

Netherlands Journal of Geosciences



Geologie en Mijnbouw



Netherlands Institute of Applied Geoscience TNO
- *National Geological Survey*



Royal Geological and Mining Society of the Netherlands

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 The Netherlands Institute of Applied Geoscience TNO - National Geological Survey (TNO - NITG). 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, 3508TA Utrecht, The Netherlands

tel. +31 (0)30 256 4470; fax . +31 (0)30 256 4475; e-mail: nig@nitg.tno.nl or b.debruin@nitg.tno.nl

Editorial Board

Th. E. Wong (Editor-in-chief), Netherlands Institute of Applied Geoscience TNO - National Geological Survey (TNO - NITG), P.O. Box 80015, 3508TA Utrecht, The Netherlands

C. Kasse, Faculty of Earth and Life Sciences, Vrije Universiteit, De Boelelaan 1085, 1081HV Amsterdam, The Netherlands

D.A. Nieuwland (Technical editor), 4e Binnenvestgracht 13, 2311NT Leiden, The Netherlands

G.J. Weltje, Department of Applied Earth Sciences, Delft University of Technology, Mijnbouwstraat 120, 2628RX Delft, The Netherlands

C.J. van der Zwan, SIEP-RTS, P.O. Box 2280AB, Rijswijk, The Netherlands

W. Hoek, Faculty of Geosciences, Department of Physical Geography, Utrecht University, Heidelberglaan 2, 3508 TC Utrecht, The Netherlands.

Advisory editors

O.A. Abbink, TNO-NITG, P.O. Box 80015, 3508 TA Utrecht, The Netherlands

H. Brinkhuis, Laboratory of Palaeobotany and Palynology, Utrecht University, Budapestlaan 4, 3584CD Utrecht, The Netherlands (paleontology)

H. Geluk, Nederlandse Aardolie Maatschappij, Schepermaat 2, 9405TA Assen, The Netherlands

G. de Lange, Department of Geochemistry, Utrecht University, Budapestlaan 4, 3584CD Utrecht, The Netherlands (geochemistry)

M.E. Donselaar, Department of Applied Earth Sciences, Delft University of Technology, Mijnbouwstraat 120, 2628RX Delft, The Netherlands (sedimentology)

A.R. Fortuin, Faculty of Earth and Life Sciences, Vrije Universiteit, De Boelelaan 1085, 1081HV, 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. Box6, 7500 AA Enschede, The Netherlands (engineering geology)

G.F.W. Hergreen, Laboratory of Paleobotany and Palynology, Utrecht University, Budapestlaan 4, 3584CD Utrecht, The Netherlands

R.F.B. Isarin, Archaeologisch Adviesbureau RAAP, Zeeburgerdijk 54, 1094AE Amsterdam, The Netherlands (sedimentology, Quaternary geology)

J.W.M. Jagt, Natuurhistorisch Museum Maastricht, De Bosquetplein 6-7, 6211KJ Maastricht, The Netherlands (paleontology, regional geology SE Netherlands)

P. Kiden, TNO-NITG, P.O. Box 80015, 3508 TA Utrecht, The Netherlands

J. Kwadijk, WL/Delft Hydraulics, P.O. Box 177, 2600MH Delft, The Netherlands (hydrology)

C.G. Langereis, Laboratory of Paleomagnetism, Utrecht University, Budapestlaan 17, 3584HD Utrecht, The Netherlands (paleomagnetism)

J.E. Meulenkaamp, Institute of Earth Sciences, Utrecht University, Budapestlaan 4, 3584CD Utrecht, The Netherlands (paleontology, stratigraphy, paleoecology)

H. Middelkoop, Department of Physical Geography, Utrecht University, P.O. Box 80015, 3508TC Utrecht, The Netherlands (physical geography)

R.T. van Balen, Faculty of Earth and Life Sciences, Vrije Universiteit, De Boelelaan 1085, 1081HV, Amsterdam The Netherlands (structural geology, modelling)

K. Rijdsdijk, TNO - NITG, P.O. Box 80015, 3508TA Utrecht, The Netherlands

R. Speijer, Katholieke Universiteit Leuven, Afdeling Historische Geologie, Redingenstraat 16, B-3000 Leuven, Belgium

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, 1098SM Amsterdam, The Netherlands (palynology, paleoecology, Quaternary geology)

Tj.C.E. van Weering, NIOZ, P.O. Box 59, 1790AB Den Burg (Texel), The Netherlands (marine geology, North Sea)

A. Veldkamp, Laboratory of Soil science and Geology, Agricultural University, P.O. Box 37, 6700AA Wageningen, The Netherlands (physical geography)

H.J.T. Weerts, TNO-NITG, P.O. Box 80015, 3508 TA Utrecht, The Netherlands

F.P. Wesselingh, Naturalis - National Museum of Natural History, Darwinweg 2, 2333CR Leiden, The Netherlands (paleontology)