Preface

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Metal forming by large inelastic deformation gives rise to more or less inelastic flow localization inside narrow bands. This strong localization is often the prelude to ductile damage initiation and growth leading to the formation of macroscopic cracks inside the formed part. Accordingly, any numerical simulation of metal forming process should include highly predictive constitutive equations accounting, not only for the inelastic flow with hardening, but also for the ductile damage occurrence and its effects on the other thermomechanical fields.

This thematic issue of IJMF is dedicated to some papers dealing with the consequence of damage evolution on the

formability of materials using various kinds of damage modeling. This includes the study of some local instability and bifurcation criteria, different kind of ductile damage modeling, some methods to determine formability limits of metallic sheets as well as various methods of coupling between the ductile damage and the other thermomechanical fields.

Hoping that the readers will find this thematic issue, devoted to the prediction of failure in metal forming, much of interest with high stimulus to further challenging studies, we would like to thank all the contributors and also the colleagues who have collaborated in the reviewing procedure.

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