## **Contents**

Part I Ergonomics and Material Environment Design	
Comparison Between Domestic Water Heating Systems Based on Either Solar Heaters or Electrical Boilers by the Life Cycle Assessment Approach	3
Aggregate Replacement and Its Usefulness in Cement Concrete for Sustainable Development—A Study on Rubber, Jarosite and Sandstone Aggregates  Sanjeev Kumar, Ramesh Chandra Gupta, Blessen Skariah Thomas and Priyansha Mehra	13
Incubating and Nurturing Sustainable Practices Through Staged Social Engagements	27
Public Facilities Driven by Service Demand for Space	39
Adaptive Reuse of Buildings as an Important Factor of Sustainable Development  Krystyna Strumiłło	51
Part II Ergonomics in Building and Architecture	
New Concepts in Arrangement of Living Spaces for Students Anna Jaglarz	63
Re-consumption of Materials in Architecture  Jerzy Charytonowicz and Maciej Skowroński	75

x Contents

Le Corbusier in Algeria: The Quest for the Human Scale in Architecture	85
Design Aspects Applied to Engineering: Technology Sustainable Development and Innovation in the Science Parks  Ekaterina Emmanuil Inglesis Barcellos, Galdenoro Botura, Jr. and Luiz Carlos Paschoarelli	95
Cross-Cultural Design and Its Application in Architecture	105
Aesthetics and Composition of Forms in the Design of Means of Transport and Rehabilitation for People with Disabilities	115
Application of the Green Roof System in Small and Medium Urban Cities	125
Shift of the Function of "Temple of the Travelling" from Railway Stations to Airports	137



http://www.springer.com/978-3-319-41940-4

Advances in Human Factors and Sustainable Infrastructure Proceedings of the AHFE 2016 International Conference on Human Factors and Sustainable Infrastructure, July 27–31, 2016, Walt Disney World®, Florida, USA Charytonowicz, J. (Ed.)

2016, X, 149 p. 64 illus., 48 illus. in color., Softcover

ISBN: 978-3-319-41940-4