

## Preface

STERMAT is an acronym of STEReology in MATerials Science. The 1th conference initiated by the Department of Materials Science of Silesian University of Technology took place in 1983 in Wisla, Poland. Scientists from various academic centres whose learning and work is concentrated on various aspects of quantitative description and analysis of microstructures of materials met to exchange their experiences and give impulse to interdisciplinary cooperation. The 1<sup>st</sup> Conference inaugurated a series of conferences. Since 1990 STERMAT is an international meeting with English as the conference language. The guests of STERMAT conferences are renowned scientists working in the field of stereology and image analysis, thus giving significant impact on development and progress of stereology and image analysis applications in materials science. The special courses on stereology principles and basic as well as advanced skills in image analysis accompany the meetings.

The 9<sup>th</sup> International Conference on Stereology and Image Analysis in Materials was held in Zakopane, from 3<sup>rd</sup> to 6<sup>th</sup> September, 2012. Zakopane is situated on the edge of the Tatra Mountains, where one can find many breathtaking landscapes, a unique culture and a unique atmosphere that makes it one of the most popular places in Poland.

The selected papers from the 9<sup>th</sup> Conference after reviewing by at least two experts were prepared for this volume of Solid State Phenomena. The papers were chosen taking into account their quality and relevancy to the conference. The volume represents the recent advances in stereology, image analysis tools, 3D data acquisition and image analysis of 3D objects.

The Organizing Committee is grateful to deans and workers of Faculty of Materials Engineering and Metallurgy of Silesian University of Technology and Faculty of Mechanical Engineering of Cracow University of Technology who made the 9<sup>th</sup> Conference and this volume possible. The Committee is also acknowledging all who have updated and reviewed the papers submitted to the conference, the scientific secretary for her editing work and Trans Tech Publications for producing the volume.

## Conference Organizers

Polish Society for Stereology,  
Silesian University of Technology,  
Cracow University of Technology