



# Handbook of Human Factors and Ergonomics, 5th Edition

Gavriel Salvendy and Waldemar Karwowski

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## DESCRIPTION

### HANDBOOK OF HUMAN FACTORS AND ERGONOMICS

**Discover the latest developments in ergonomics and human factors with the newest edition of this market leading reference**

In the newly revised Fifth Edition of *Handbook of Human Factors and Ergonomics*, Drs. Gavriel Salvendy and Waldemar Karwowski deliver a comprehensive exploration of workplace environment design, human-machine interfaces, and cutting-edge research on the reduction of health and safety risks. The editors have compiled practical material from an international team of leading experts in ergonomics and human factors that will benefit specialists in the area, as well as safety engineers and human-computer interaction specialists.

The *Handbook* includes information culled from over 7500 sources and features brand new coverage in areas like artificial intelligence, social media, information technology and cybersecurity, and data analytics. Numerous case studies demonstrate the real-world application of the concepts and methods discussed within and showcase the extraordinary developments in the field since the publication of the Fourth Edition in 2012.

Readers will also benefit from the inclusion of:

- A thorough introduction to the human factors function, including the discipline of human factors and ergonomics and human systems design and integration
- An exploration of the fundamentals of human factors, including sensation and perception, selection and action control, information processing, and mental workload

- Discussions of the design of equipment, tasks, jobs, and environments, including workplace design, task analysis and design, and training systems
- An in-depth treatment of design for health, safety, and comfort, including low-back and upper extremity musculoskeletal disorders and the use of personal protective equipment

Perfect for ergonomics and human factors engineers at any level of their careers, *Handbook of Human Factors and Ergonomics* will also earn a place in the libraries of design engineers, applied psychologists, human-computer interaction specialists, engineering and technology managers, and safety professionals and industrial hygienists.

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## ABOUT THE AUTHOR

**Gavriel Salvendy, PhD**, is University Distinguished Professor at the College of Engineering and Computer Science at the University of Central Florida, Founding President of the Academy of Science, Engineering, and Medicine of Florida, and a member of the National Academy of Engineering (NAE). He is also Professor Emeritus of Industrial Engineering at Purdue University and Chair Professor Emeritus and Founding Head of the Department of Industrial Engineering at Tsinghua University, Beijing, P.R. China.

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