The journal for the Special Issue:
International Journal of Advanced Manufacturing Technology

The title for the Special Issue:
Machining Chatter

Proposed Aims and Scope, overview of the Special Issue’s intended focus and a list of the topics:

Machining operations have widely applications in manufacturing industries and advanced greatly in the recent decades. However, the occurrence of machining chatter will lead to poor surface finish, tool rapid wear and even damage of the machine tools. Therefore, machining chatter has been a challenging problem, which attracts the attention from both the academic fields and industries.

The first investigations of machining chatter appeared at the beginning of the 20th century, and has been a heated research topic ever since. The development of new concepts, device, materials, tools and other innovations makes great changes for machining process, and also brings new challenges to machining chatter investigations, which make it not an easy task. Fortunately, there are great minds throughout the world devoting to the work. The better understanding of machining chatter can help to enhance the machining quality and efficiency, which are essentially important for industries to achieve rapid and economic production output.

The objective of this special issue is to provide an opportunity for scientists, engineers, and practitioners to present their latest research achievements in machining chatter. All the submissions are expected to have original ideas and new approaches.

Potential topics include, but are not limited to:
- Modeling and Simulation of machining chatter
- Online monitoring and inspection for machining chatter
- Machine performance assessment and cutting trials
- Machine control system for chatter suppression and implementation
- Design of cutters or structures for chatter suppression

The schedule is as follows:

Guest Editors:
Dr. & Prof. Weihong Zhang, China, zhangwh@nwpu.edu.cn,
Dr. & Prof. Min Wan, China, m.wan@nwpu.edu.cn,
Dr. Tamás Insperger, Hungary, insperger@mm.bme.hu