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Editors

Pedestrian and Evacuation Dynamics 2008

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Wolfram W.F. Klingsch • Christian Rogsch •
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ISBN 978-3-642-04503-5 e-ISBN 978-3-642-04504-2
DOI 10.1007/978-3-642-04504-2
Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2009941802

Mathematics Subject Classification (2000): 49-XX, 4906, 65-XX, 65C05, 65C20, 68-XX, 68Q80, 68U05, 68U07, 68U10, 68U20, 68U35, 82-XX, 82C21, 90-XX, 90BXX, 91-XX, 91CXX, 93-XX, 93E25

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Cover illustration: Norbert Sdunzik
Cover design: WMXDesign GmbH, Heidelberg

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

Proper management of evacuation processes is one of the basic requirements within life safety concepts, and it helps to prevent critical situations from getting out of control. Super high-rise buildings, deep underground stations or shopping areas, airplanes for the mass transportation, sport stadiums or meeting places with tens of thousands of visitors—they all call for new dimensions in safe evacuation planning. Research results in evacuation dynamics give answers to these challenges.

PED-conferences are the prime address for all research in this field. The increasing number of participants from different fields of research reflect their importance. After PED-conferences in Germany (Duisburg, 2001), Great Britain (Greenwich, 2003) and Austria (Vienna, 2005), the PED 2008 Conference in Wuppertal/Germany reached new heights with more than 120 participants from 20 countries and nearly 100 presentations. The wide field of topics discussed in presentations also reflects deeper understanding of fundamental effects as well as the stronger interactions between different research areas. New test designs offer new important basic data, new analysis procedures open a better understanding of complex interactions, new model designs allow more realistic simulations, and the input from architectural design and the medical references on physical limitations help to realize a safe evacuation design. On the one hand all these data give an outlook of future possibilities and sometimes they open an astonishing new understanding of seemingly well-known data. On the other hand, they make clear the limitations of our current knowledge. Integration of evacuation analysis into fire safety concepts is without doubt an important step to improve the quality of life safety planning. But incorporation of tools for calculating toxic gas concentrations, for example, should be accepted only with caution, as too little reliable information about the chemistry of fire sources and its modeling is available.

The PED 2008 Conference Proceedings offer a wealth of the latest information on all fields of pedestrian evacuation and will be an important source for all researchers working in their different disciplines.

Finally, we would like to thank all people who, mostly behind the scenes, have helped to make the conference a success. Special thanks go to Mrs. Birgit Dahm-Courths for the excellent job she has done in preparing these proceedings, and to Mrs. Sabine Mehring for the excellent assistance before and during the whole conference. Furthermore, we would like to thank Wahed Azimi, Tobias Rupprecht, Dimitrios Toris, Nina Wellenberg, and Andreas Winkens for their "helping hands", without whose support this conference could not have been realized.

Wuppertal, Köln, Duisburg
July 2009

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Part I

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