Operating Performance Assessment, Fault Diagnosis and Intelligent Maintenance for Industry Processes Driven by Knowledge and Data

CALL FOR PAPERS

In order to meet the increasing demands for safety, reliability, and production efficiency, enterprises in the process industry continuously introduce advanced automation and intelligent technologies to ensure the stable and efficient operation of production processes. As market competition intensifies, the operational safety of industrial equipment and the long-term efficient operation of production processes have become particularly crucial. Any inefficient operation, downtime, or even fault can result in significant economic losses. Technologies driven by knowledge and data have shown great potential in improving the operational performance, fault diagnosis, and intelligent maintenance of process industries. The use of big data analytics and artificial intelligence algorithms provides strong support for accurate performance evaluation, equipment fault diagnosis, and effective maintenance strategies. This topic will systematically explore the current applications, technological advancements, achievements, challenges, and future development directions of the technologies driven by knowledge and data in the fields of process industry operating performance assessment, fault diagnosis, and intelligent maintenance, based on industrial process intelligent monitoring.

The solicitation scope of this topic includes but is not limited to the following topics:

❈ Process monitoring methods driven by knowledge and data in the process industry;

❈ Methods for operating performance assessment driven by knowledge and data in the process industry;

❈ Fault diagnosis and maintenance methods driven by knowledge and data in the process industry;

❈ Methods for predicting key parameters driven by knowledge and data in the process industry;

❈ Optimization methods driven by knowledge and data in the process industry;

If you want to know more about the topic, please contact Professor Yuqing Chang via email: **changyuqing@ise.neu.edu.cn**