

Netherlands Journal of Geosciences — Geologie en Mijnbouw

Netherlands Journal of Geosciences / Geologie en Mijnbouw (ISSN 0016-7746) is an international journal published by the 'Netherlands Journal of Geosciences' Foundation on behalf of the Royal Geological and Mining Society of the Netherlands (KNGMG) and TNO Built Environment and Geosciences, *Geological Survey of the Netherlands*. It is the successor of the international journals of both the KNGMG (Geologie en Mijnbouw) and TNO-NITG (Mededelingen Nederlands Instituut voor Toegepaste Geowetenschappen TNO).

Address

Editorial Office Netherlands Journal of Geosciences / Geologie en Mijnbouw
P.O. Box 80015, 3508 TA Utrecht, the Netherlands
tel. +31 (0)30 256 44 70; fax. +31 (0)30 256 44 75; email: njg@tno.nl

Editorial Board

Th. E. Wong (Editor-in-chief), TNO Built Environment and Geosciences, *Geological Survey of the Netherlands*, P.O. Box 80015, 3508 TA Utrecht, the Netherlands
M.E. Donselaar, Department of Applied Earth Sciences, Delft University of Technology, Mijnbouwstraat 120, 2628 RX Delft, the Netherlands
W.Z. Hoek, Faculty of Geosciences, Department of Physical Geography, Utrecht University, Heidelberglaan 2, 3508 TC Utrecht, the Netherlands
H.B. Vonhof, Faculty of Earth and Life Sciences. Paleoclimatology and Geomorphology, Vrije Universiteit, De Boelelaan 1085, 1081 HV Amsterdam, the Netherlands
C.J. van der Zwan, SIEP-RTS, P.O. Box 60, 2280 AB, Rijswijk, the Netherlands
Jos Rietstap Vormgeving (Technical editor), Louise de Colignystraat 21, 3116 EG Schiedam, the Netherlands

Advisory editors

O.A. Abbink, TNO, P.O. Box 80015, 3508 TA Utrecht, the Netherlands (general stratigraphy, biostratigraphy (palynology), Paleozoic – Mesozoic terrestrial systems)
H. Brinkhuis, Laboratory of Palaeobotany and Palynology, Utrecht University, Budapestlaan 4, 3584 CD Utrecht, the Netherlands (palynology)
M.C. Geluk, Shell Exploration and Production, P.O. Box 60, 2280 AB Rijswijk, the Netherlands
G. de Lange, Department of Geochemistry, Utrecht University, Budapestlaan 4, 3584 CD Utrecht, the Netherlands (geochemistry)
A.R. Fortuin, Faculty of Earth and Life Sciences, Vrije Universiteit, De Boelelaan 1085, 1081 HV Amsterdam, the Netherlands (stratigraphy, sedimentology)
P. Gerling, Department of Geochemistry, BGR, Stilleweg 2, 30655 Hannover, Germany (organic geochemistry, regional geology of Germany)
Ph. Gibbard, Quaternary Stratigraphy Group, Godwin Institute of Quaternary research, Department of Geography, University of Cambridge, Downing Place, Cambridge CB2 3EN, United Kingdom (Quaternary geology, regional geology UK)
H.R.G.K. Hack, ITC Enschede, P.O. Box 6, 7500 AA Enschede, the Netherlands (engineering geology)
G.F.W. Herengreen, Laboratory of Paleobotany and Palynology, Utrecht University, Budapestlaan 4, 3584 CD Utrecht, the Netherlands
R.F.B. Isarin, Archeologic, Pelmolenlaan 12-14, 3447 GW Woerden, the Netherlands (sedimentology, Quaternary geology)
J.W.M. Jagt, Natuurhistorisch Museum Maastricht, De Bosquetplein 6-7, 6211 KJ Maastricht, the Netherlands (paleontology, regional geology SE Netherlands)
C. Kasse, Faculty of Earth and Life Sciences, Vrije Universiteit, De Boelelaan 1085, 1081 HV Amsterdam, the Netherlands
P. Kiden, TNO, P.O. Box 80015, 3508 TA Utrecht, the Netherlands (Quaternary stratigraphy and geological mapping, sea level change and crustal movements, palaeoclimatology and -hydrology)
J. Kwadijk, WL|Delft Hydraulics, P.O. Box 177, 2600 MH Delft, the Netherlands (hydrology)
C.G. Langereis, Laboratory of Paleomagnetism, Utrecht University, Budapestlaan 17, 3584 HD Utrecht, the Netherlands (paleomagnetism)
J.E. Meulenkamp, Institute of Earth Sciences, Utrecht University, Budapestlaan 4, 3584 CD Utrecht, the Netherlands (paleontology, stratigraphy, paleoecology)
H. Middelkoop, Department of Physical Geography, Utrecht University, P.O. Box 80015, 3508 TC Utrecht, the Netherlands (physical geography)
K. Rijdsdijk, TNO, P.O. Box 80015, 3508 TA Utrecht, the Netherlands (Quaternary North Sea & Irish Sea Basin, glacial geology)
R. Speijer, Katholieke Universiteit Leuven, Afdeling Historische Geologie, Redingenstraat 16, B-3000 Leuven, Belgium
R.T. van Balen, Faculty of Earth and Life Sciences, Vrije Universiteit, De Boelelaan 1085, 1081 HV Amsterdam, the Netherlands (structural geology, modelling)
W.J.E. van de Graaff, Sir Winston Churchillaan 1009a, 2286 AD Rijswijk, the Netherlands
N. Vandenberghe, Institute of Earth Sciences, Leuven University, Redingenstraat 16bis, B-3000 Leuven, Belgium (Quaternary geology)
B. van Geel, Institute for Biodiversity and Ecosystems (IBED), Department of Palynology, Amsterdam University, Kruislaan 318, 1098 SM Amsterdam, the Netherlands (palynology, paleoecology, Quaternary geology)
A. Veldkamp, Laboratory of Soil science and Geology, Agricultural University, P.O. Box 37, 6700 AA Wageningen, the Netherlands (physical geography)
Tj.C.E. van Weering, NIOZ, P.O. Box 59, 1790 AB Den Burg (Texel), the Netherlands (marine geology, North Sea)
H.J.T. Weerts, TNO, P.O. Box 80015, 3508 TA Utrecht, the Netherlands (fluvial sedimentology, lithostratigraphy, Quaternary geology)
F.P. Wesselingh, Naturalis – National Museum of Natural History, Darwinweg 2, 2333 CR Leiden, the Netherlands (paleontology)

Scope

Netherlands Journal of Geosciences / Geologie en Mijnbouw seeks to be the prime outlet for publication of geo-scientific papers pertaining to the Netherlands and the North Sea region and relevant adjacent areas. Manuscripts on any geoscientific topic will be considered for publication, provided they comply with the regional focus of the journal and are of international interest and quality.

Submission of manuscripts

Manuscripts may be submitted to the Editorial Office. Manuscripts should be prepared in accordance with the 'instructions to authors' as summarized in every first issue of a volume; the instruction is also available upon request from the Editorial Office and on the journal's website (www.njgonline.nl). The author(s) of manuscripts submitted are responsible for obtaining clearance for publication from relevant parties including, if appropriate, permission to include copyright material.

Subscription and distribution

Netherlands Journal of Geosciences / Geologie en Mijnbouw is published quarterly and dispatched by surface post. The journal is distributed to members of the Royal Geological and Mining Society of the Netherlands (KNGMG) free of charge and to private and institutional subscribers. The rate for institutional subscribers for the year 2007 is EUR 298, an individual subscription is EUR 80. Subscriptions are handled by Drukkerij Giethoorn ten Brink, Mrs. Mirjam R.H. Worst, P.O. Box 41, 7940 AA Meppel, the Netherlands (tel. +31 522 855 175; fax +31 522 855 176; email: m.worst@gmgroep.nl).

All orders (including requests for back issues) and related business correspondence (including address changes for subscribers) should be addressed to Drukkerij Giethoorn Ten Brink.

Abstracting and indexing

Netherlands Journal of Geosciences / Geologie en Mijnbouw is indexed/abstracted in Biological Abstracts, Current Contents/Physical, Current Geographical Publications, Chemical & Earth Sciences, Geological Abstracts, GeoArchive & GeoTitles, Science Citation Index Expanded, ASCA, Cambridge Scientific Abstracts, INSPEC Information Services Petroleum Abstracts, Bibliography and Index of Geology, GeoRef, Geobase/ GeoAbstracts, Chemical Abstracts, The ISI Alerting Services.

Access to NJG's internet version

The Netherlands Journal of Geosciences is also published online (<http://www.njgonline.nl>). Access to the full texts of the articles is permitted only to subscribers (including all members of KNGMG). For individual subscribers the registration procedure is as follows: (1) Go to <http://www.njgonline.nl>; (2) Click on the button 'register' (top right); (3) Fill in the dialog box (surname and postal code as on the address label of NJG) and finish with <send>; (4) You will receive your userid and password by email. To view articles in full text: (5) Go to <http://www.njgonline.nl>, using the button 'previous issue' (upper right-hand corner) you can then visit older issues; (6) To the right of each article title you find links to abstract and to full text; (7) Click on full text; (8) Log in by entering your userid and password in the dialog box. You can then view the selected article.

Institutional subscribers wishing to arrange automatic access for the computers within their institutions should mail the appropriate IP addresses (or IP range) to m.c.p.adriaanse@library.uu.nl.

Copyright and photocopying

© *Stichting Netherlands Journal of Geosciences.*

The journal (ISSN 0016-7746) is registered with the Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, USA. Authorization to photocopy items for internal or personal use is granted by the *Stichting Netherlands Journal of Geosciences*, provided that the appropriate fee is paid directly to CCC. Prior to photocopying, please get permission online at the CCC website (<http://www.copyright.com>) or call the CCC (+1 978 750 8400), which can also be contacted for information about additional usage of material.

Requests for permission to reproduce material published in this journal for other publications should be addressed to the Editorial Office.