



ADEX Optimized Adaptive Controllers and Systems: From Research to Industrial Practice (Hardback)

By Juan M. Martin-Sanchez, José Rodellar

Springer International Publishing AG, Switzerland, 2014. Hardback. Condition: New. 2015 ed.. Language: English . Brand New Book. This book is a simple and didactic account of the developments and practical applications of predictive, adaptive predictive, and optimized adaptive control from a perspective of stability, including the latest methodology of adaptive predictive expert (ADEX) control. ADEX Optimized Adaptive Control Systems is divided into six parts, with exercises and real-time simulations provided for the reader as appropriate. The text begins with the conceptual and intuitive knowledge of the technology and derives the stability conditions to be verified by the driver block and the adaptive mechanism of the optimized adaptive controller to guaranty the desired control performance. The second and third parts present strategic considerations of predictive control and related adaptive systems necessary for the proper design of driver block and adaptive mechanism and thence their technical realization. The authors then proceed to detail the stability theory that supports predictive, adaptive predictive and optimized adaptive control methodologies. Benchmark applications of these methodologies (distillation column and pulp-factory bleaching plant) are treated next with a focus on practical implementation issues. The final part of the book describes ADEX platforms and illustrates their use in the...



READ ONLINE

Reviews

An extremely wonderful book with lucid and perfect information. It is one of the most awesome publication i have read. Your life period will probably be enhance the instant you total looking at this pdf.

-- Prof. Dan Windler MD

It is really an amazing publication i actually have at any time read. It is really simplistic but unexpected situations inside the 50 percent of your pdf. Its been written in an exceptionally simple way in fact it is just right after i finished reading this ebook where actually transformed me, alter the way i really believe.

-- Dr. Celestino Spinka III