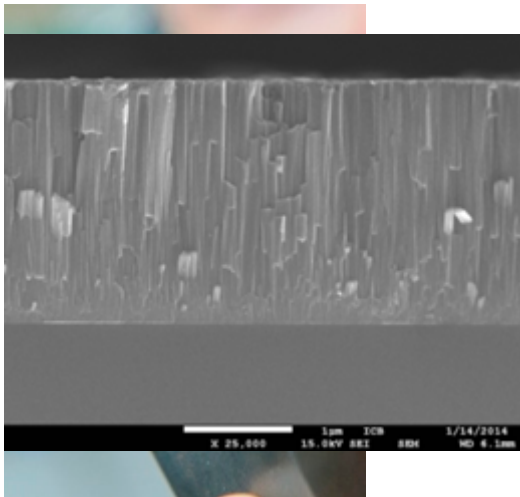


Topic 1.1: PVD

This axis of the MSE team is focused on the improvement of surfaces by deposition of a new material with various properties by reactive Magnetron sputtering (PVD).

Learn how works [sputtering](#).

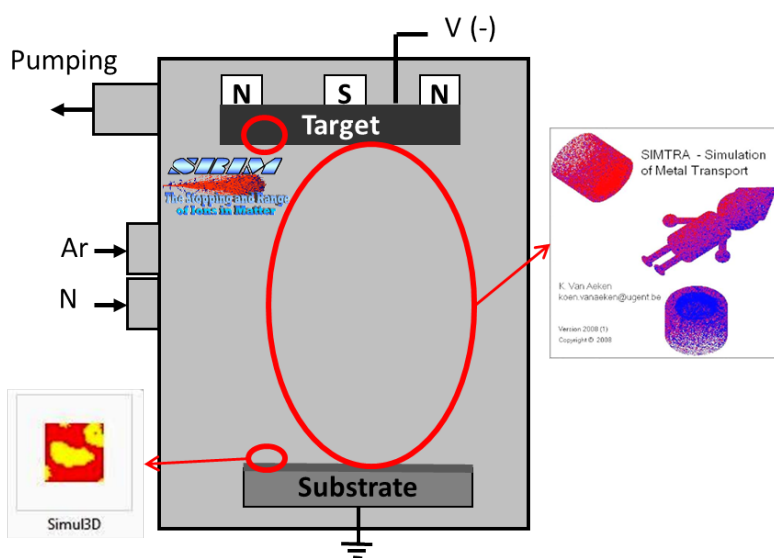
- The historical thematic is the improvement of cutting tools, for wood or metal. Consequently a large experience has been gained on nitrided coatings (binary, ternary and multilayers)



Coating cross section

Coated wood machining tool

- The control of the process is a thematic based on experimental part and numerical one. Combining [Simul3D](#) or [NASCAM](#) (Prof. S. Lucas, UNamur) with [SRIM](#) (Prof. J. F. Ziegler, IBM) and [SiMTRA](#) (Prof. D. Depla, UGent) allows to simulate the whole PVD process.



This thematic is developed in the [Digital PVD process](#) axis