

Preface

This is a follow on symposium of the 2004, 2007 and 2010 TMS Annual meeting symposia on the subject matter of “Cost-Affordable Titanium”. The main purpose is to bring together the scientists, researchers and technologists to review the status of process technologies, materials development efforts, emerging applications and economics/affordability issues. The scope is broad. Potential participants who are involved in titanium production technology, vapor, solid and liquid titanium processing/post-processing, alloy development, microstructure-property enhancement, modeling and simulation, and application and market development areas were invited to participate in this symposium. The diverse mix of papers presented in these proceedings reflects the breadth of activities in the cost affordable use of titanium and emerging applications. The opening overview paper, by the editors, attempts to present a broad view of present and projected titanium cost reduction, both in titanium production and in subsequent processing. What is particularly clear is that the impetus for broadening markets for titanium is very much dependent on cost reduction methods, particularly cost sensitive industrial applications such as the auto industry. The proceedings the symposium was organized into four chapters and these are: Overview and Low Cost Processing, Powder Consolidation and Characterization, Creative Processing and Low Cost Materials and Properties.

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