



2011. XXX, 217 p. 69 illus., 21 in color.
(Advances in Industrial Control) Hardcover

- ▶ **99,95 €**
- ▶ **\$129.00**
- ▶ **SFr. 143.50**
- ▶ **£90.00**

ISBN 978-1-84996-352-7

C. Ocampo-Martinez, Parc Tecnològic de Barcelona, Spain

Model Predictive Control of Wastewater Systems

This book shows how sewage systems can be modelled and controlled within the framework of model predictive control (MPC). Several MPC-based strategies are proposed, accounting for the inherently complex dynamics and the multi-objective nature of the control required. The effect of system disturbance, represented by data from real rain episodes, on the performance of the control loop, is also accommodated. Complementary to these considerations is the incorporation of the closed-loop system within a fault-tolerant architecture and the study of faults in system actuators. Actuator faults are represented using hybrid modelling techniques, avoiding the loss of convexity of the related optimisation problem when the linear case is considered. The methods and control designs described in this book can easily be extrapolated to other complex systems of similar nature. A MATLAB® toolbox (available for download) will assist readers in implementing the MPC methods described within a sewer network.... *more on <http://springer.com/978-1-84996-352-7>*

- ▶ Introduces readers to the implementation of a powerful and increasingly popular control method in a group of applications of vital importance
- ▶ An accompanying MATLAB® toolbox designed by the author helps facilitate the actual use of the methods described for real water networks
- ▶ Proposes multiple MPC-based strategies

Order Now!

Yes, please send me _____ copies

"Model Predictive Control of Wastewater Systems"
ISBN 978-1-84996-352-7

Methods of Payment ☐ Check/Money Order enclosed ☐ AmEx ☐ MasterCard ☐ VISA

Card No. Exp. Date

Please send orders to:

Outside the Americas:

Springer
Order Department
PO Box 2485
Secaucus, NJ 07096-2485
USA

Springer
Customer Service Center GmbH
Haberstrasse 7
69126 Heidelberg
Germany

- ▶ **Call toll-free** 1-800-SPRINGER
8:30 am – 5:30 pm ET
- ▶ **Fax your order to** (201) 348-4505
- ▶ **Web** springer.com
- ▶ **Email** orders-ny@springer.com

- ▶ **Call:** + 49 (0) 6221-345-4301
- ▶ **Fax:** +49 (0) 6221-345-4229
- ▶ **Web:** springer.com
- ▶ **Email:** orders-hd-individuals@springer.com

Name	
Address	
Street Address	
(Sorry, we cannot deliver to P.O. boxes)	
City / State / ZIP-Code	
Country	
Telephone / Email	
Date ✕	Signature ✕

CA, MA, NJ, NY, and PA residents, please add sales tax. Canadian residents, please add 5% GST. Please add \$5.00 for shipping one book and \$1.00 for each additional book. Outside the US and Canada add \$10.00 for first book, \$5.00 for each additional book. All orders are processed upon receipt. If an order cannot be fulfilled within 90 days, payment will be refunded upon request. Prices are payable in US currency or its equivalent. Remember, your 30-day return privilege is always guaranteed. Pre-publication pricing: Unless otherwise stated, pre-pub prices are valid through the end of the third month following publication, and therefore are subject to change.

All € and £ prices are net prices subject to local VAT, e.g. in Germany 7% VAT for books and 19% VAT for electronic products. Pre-publication pricing: Unless otherwise stated, pre-pub prices are valid through the end of the third month following publication, and therefore are subject to change. All prices exclusive of carriage charges. Prices and other details are subject to change without notice. All errors and omissions excepted. Please consult springer.com for information on postage.