

Preface

The present volume contains selected papers from the 16th International Conference on Advanced Materials and Processing Technologies (AMPT 2013) held in Taipei, Taiwan. This conference was co-organized by the SME (Society of Manufacturing Engineers) Taipei Chapter, and the National Taiwan University of Science and Technology (NTUST).

AMPT 2013 is the 16th event in the series, and furthermore, is the 20th anniversary since its inauguration. With two decades of glorious and well-recognized experiences, AMPT 2013 is a major global event in the manufacturing research community and industry. This event has been a good opportunity for expert engineers and researchers to share their new ideas and progresses in manufacturing engineering. This conference covers a wide range of fields including manufacturing processes, materials, automation and control, mechanical design, manufacturing management, and bio-medical manufacturing. This year, the theme of the conference is set as “Advanced Materials Processing and Manufacturing Technologies through Multi-disciplinary Integration.” This volume presents a selection of papers submitted to AMPT2013 from universities and industries all over the world. All of the papers were rigorously reviewed by at least two expert referees. Selection of papers for this volume is primarily based on the paper quality and relevancy to the theme. The volume aims to present to the readers the necessity of integration in the field of materials and processing technologies including the forming, machining, automation, manufacturing systems, metrology, precision engineering, computer-aided engineering, and micro/nano technology. It can be regarded as a highlight of recent multi-disciplinary integrations in the materials and processing technologies.

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