

Tentative Outline
Special Issue for Recent Patents on Nanotechnology (NANOTEC)

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TITLE: Nanofluids Minimum Quantity Lubrication (NMQL) Machining

Aims & Scope:

Nanofluid Minimum Quantity Lubrication (NMQL) technology is a new high-efficiency, lowconsumption, clean and low-carbon precision machining method for the bottleneck of Minimum Quantity Lubrication (MQL) application. The processing method of nanoparticles participating in heat transfer enhancement not only inherits all the advantages of MQL processing, but also greatly improves the heat transfer capacity of traditional MQL processing. Nanoparticles have excellent anti-wear and anti-friction properties, which can effectively improve the lubricity of the working interface, improve the processing accuracy, surface quality, especially surface integrity of the workpiece, and improve the working environment. Therefore, by seeking patents that have made outstanding contributions to the micro-lubrication of nanofluids, it will serve as a guiding point for the processing field.

6-8 Keywords: Nanofluids, MQL, Cooling, Heat transfer, Cutting, Grinding

Approximate Schedule:

- Manuscript submission deadline: November 21st, 2019
- Peer Review Due: January 1st, 2020
- Revision Due: March 2nd, 2020
- Notification of acceptance by the Guest Editor: April 22nd, 2020
- Final manuscripts Due: June 1st, 2020