

INTERNATIONAL JOURNAL OF Computerized DENTISTRY

Official Publication of the International Society of Computerized Dentistry
Academy of Computerized Dentistry of North America (ACDNA) • Accademia Italiana di Odontoiatria Computerizzata Onlus (AIOC) • Associação Brasileira de Odontologia Computadorizada (ABOC) • Australian Society of Computerized Dentistry (ASCD) • Accademia Italiana di Odontoiatria Computerizzata Onlus (AIOC) • British Society of Computerized Dentistry (BSCD) • Club Francophone d'Applications Odontologiques en cadcam (CFAO-cadcam) • Danish Society of Computerized Dentistry (DSCD) • Deutsche Gesellschaft für computergestützte Zahnheilkunde (DGCZ) • Dutch Association for Computerized Dentistry (DACD) • Egyptian Society of Computerized Dentistry (ESCD) • Georgian Computerized Dentistry Association "Infodent" • Irish Society of Computerized Dentistry (IreSCD) • Japanese Society of Computer Aided Dentistry (JSCAD) • Österreichische Gesellschaft für computergestützte Zahnheilkunde (ÖGCZ) • Sociedad Chilena de Odontologia Computerizada (SOCHOCO) • South African Academy of Computerized Dentistry (SAA-CD) • Spanish Society of Computerized Dentistry (SOCE)

Associated Society:

Arbeitsgemeinschaft für Röntgenologie in der DGZMK (ARö)

EDITORS

Prof Dr Dr Albert Mehl
Division of Computerized Restorative Dentistry
Center of Dental Medicine
University of Zurich,
Plattenstr. 11, 8032 Zurich/ Switzerland
E-mail: mehl@quintessenz.de

Dr Olaf Schenk
Hohenzollernring 26, 50672 Cologne/Germany
E-mail: schenk@quintessenz.de

EDITORIAL BOARD

Prof Dr Gerwin Arnetzl, Graz/Austria; Prof Dr Florian Beuer, Berlin/Germany; Dr Andreas Bindl, Zurich/Switzerland; Dr Alessandro Devigus, Bülach/Switzerland; Prof Dr François Duret, Fleury d'Aude/France; Dr Kenneth A. Eaton, London/UK; Dr Dennis J. Fasbinder, Ann Arbor, Michigan/USA; Dr Andreas Fuhrmann, Hamburg/Germany; Prof Dr Reinhard Hickel, Munich/Germany; Dr Nicolas M. Jedyakiewicz, Liverpool/UK; Prof Dr Thomas Kerschbaum, Cologne/Germany; Prof Dr Bernd Kordaß, Greifswald/Germany; Dr Andreas Kurbad, Viersen/Germany; Prof Dr Werner H. Mörmann, Zurich/ Switzerland; Prof Dr Michael J. Noack, Cologne/Germany; Prof Dr Sven Reich, Aachen/Germany; Dr Bernd Reiss, Malsch/Germany; Prof Dr U. J. Rother, Hamburg/Germany; Prof Dr Winfried Walther, Karlsruhe/Germany; Dr Klaus Wiedhahn, Buchholz/Germany; Prof Dr Daniel Wismeijer, Amsterdam/The Netherlands; Dr Moritz Zimmermann, Zurich/ Switzerland

Submit manuscripts and illustrations preferably through:

www.manuscriptmanager.com/ijcd or to: Quintessenz Verlags-GmbH,
Anke Schiemann, IJCD, Ifenpfad 2-4, 12107 Berlin, Germany

Impact Factor 2015: 1.154

Subscription/Manuscript Information

Quintessenz Publishing Co., Ltd., Grafton Road,
New Malden, Surrey KT3 3AB, Great Britain
Phone: +44(0)20 8949 6087,
Fax: +44(0)20 8336 1484
E-mail: info@quintpub.co.uk

Germany, Austria, Switzerland

Quintessenz Verlags-GmbH, Ifenpfad 2-4,
D-12107 Berlin, Germany
Phone: +49-30-761 80-5, Fax: +49-30-761 80-680,
E-mail: info@quintessenz.de,
Web site: <http://www.quintessenz.de>

N. and S. America, Australia, New Zealand, Asia

Quintessenz Publishing Co., Inc, 4350 Chandler Drive,
Hanover Park, Illinois 60133/USA
Phone: (630) 682-3223, Fax: (630) 682-3288
E-mail: quintpub@aol.com
Web site: <http://www.quintpub.com>

Publisher

Journal Director
Editorial Manager

Dr. h. c. H.-W. Haase
Johannes W. Wolters
Anke Schiemann /
Avril du Plessis

Production Manager
Subscription Manager

Angela Köthe Germany, Austria, Switzerland
Andrew Johnson All other countries

Advertising Sales Manager

Emelie Gustafsson

The International Journal of Computerized Dentistry is published quarterly by Quintessenz Publishing Co., Ltd., Grafton Road, New Malden, Surrey KT3 3AB, Great Britain. Court domicile and place of performance: London, Great Britain.

Subscription rates 2017

Full Rate £ 118.00 per year, via air mail £ 138.00; Institution Rate £ 238.00; Student Rate £ 60.00. Single copy £ 30.00. Germany, Austria, Switzerland: Personal Rate € 138; Institutional Rate € 280; Student Rate € 70.

America, Australia, New Zealand, Asia: Regular \$ 170.00; Institutional \$ 298.00; Student \$ 100.00.

Subscriptions may begin at any time; cancellations must be received one month prior to expiration date. Please allow 6 weeks for any change of address notification to be processed. Claims for missing issues will be serviced only within 6 months of publication date. Otherwise, single copy price will be charged on missing issues.

Postmaster: Send address changes to

Quintessenz Publishing Co., Ltd., Grafton Road, New Malden, Surrey KT3 3AB, Great Britain; or Quintessenz Verlags-GmbH, Ifenpfad 2-4, D-12107 Berlin, Germany.

Copyright © 2017 by Quintessenz Publishing Co Ltd. All rights reserved. No parts of this journal may be reproduced in any material form (including photocopying or storing it in any medium by electronic means and whether transiently or incidentally to some other use of this journal) without the written permission of the publisher except in accordance with the provisions of the Copyright, Designs and Patents Act 1988 or under the terms of a licence issued by The Copyright Licensing Agency Ltd, 90 Tottenham Court Road, London, W1P 0LP. Application for the copyright owner's written permission to reproduce any part of this journal should be addressed to the publisher. The publisher assumes no responsibility for unsolicited manuscripts. All opinions are those of the authors.

Permission to photocopy items solely for internal or personal use and for the internal and personal use of specific clients is granted by Quintessenz Publishing Co Ltd.

Advertising Policy All advertising appearing in the International Journal of Computerized Dentistry must be approved by the Editors/Editorial Board. The publication of an advertisement is not to be construed as an endorsement of approval by IJCD or its publisher.

ISSN 1463-4201

Printed in Germany