Preface

Terotechnology is the technology of installation, commissioning, maintenance, replacement and removal of plant machinery and equipment, of feed-back to operation and design thereof, and to related subjects and practices.

Twelve years have already passed since the first Conference on Terotechnology had been taking place. It is still a joint venture of Kielce University of Technology, Polish Maintenance Society, Kielce Trade Fairs and Polish Society for Stereology. For the first time the conference was held in 2001, and subsequent meetings were held in 2005-2009 in the annual cycle. Since the year 2011 a two-year conference cycle has been established.

The 8th International Conference on Terotechnology was held at the Kielce Trade Fair Centre, Kielce, POLAND on 26-27 September, 2013. The selected papers from the 8th Conference after reviewing by at least two experts were prepared for this volume of *Advanced Materials Research*. The papers were chosen taking into account their quality and relevancy to the conference. The volume represents the recent advances in materials, technologies and methods.

Dozens of people meet at the conference: experienced researchers, young scientists and many practitioners from industry. A special feature of our Conference is broad formula resulting from the extent of the concept of "terotechnology".

The aim of conference is to present results and exchange experiences of research work in the area of broadly defined use of machinery. The conference is addressed to academic staff, research institutes, manufacturing and transportation, as well as the local government administration. The conference covers all areas of exploitation, namely: the theories of exploitation, reliability, technical diagnostics, materials science, design of experiments, tribology and technical safety.

The Organizing Committee is grateful to deans and workers of the Centre for Laser Technologies of Metals of Kielce University of Technology, Institute of Chemistry of Jan Kochanowski University in Kielce, Faculty of Mechanical Engineering of Cracow University of Technology, Faculty of Materials Engineering and Metallurgy of Silesian University of Technology who made possible the 8th Conference and edition of this volume. The Committee acknowledges all who have updated and reviewed the papers submitted to the conference, the scientific secretarial staff for the editing work and Trans Tech Publications for producing the volume.

Conference Organizers

Kielce University of Technology, Polish Maintenance Society, Kielce Trade Fairs, Polish Society for Stereology