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Hydrogen Fuel for Surface Transportation

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Dedication

To Dr. Robert M. Zweig, whose longstanding commitment
to the advancement of hydrogen as a clean fuel
has been a source of inspiration to many

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Preface

This book has been written as part of an ongoing program in hydrogen fuel for surface transportation at the College of Engineering—Center for Environmental Research and Technology (CE-CERT) at the University of California, Riverside. Faculty, students, and staff who are working with new technologies for hydrogen production and hydrogen-fueled vehicles have developed this book as a comprehensive overview, reference, and database on the subject. The book provides background information on the advantages and disadvantages of hydrogen as a fuel for surface transportation, describes the current state of technology of hydrogen-fueled vehicles, and discusses the future requirements of the so-called “hydrogen economy.” We believe that the reprints and introductory material of each chapter will be invaluable to new and experienced researchers in the field.

The hydrogen program at CE-CERT is directed by Joseph M. Norbeck, CE-CERT’s Director, and Project Manager James W. Heffel. The development of this book was supervised by Steven E. Belinski, who was also the primary editor. The following individuals were responsible for writing the individual chapters: Thomas D. Durbin contributed to all the chapters; Bassam Tabbara contributed to Chapters 3, 6, and 7; John M. Bowden contributed to Chapters 4 and 6; and Michelle C. Montano contributed to Chapter 5. Helen Ku assisted with the preparation of the final manuscript.

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Since the field of hydrogen for surface transportation is evolving so rapidly, information on current developments in the field of hydrogen-fueled vehicles and the hydrogen economy can be obtained directly from CE-CERT at (909) 781-5791.

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