Instrumentation, Control and Automation in Wastewater Systems

Instrumentation, control and automation (ICA) in wastewater treatment systems is now an established and recognised area of technology in the profession.

There are obvious incentives for ICA, not the least from an economic point of view. Plants are also becoming increasingly complex which necessitates automation and control. Instrumentation, Control and Automation in Wastewater Systems summarizes the state-of-the-art of ICA and its application in wastewater treatment systems and focuses on how leading-edge technology is used for better operation.

The book is written for:

- The practising process engineer and the operator, who wishes to get an updated picture of what is possible to implement in terms of ICA;
- The process designer, who needs to consider the couplings between design and operation;
- The researcher or the student, who wishes to get the latest technological overview of an increasingly complex field.

There is a clear aim to present a practical ICA approach, based on a technical and economic platform. The economic benefit of different control and operation possibilities is quantified. The more qualitative benefits, such as better process understanding and more challenging work for the operator are also described. Several full-scale experiences of how ICA has improved economy, ease of operation and robustness of plant operation are presented. The book emphasizes both unit process control and plant wide operation.