

BIOTECHNOLOGY  
INTELLIGENCE  
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# CRYSTALLINE BACTERIAL CELL SURFACE PROTEINS

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Academic Press

R.G. LANDES COMPANY

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R.G. LANDES COMPANY  
Austin, Texas, U.S.A.

Submitted: October 1995

Published: January 1996

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R.G. Landes Company  
909 Pine Street, Georgetown, Texas, U.S.A. 78626  
Phone: 512/ 863 7762; FAX: 512/ 863 0081

Academic Press, Inc.

525 B Street, Suite 1900, San Diego, California, U.S.A. 92101-4495

United Kingdom Edition published by Academic Press Limited  
24-28 Oval Road, London NW1 7DX, United Kingdom

International Standard Book Number (ISBN): 0-12-648470-8

Library of Congress Catalog Number: not available by publication date

Printed in the United States of America

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Library of Congress Cataloging-in-Publication Data

(CIP data applied for but not available by publication date)

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Deborah Muir Molsberry  
Publications Director  
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*Chapter 7*

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## PREFACE

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Most prokaryotic cells possess layered assemblies of homo- and heteropolymers external to the cytoplasmic membrane which function as important interface between the environment and the cell. As such, the supramolecular architecture of envelopes represents very specific evolutionary adaptations of unicellular life forms to different environmental conditions and selection criteria. Although bacterial cell envelope structures are one of the most intensively studied major structures of microbial cells it took relatively long until it became evident that monomolecular arrays of protein or glycoprotein subunits (S-layers) are one of the most common surface structures found in prokaryotic organisms. The aim of this book is to assemble our present day understanding of the occurrence, structure, chemistry, genetics, assembly, function and application potential of S-layers. Each chapter is designed in a way that it stands as a self-contained unit. We hope that this book will help to stimulate further development in basic and applied S-layer research.

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*October 1995*

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