon, France)	John MacDonald (University of Glasgow, UK)	Igor Villa (University of Bern, Switzerland)
Erdin Bozkurt (Middle East Technical University, Turkey)	Adrian Hartley (University of Aberdeen, UK)	Conall Mac Niocaill (University of Oxford, UK)	Sebastian Watt (University of Birmingham, UK)
Andrew Carter (Birkbeck College, London, UK)	Philip Hughes (University of Manchester, UK)	Tyrone Rooney (Michigan State University, USA)	Shihong Zhang (China University of Geosciences Beijing)
Chris Clark (Curtin University, Australia)	Stuart Jones (Durham University, UK)	Graham Shields-Zhou (University College London, UK)	
Peter Clift (Louisiana State University, USA)	Linda Kirstein (University of Edinburgh, UK)	Carl Stevenson (University of Birmingham, UK)	

Advisory Editors

Jon Blundy (University of Bristol, UK)	Dave Harper (Durham University, UK)	Brendan Murphy (St. Francis Xavier University, Canada)	James Scourse (Bangor University, UK)
Stephen Daly (University College Dublin, Ireland)	Dave Hodgson (University of Leeds, UK)	Victoria Pease (Stockholm University, Sweden)	Cees van Staal (Geological Survey of Canada)
Richard England (University of Leicester, UK)	Peter Kokelaar (Liverpool University, UK)	Victor Ramos (University of Buenos Aires, Argentina)	Mike Watkeys (University of KwaZulu-Natal, SA)
Ian Fitzsimons (Curtin University, Australia)	Anne Mather (Plymouth University, UK)	Hugh Rollinson (University of Derby, UK)	Martin Whitehouse (Swedish Museum of Natural History)
Haakon Fossen (University of Bergen, Norway)	Rajat Mazumder (Curtin University Sarawak, Malaysia)	Karel Schulmann (Université Louis Pasteur, Strasbourg, France)	Wenjiao Xiao (Chinese Academy of Sciences)

Production Editor: Patricia Pantoş (e-mail: patricia.pantos@geolsoc.org.uk)

The Journal of the Geological Society is published bi-monthly in January, March, May, July, September and November.

Subscriptions: All correspondence relating to trade subscriptions should be addressed to the Journal Subscriptions Department, Geological Society Publishing House, Unit 7, Brassmill Enterprise Centre, Brassmill Lane, Bath, UK, BA1 3JN (tel 01225 445046; fax 01225 442836; e-mail: sales@geolsoc.org.uk). The online + print subscription prices for 2016 to institutions and non-Fellows is: £1249.00 + VAT (UK), £1387.00 +VAT, where applicable (EU), £1387.00/\$2773.00 (RoW). More information about subscription options can be found at <http://www.geolsoc.org.uk/lcaccess>.

Outside Europe, the Journal is dispatched by various forms of airspeeded delivery. Airfreight and mailing in the USA by agent named Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Jamaica NY 11431. US Postmaster: send address corrections to The Journal of the Geological Society, Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Back numbers are normally dispatched by surface mail.

Editorial correspondence and material submitted for publication: see inside back cover.

The Geological Society of London was founded in 1807. It is the oldest national geological society in the world and the largest in Europe. It was incorporated under Royal Charter in 1825 and is Registered Charity 210161. To find out about the Society and how you can join, please visit our website at www.geolsoc.org.uk or e-mail enquiries@geolsoc.org.uk.

© The Geological Society of London 2016. No reproduction, copy or transmission of all or part of this publication may be made without the prior written permission of the publisher. In the UK, users may clear copying permissions and make payment to The Copyright Licensing Agency Ltd, Saffron House, 6-10 Kirby Street, London EC1N 8TS UK, and in the USA to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Other countries may have a local reproduction rights agency for such payments. Full information on the Society's permissions policy can be found at: www.geolsoc.org.uk/permissions

Typeset by Nova Techset Private Limited, Bengaluru and Chennai, India.

Printed and bound by Henry Ling Ltd, Dorset Press, Dorchester, Dorset DT1 1HD, UK