

Preface

**Special Issue: Contemporary Problems in
Mechanics of Solids and Materials**

Upon the invitation by the Editor-in-Chief, Professor Milan Mićunović, to be the guest editors of the Theoretical and Applied Mechanics, which we gladly accepted, we prepared this Special Issue of TAM entitled "Contemporary Problems in Mechanics of Solids and Materials." The Special Issue will consist of four volumes devoted to a wide range of current research topics in elasticity, viscoelasticity, plasticity, fracture mechanics, biomechanics, and analytical mechanics.

This number of Theoretical and Applied Mechanics (TAM 38/2) contains the first of the four volumes, with the contributions by Jiddu Bezares, Zhangli Peng, Robert Asaro and Qiang Zhu on macromolecular structure and viscoelastic response of the organic framework of nacre in *Haliotis rufescens*, by Teodor Atanackovic and Alexander Seyranian on bimodal optimization with constraints, with a particular referral to the critical value of the constraint and post-critical configurations, by Stephane Andrieux and Huy Duong Bui on some nonlinear inverse problems in elasticity, and by Heng Xiao, Otto Bruhns and Albert Meyers on thermoinduced plastic flow and shape memory effects. The contents of each of other three volumes of the Special Issue will be described in the sequel TAM 38/3-39/1, as the volumes are printed.

We expect that the Special Issue "Contemporary Problems in Mechanics of Solids and Materials" will become a valuable resource for researchers in the fields of applied mechanics and materials science.

Guest editors:

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