

Preface

Increased use of advanced materials in high performance structures such as power systems, electronics, medical devices, aircraft and vehicles, needs improved reliability, resistance to degradation, and failure prediction the life time under a variety of load conditions. The development of materials with advanced structural properties is a key factor in the industrial and technological progress.

The purpose of the fourth edition ACMA 2012, which took place on 9-12 May 2012 the city of Fez, Morocco, is to provide a forum for engineers, researchers, specialists academics, students, scientists and industry experts, to present their work and discuss the current state of modern technology, experimental techniques, numerical analysis and current developments in the field of advanced materials.

ACMA 2012 includes invited lectures by internationally distinguished researchers in European countries as well as major conferences, presentations and oral contributions in the form of displays covering all aspects of research and technology of advanced materials.

A selection of articles in this special issue congress is dedicated to important topics pertaining to the understanding and determination of the mechanical behaviour of engineering materials under different regimes of loading.

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