



PROJECT GROUP RESOURCE-EFFICIENT MECHATRONIC PROCESSING MACHINES, RMV



A new approach for an efficient and flexible control of biogas production in a full scale plant

motivation

- insufficient modelling for real process operation
- unused potential of existing big data

vision

- smart grid integration of biogas plants in accordance to the demand of the gas market by implementing a
- robust, fast, and dynamic control of the raw biogas production process

objectives

- enhancing description of biological process in an adjustable SBML* model
- formulating a method for identifying plant-significant operating points
- reducing parameter search space by model reduction and determining theoretical limits
- applying receding horizon control
 *) SBML: Systems Biology Markup Language

CONTACT INFORMATION

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