

Preface

In 2013 the Strength of Materials Laboratory from POLITEHNICA University of Timisoara reaches its 90th anniversary. The Strength of Materials Laboratory was opened in 1923 in the presence of King FERDINAND and Prime Minister I. C. BRATIANU. The lab was equipped with the support of the Rector of Politehnica School from Timisoara professor Traian LALESCU and Strength of Materials professor C. C. TEODORESCU. First tests with students were held in 1923, and the first student "*Laboratory notebook*" was published in 1924. In 1931 the laboratory was visited by King CAROL the Second and Prime Minister Nicolae IORGA. Over the years the Laboratory has developed considerably and now represents one of the main facilities in the West part of Romania for materials testing, experimental and numerical stress analysis.

To celebrate this anniversary **POLITEHNICA University of Timisoara, Fundatia POLITEHNICA and Romanian Association on Experimental Stress Analysis (ARTENS)** organized the 14th **Symposium on Experimental Stress Analysis and Materials Testing** in Timisoara from 23 to 25 May 2013. The conference which was attended by scientists from 12 countries (Austria, Belgium, Finland, Germany, Italy, Poland, Romania, Serbia, Slovakia, Slovenia, Spain, UK) represents a forum for latest researches on experimental and numerical stress analysis aspects, material testing, fracture, fatigue, biomechanics, vibration and noise fields. The conference program consists in one plenary session and 11 parallel sessions. This volume represents a collection of papers presented at the conference. The proceedings are structured on five parts: Experimental Stress Analysis and Materials Testing, Analytical and Numerical Stress Analysis, Biomechanical Applications, Civil Engineering Applications, and Mechanical Behavior of Cellular Materials.

The Editor would like to thank the members of the Local Organizing Committee and International Scientific Committee for help and support, which were essential to the success of the conference. Also the support of our sponsors is greatly acknowledged.

Editor
Prof. Liviu MARSAVINA
Timișoara, December 2013

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