

6th International Virtual Conference of Engineering Against Failure

## Session description

Chairman name: Prof. Haidemenopoulos Gregory

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Title of the session: Integrated Computational Materials Engineering (ICME) - The case of steels.

Objectives: ICME is an emerging field in materials science and engineering. The main objective of ICME is the application of a modeling/simulation-based design of materials and processes in order to accelerate material deployment, while lowering cost and improving product quality. The scope of this session is to discuss numerical models that describe the influence of processing conditions on resulting microstructures and properties in steels. The aim is to better understand evolution of steel microstructures in casting, thermo-mechanical processing, additive manufacturing and deformation of steels and its effect on mechanical behavior.