

Preface

The S2P International Conferences are dedicated to science and technology of semi-solid processing of metals. Since the discovery of the specific flow behaviour of metals in semi-solid state during the seventies, this fascinating technology has experienced a dynamic development history which has led to a whole family of new production processes, new equipment and industrial applications. In order to fully exploit the technical and economical potential of these new ideas it is important to achieve a better understanding of the microstructure development, flow behaviour, improved material and process modelling as well as process control. The S2P International Conferences have contributed to achieve this goal by providing a forum for scientists from various disciplines as well as for engineers and production specialists to learn from each other, to share the common knowledge and to develop a common sense on fundamental topics and industrial requirements.

The first S2P Conference was held in 1990 at the Ecole des Mines de Paris in Sophia Antipolis, France. Other conferences followed in 1992, Cambridge, MA, USA; 1994, Tokyo, Japan; 1996, Sheffield, England; 1998, Denver, CO, USA; 2000, Torino, Italy; 2002, Tsukuba, Japan; 2004, Limassol, Cyprus and 2006, Busan, South Korea.

The 10th S2P Conference organised by the RWTH Aachen University, Germany and the University of Liège, Belgium took place from September 16th to 18th, 2008 at the Sofitel Aachen Quellenhof and the Château de Colonster in Liège.

To ensure a high quality of the conference contributions the submitted papers have been individually reviewed by two independent reviewers. In some cases already this review process stimulated a fruitful scientific discussion before the paper acceptance. We definitely want to thank both, the reviewers and the authors for their valuable work and effort to achieve the best possible result. The conference concentrates on the advancement of fundamental knowledge and development of materials and industrial processes for semi-solid manufacturing of high performance metal components which result in the topics of the conference as “Process Development and Industrial Application”, “Material Development and Characterisation”, “Numerical Modelling and Simulation” and “Process and Parts Assessment”.

G. Hirt, A. Rassili
Chairmen of the 10th S2P