Title:

Plasticity modelling, parameter identification and applications to forming operations

Organizers:

M. Vaz Jr.
State University of Santa Catarina
Department of Mechanical Engineering
Email: miguel.vaz@udesc.br

Abstract:

The use of appropriate constitutive models has been the key to successful predictions of material behaviour in realistic metal forming scenarios. Large plastic deformation, mechanical degradation, multifracturing, multiscale and multiphysics approaches to material modelling have constituted challenges to researchers. Notwithstanding, the success of numerical simulation of forming operations requires a proper definition of material parameters. Therefore, in addition to material modelling, identification of the such parameters is of paramount importance once accuracy of the numerical predictions is directly dependent upon the material data used in the simulations. Within this framework, this session welcomes works addressing strategies to material modelling, parameter identification techniques and applications to engineering prolems.