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Function:	Professor in industrial fermentation technology		
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Division	CAPEC-PROCESS Research Center		

Areas of Expertise:

Mathematical modelling Benchmarking of control strategies Simulation

Short Description of your Institution:

DTU is a leading international research university, hosting 10,600 students and 5,800 staff. As one of the largest departments at DTU, the Department of Chemical and Biochemical Engineering hosts 6 research centers. The CAPEC-PROCESS Research Center has 50 staff members with extensive knowledge in process modelling, monitoring and control. Specifically in the wastewater area, the team has vast experience with development and use of advanced plant-wide treatment models, with process design, with development of novel control strategies and benchmarking of control strategies, and with extensions of the Anaerobic Digestion Model No. 1 (ADM1). In the fermentation area, the center works with computational fluid dynamics (CFD), with mixing and mass transfer, and with process modelling and control. Furthermore, the center has own labs for biocatalysis and fermentation related projects, and also has access to DTU's fermentation platform (60 lab-scale fermenters). Finally, the center is expanding its pilot-scale equipment, now including fermentation (up to 150 L) in a stirred tank, a bubble column, and a U-loop fermenter for Single Cell Protein (SCP) production. The center has access to full-scale treatment plant data via its contacts with several industrial partners.

Role in the project:

Principal Investigator for DTU

Date, September 13th 2016