Preface

The papers collected in this special issue of Solid State Phenomena, which have been accepted after peer reviewing, are the outcome of the 16th International Conference on Internal Friction and Mechanical Spectroscopy, ICIFMS-16, held on July 3 – 8, 2011, in Lausanne, Switzerland.

The Symposium brought together 110 scientists coming from 22 countries to share their results in the area of mechanical energy dissipation and elastic properties of crystalline and non-crystalline solid materials. The scientific program was composed of 7 invited lectures, 65 oral talks and 30 posters.

Two special talks were given in remembrance of Prof. P. G. Bordoni and Prof. A. S. Nowick by Prof. F. Mazzolai and Prof. D. Beshers, respectively. Prof. Bordoni, who died in 2009, discovered in 1949 the low temperature anelastic relaxation, which is now known as the Bordoni relaxation and the origin of which was correctly attributed by Bordoni to dislocations. The 1953 review article of Prof Nowick, “Internal Friction in Metals” brought him widespread recognition at an early age. In 1972 the iconic monograph “Anelastic Relaxation in Crystalline Solids,” written with Brian S. Berry, established Nowick’s position as the leading expositor.

As customary with previous conferences of this series, distinguished scientists were awarded the gold medal Zener prize for their outstanding contributions to the advancement of knowledge in the field of elasticity and anelasticity of materials. They were:

Fabio Mazzolai of University of Perugia, Italy
Gérard Gremaud of EPFL, Lausanne, Switzerland

The present proceedings of ICIFMS-16 aim at attracting newcomers to this field of research to appreciate the potentiality of anelastic methodologies in the investigation of advanced materials and new phenomena. On the other hand scientist already involved in the field may find in this issue ideas and stimuli to built new experiments and theories.
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