

PREFACE

This special issue of Trends in Automotive Research contains papers contributed to the Regional Conference on Automotive Research (ReCAR) 2011 held on 14-15th December 2011 in Kuala Lumpur, Malaysia. This conference was organised by Centre for Automotive Research (CAR), Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia.

The conference, with its theme “Inspiring Ideas and Nurturing Innovation in Automotive Research”, acts as an avenue for professionals, academics and researchers to present and discuss latest developments, research results and future perspectives pertaining to automotive engineering and related issues. It is anticipated that the outcome of this book may stimulate and accelerate the advancement in knowledge and technology innovation which are vital for the successful future development.

The demand for higher quality and performance in products and services produced by the industrial sector has increased tremendously in recent years. This conference is especially organised to cater to the needs of meeting these requirements as well as to act as a catalyst in spearheading the advancement of our indigenous technologies. This is also a regional forum for exchanging ideas between the research community and practitioners. In addition, it provides a venue where issues related to automotive engineering and technology are deliberated.

This volume covers broad areas of Materials Characterisation, Computational & Experimental Mechanics, Advanced Manufacturing in Automotive Industries, Signal Processing & Automotive Electronics, Mathematical Modelling and Optimisation, Noise, Vibration & Harshness, Fuel & Combustion, Vehicle Dynamics & Mechatronics, Automotive Design, Comfort & Ergonomics, Green Technology, Safety, Comfort & Ergonomics, and other related topics in automotive engineering.

Despite this only being its inaugural event, ReCAR 2011 managed to attract wide participation locally and internationally, with about 100 contributions received. A strict reviewing process was adhered to, and all contributed papers were assessed by at least two reviewers before being accepted. I would like to express my most sincere appreciation to all reviewers and also conference participants. In addition, a lot of thanks also are conveyed to all our keynote speakers who came from Germany, Indonesia and also Malaysia for sharing their knowledge and vast experiences with all of us.

I am particularly indebted to the Organising Committee for their relentless efforts in ensuring the success of this conference and also, the Technical Committee for spending much valuable time to review the papers. This conference would not have been possible without our sponsors and supporters. We are most grateful for their generosity.

Thank you very much indeed.

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Development of Fatigue Failure Classification Index Using Statical-Based
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