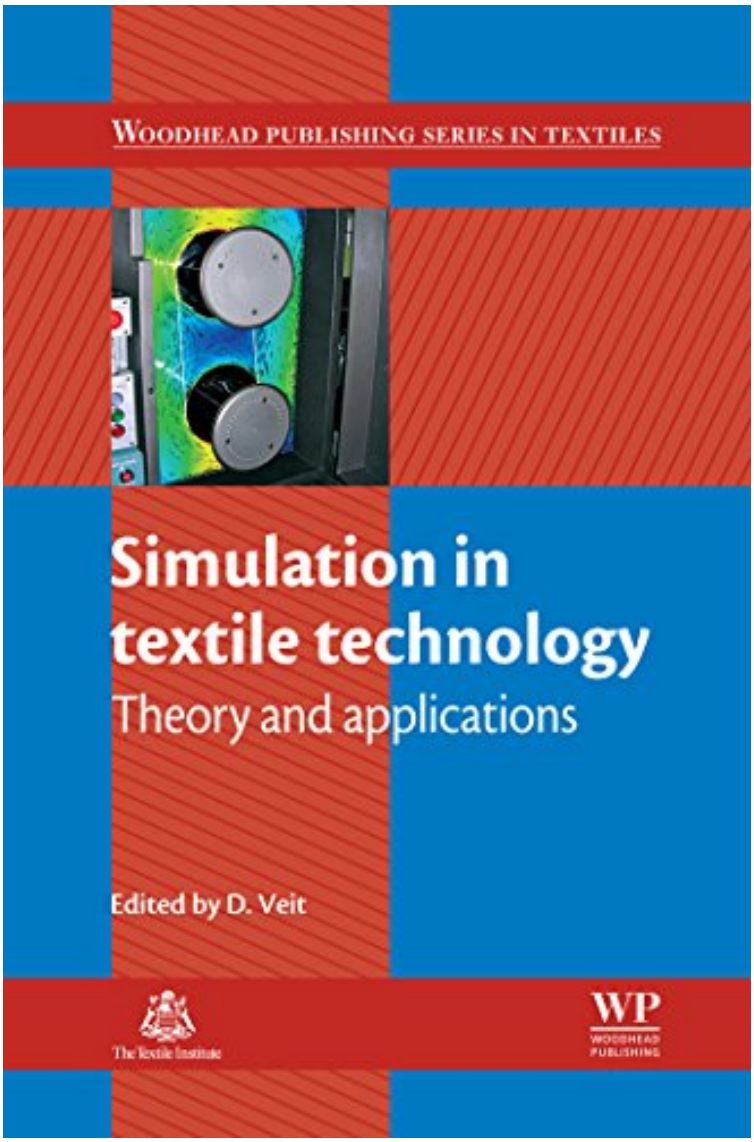
Simulation in Textile Technology: Theory and Applications (Woodhead Publishing Series in Textiles)

From Woodhead Publishing
*audiobook | *ebooks | Download PDF | ePub | DOC*



#4258895 in eBooks 2012-06-11 2012-06-11File Name: B00HMQCVG6 | File size: 58.Mb

From Woodhead Publishing : Simulation in Textile Technology: Theory and Applications (Woodhead Publishing Series in Textiles) before purchasing it in order to gage whether or not it would be worth my time, and all praised Simulation in Textile Technology: Theory and Applications (Woodhead Publishing Series in Textiles):

The use of mathematical modelling and computer simulation can vastly improve the quality, efficiency and economic success of textile technology. Simulation in textile technology provides a comprehensive review of the key principles, applications and benefits of modelling for textile production.After an introduction to modelling and simulation, Simulation in textile technology goes on to review the principles and applications of the main types of model. The book first discusses neural networks and their applications before going on to explore evolutionary methods and fuzzy logic. It then considers computational fluid dynamics and finite element modelling. The modelling of fibrous structures and yarns are considered in the following chapters, along with wound packages, woven, braided and knitted structures. The book concludes by reviewing the simulation of textile processes and machinery.With its distinguished editor and team of expert contributors, Simulation in textile technology is a valuable reference tool for all those involved in both developing models of textile processes and those applying them to improve process efficiency and product quality.Provides a comprehensive review of the key principles, applications and benefits of modelling for textile productionDiscusses neural networks and their applications before going on to explore evolutionary methods and fuzzy logicConsiders the modelling of fibrous structures and yarns, along with wound packages, woven, braided and knitted structures

About the AuthorDieter Veit is the Academic Director and Deputy Director of the Institute of Textile Technology at RWTH Aachen University, Germany