

Preface

Powder metallurgy of titanium and its alloys is one of the hot topics in research nowadays not at least due to the novel opportunities arising in the field of processing because of the advent of different additive manufacturing techniques. Despite these rosy prospects for PM of titanium the industrial applications are still very limited. Only continuous joint effort by industry and the research community can overcome this and realize the full potential of PM titanium usage in high demanding applications. The PM-Ti conference series was set up to incite the discussion in the PM titanium community and channel the single efforts to this common goal. Initially started in 2011 in Brisbane, Australia by Ma Qian, and followed 2013 in Hamilton, New Zealand, organized by TIDA, the third iteration held in 2015 in Lüneburg, Germany covered again a variety of different topics. The long list from microstructure and properties to cost efficient and specific techniques proofed the high attractiveness of the conference series in the community. The conference was organized by Helmholtz-Zentrum Geesthacht, Germany, and held at the Leuphana University Lüneburg, Germany, from 31 August to 3 September 2015.

The high interest in PM of titanium and its alloys was evidenced by the participation of more than 130 people from 25 countries and the contribution of 51 talks and 22 posters. In addition to topics which attract continuous interest as for example alloy development and the actual hot topic of additive manufacturing, many talks concentrated on robust PM processing of titanium alloys, cost efficient methods of powder production and other aspects which are important to promote a wider introduction of PM titanium in industrial applications. This openness of the contributing authors to present work aimed to solve industrial demands on PM titanium was mirrored by an active attendance of participants from the industrial side. Between the presentations there was much room for discussion and networking enhancing the contact between research and industry and promoting new projects.

The most important results of the conference were compiled in 49 papers. These have undergone a rigorous peer review process to ensure adequate scientific quality. They are presented in this proceedings issue giving an up-to-date overview of the activities in the field of PM titanium from the scientific as well as the industrial side.

The editors like to thank the members of the international organizing committee, the sponsors and the many people from Helmholtz-Zentrum Geesthacht enabling the success of this conference. They are convinced the series of the conferences on Powder Pressing, Consolidation and Metallurgy of Titanium will be continued and become more and more a well-established and highly ranked event.

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