Foreword

The Conference on Structural Nonlinear Dynamics and Diagnosis (CSNDD 2012) is held in Marrakech, Morocco, and is organized by the Laboratory of Mechanics, Group of Nonlinear Dynamics of the Hassan II University of Casablanca.

The International Conference on Structural Nonlinear Dynamics and Diagnosis intends to be a meeting place for scientists from different branches of applied mathematics and mechanics working in nonlinear dynamics, diagnosis and control can meet to discuss the latest achievements and to exchange ideas in theoretical, numerical and experimental techniques. Focuses are directed toward diverse topics, ranging from dynamical systems theory to different engineering applications.

This first CSNDD 2012 aims at covering a large field of nonlinear dynamics, including structural health monitoring, diagnosis and damage detection, fast slow dynamics, multi-scale dynamics, advances on nonlinear PDEs and their dynamics, experimental methods, active vibration control and smart structures, identification of nonlinear systems, vibro-impact dynamic, and nonlinear dynamics in MEMS / NEMS and nanotechnology.

The organizers would like to make this meeting a tradition and sets a goal of organizing the event every two or three years in Morocco and in the nearby countries.

It is a great privilege for the nonlinear dynamic Moroccan community to host the CSNDD 2012 conference in Marrakech, as the first international conference in nonlinear dynamics organized in Morocco.

The first CSNDD 2012 has attracted a representative international scientific community in nonlinear dynamics, diagnosis and control. More than 200 papers from 28 countries were submitted and nearly 160 were accepted for presentation. 67 papers were accepted for publication in MATEC Web of Conferences and 9 papers in ESAIM Proceeding. Thirteen Mini-symposia were organized by leading experts in the field, who contributed to attract top-quality scientists. All submissions were reviewed.

I would like to thank the Keynote lecturers, the invited speakers, all MS organizers, reviewers and other volunteers for their help in maintaining high standards of the Conference Technical Program. At the same time, I would like to thank all participants to the Conference, as well as PhD students, colleagues and friends who meaningfully helped with the organization.

Mohamed Belhaq

CSNDD 2012 Chair