

FOREWORD

For more than 20 years the Annual Symposium of the Institute of Solid Mechanics and Session of the Commission of Acoustics organized by Romanian Academy, Section of Technical Sciences, Institute of Solid Mechanics and Commission of Acoustics, has presented groundbreaking developments in mechanics and acoustics. It covers such fields as Solid and Fluid Mechanics, Applied Mechanics, Mechanics of Materials, Biomechanics, Robotics and Mechatronics.

The range of appropriate contributions in this number of the Romanian Journal of Technical Sciences – Applied Mechanics is very wide. It includes the analysis and computational method for the simulation of complex engineering such as the characterization of anisotropic materials using a non-destructive free vibration method, the modular hip total prostheses, the systems for disabled people and the development of an integrated IT&C solution aimed to help teaching and training processes of the visually impaired pupils, the collaborative robots or cobots and the bucket position in function of the hydraulic cylinders lengths. The papers contain computational method for the simulation of complex engineering problems leading to the analysis and design of engineering products and systems. The articles are at higher scientific level but may include some introductory material.

Guest editors,

Dr. Veturia Chiroiu

Institute of Solid Mechanics, Romanian Academy

Dr. Tudor Sireteanu

Director of the Institute of Solid Mechanics, Romanian Academy