Simple Theorems, Proofs, and Derivations in Quantum Chemistry

# MATHEMATICAL AND COMPUTATIONAL CHEMISTRY 

Series Editor: PAUL G. MEZEY<br>University of Saskatchewan<br>Saskatoon, Saskatchewan

FUNDAMENTALS OF MOLECULAR SIMILARITY<br>Edited by Ramon Carbó-Dorca, Xavier Gironés, and Paul G. Mezey

## MANY-ELECTRON DENSITIES AND REDUCED DENSITY MATRICES Edited by Jerzy Cioslowski

## SIMPLE THEOREMS, PROOFS, AND DERIVATIONS IN QUANTUM CHEMISTRY István Mayer

# Simple Theorems, Proofs, and Derivations in Quantum Chemistry 

István Mayer<br>Chemical Research Center<br>Hungarian Academy of Sciences<br>Budapest, Hungary

Kluwer Academic / Plenum Publishers
New York • Boston • Dordrecht • London • Moscow

Mayer, István, 1943-
Simple theorems, proofs, and derivations in quantum chemistry/István Mayer. p. cm. - (Mathematical and computational chemistry)

ISBN 0-306-47409-3

1. Quantum chemistry. I. Title. II. Series.

QD462 .M39 2002
$541.2^{\prime} 8$ —dc21

ISBN 0-306-47409-3
© 2003 Kluwer Academic / Plenum Publishers, New York
233 Spring Street, New York, New York 10013
http://www.wkap.nl/
$\begin{array}{llllllllll}10 & 9 & 8 & 7 & 6 & 5 & 4 & 3 & 2 & 1\end{array}$
A C.I.P. record for this book is available from the Library of Congress
All rights reserved
No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording, or otherwise, without written permission from the Publisher, with the exception of any material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work.

Printed in the United States of America

To my wife Márti;
and to the memory of my mother and aunts, who saved me and raised me in difficult times.


