Microstructure simulation during quenching

External supervisor report

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Student: Krupesh Beekanahalli

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Company: Ikerlan S.Coop.

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Krupesh has done a very good job in his 6-week-satge in Ikerlan. He joined the research team very easily and he has been proactive during all the stage. His integration in the department was fine.

The work is divided in two tasks. First two weeks Krupesh worked in Code Aster free software possibilities for quenching simulation. We knew that microstructure simulation is a difficulty in quenching analysis. The objective of this task was to explore the possibilities of Code Aster for this aim. Developed software in literature, availability of this code, interaction Ansys-Code_Aster, etc. We decided to finish this task with a state of the arte review; no code development was done with Code Aster.

Last 4 weeks Krupesh worked on Ansys APDL code development for microsturcture simulation in a fast cooling process. He has develop some code and he has tested it in 2D and 3D geometries. We consider that this code lines are the base for a future complete code.

My evaluation of the work performed by Krupesh is excellent.

Yours faithfully,

Unai