**Topic:** Advanced nanocomposite tool coatings for challenging cutting applications

PVD-Technology (Tools)

**Research Goals:**
Within the scope of this work, you will learn how to independently carry out coating processes on an industrial coating system as well as the material characterization of TiAlCrSiN coatings with different Al contents. In order to investigate the damage behavior of the TiAlCrSiN coatings, you will perform tribological model tests and milling tests. In order to analyze the coated tools after the tests, you will gain practical experience in confocal laser scanning and scanning electron microscopy (CLSM & SEM). Finally, you will compare the damage behavior of the coated milling tools with each other.

**Interested...**
If you are intrigued by the topic and would like to gain some practical experience in PVD coating development, machining technology and material analysis techniques, then contact per E-mail or phone!

**If you are interested, we can make an appointment to discuss further details. Kindly, contact me by E-mail or phone.**

**Contact:**
M. Tayyab, M.Sc.
Tel: +49 (0)241 80-95578
E-Mail: tayyab@iot.rwth-aachen.de