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**Quality Monitoring of Manufacturing Processes by In-Process
Sensor Signals**

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Abstract

An increasing attention in manufacturing industry has been devoted to the use of in-process sensor signals to improve quality, productivity and automation. The analysis of real-time data streams leads to different challenges for quality control. Thus, signal pre-processing, registration and fusion techniques are critical for the achievement of desired performances. The paper investigates new methods and open issues related to the application of SPC and profile monitoring techniques to sensor data.