

# Preface

The 6th International Conference on Mechanical Stress Evaluation by Neutrons and Synchrotron Radiation (MECA SENS VI) took place from *7<sup>th</sup> to 9<sup>th</sup> September* 2011 at the University of Hamburg - for the first time in the history of this conference in Germany - with 120 participants from 20 countries around the world. The location had been chosen in Hamburg close to Geesthacht and DESY where the local organiser Helmholtz-Zentrum Geesthacht operates an outstation for engineering materials science with synchrotron radiation.

The exciting and comprehensive program of the MECA SENS VI conference provided a platform for the current topics within the research fields of Mechanical Stress Evaluation with Neutrons and Synchrotron Radiation. The resulting contributions in this volume offer an excellent overview of all the various aspects in this field ranging from fundamental research and modelling to practical engineering applications.

We thank all the renowned national and international authors for their interesting state-of-the-art contributions showing the potential in residual stress analysis using both probes, neutrons and photons.

On behalf of the editors

*Prof. Dr. Andreas Schreyer*

*Director of the German Engineering Materials Science Centre (GEMS)*

*Helmholtz-Zentrum Geesthacht*

*<http://gems.hzg.de>*