

CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom
One Liberty Plaza, 20th Floor, New York, NY 10006, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India
103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781108790864

DOI: 10.1017/9781108807005

© Cambridge University Press 2022

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First edition published as *Geochemical Reaction Modeling* by Oxford University Press, 1996

Second edition published as *Geochemical and Biogeochemical Reaction Modeling* by Cambridge University Press, 2010

Third edition published 2022

Printed in the United Kingdom by TJ Books Limited, Padstow Cornwall

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Names: Bethke, Craig, author.

Title: *Geochemical and biogeochemical reaction modeling* / Craig M. Bethke, University of Illinois at Urbana-Champaign.

Description: Third edition. | Cambridge, United Kingdom ; New York, NY : Cambridge University Press, 2022. | Includes bibliographical references and index.

Identifiers: LCCN 2021044807 | ISBN 9781108790864 (hardback)

Subjects: LCSH: Geochemical modeling. | Chemical reactions—Simulation methods. | BISAC: SCIENCE / Earth Sciences / General

Classification: LCC QE515.5.G43 B48 2022 | DDC 551.9—dc23

LC record available at <https://lcn.loc.gov/2021044807>

ISBN 978-1-108-79086-4 Paperback

Additional resources for this publication at www.cambridge.org/bethke3

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.