

Multi-Agent Approach for Monitoring and Control of Biotechnological Processes

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Abstract : This paper is aimed at using a multi-agent approach to monitor and diagnose a biotechnological system in order to validate certain control actions depending on the process development and the operating conditions. A multi-agent system is defined as a network of interacting software modules that collectively solve complex tasks. Remote monitoring and control of biotechnological processes is a necessity when automated and reliable systems operating with no interruption of certain activities are required. The advantage of our approach is in its flexibility, modularity and the possibility of improving by acquiring functionalities through the integration of artificial intelligence.

Keywords : multi-agent approach, artificial intelligence, biotechnological processes, anaerobic biodegradation

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