Guest Editorial

This special issue of the *Journal of Reliability and Statistical Studies* is devoted to papers on *Reliability and Stochastic Processes*. The idea of the special issue was to assemble researchers and practitioners from universities and institutions, working in these fields. Theoretical issues and applied case-studies are presented in this issue by leading researchers on the field.

Reliability theory is a multidisciplinary science aiming to develop complex technical and informational systems. At the same time, it is of fundamental importance for engineers and managers involved in the manufacturing process of high-quality products and the design of reliable technical systems. The theoretical background for such problems is closely connected with stochastic processes and stochastic modelling fields that grow enormously as a result of the rapid growth of the computer industry and the wide applicability of computational stochastic techniques and methods. The field has emerged as one of the main fields not only for scientists and researchers but also for engineers and industrial managers. Accordingly, the need of publications is evident. New publications appear as printed or electronic, covering the need for information from such important fields of science and engineering. This issue covers some of the recent developments in the field of reliability and stochastic processes by presenting innovative theoretical approaches as well as solutions of important practical problems and case studies.

The articles were reviewed and finally accepted to be included in this special publication. We hope that this selection of these high quality four papers gives an idea of the diversity of topics covered in this scientific area.

We would like to thank the contributing authors for sharing their technical expertise, their engineering foresight and their hard work on this issue. We also wish to express our appreciation to the reviewers for the time they kindly spend evaluating the manuscripts. It was indeed our pleasure to work with Ms. Karen Robinson of the Editorial Office of River Publications.

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